



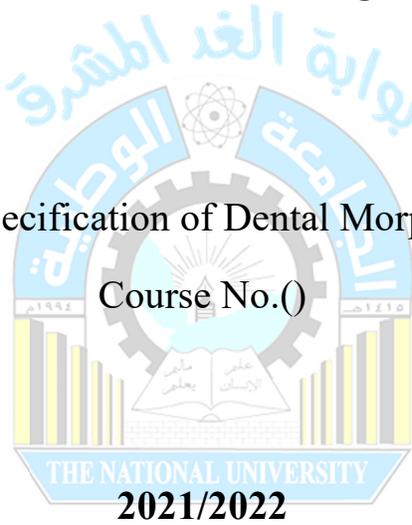
Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Dental Morphology 1

Course No.()



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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

I. Course Identification and General Information:						
1	Course Title:	Dental Morphology 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	1 st Level / 1 st Semester				
5	Prerequisites:	None				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

II. Course Description:
<p>This course comprises lectures and laboratory sessions. aims to encourage students with the basic elements of tooth morphology, physiology and occlusion to be able to apply critical thinking of detailed intraoral anatomy during treatment of dental patients. Laboratory exercises focuses on the anatomy of anterior and premolars teeth and incorporation carving procedures by Using wax for wax carving technique, this is designed to reinforce the theoretical knowledge gained in the lectures and aims to develop in students an awareness of the role of morphology of natural teeth and their normal forms and functions. This course is an essential pre-requisite for other dental courses.</p>

III. Outcomes of the Course
<p>The students would be learn the basic knowledge on Morphology of and development of dentition, evolutionary development of jaws and compare between teeth according to shape, size and function. in addition to differential between deciduous and permanent teeth</p>

IV. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A1	a1-	Describe the identification principles of different types of teeth, and terminology.
	A1	a2-	Identify, the anatomical landmarks, nomenclature of the oral cavity and all teeth.
	A2	a3-	Describe the specific anatomical features of anterior teeth and premolars which are important in diagnosis and treatment of oral diseases.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Demonstrations Discussion	Quizzes Midterm Exam Final Exam
a1-	Describe the identification principles of different types of teeth, and terminology.		
a2-	Identify, the anatomical landmarks, nomenclature of the oral cavity and all teeth.		
a3-	Describe the specific anatomical features of anterior teeth and premolars which are important in diagnosis and treatment of oral diseases.		

(B) Intellectual Skills
Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B1	b1-	Discuss dental formulas and dental notation systems
	B1	b2-	Interpret the physiological tooth form that affects the supporting dental and para-dental tissues.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:			
CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Lab Sessions Demonstrations Discussion	Quizzes Midterm Exam Final Exam Practical Exam Semester work
b1-	Discuss dental formulas and dental notation systems		
b2-	Interpret the physiological tooth form that affects the supporting dental and para-dental tissues.		



(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C7	c1-	Perform manual wax carving for all permanent maxillary molars and mandibular premolar and molars
	C2	c2-	Replace missing tooth surfaces with wax to normal anatomical and morphological features

	C7	c3-	Draw to scale two dimensions of posterior teeth following the lectures outline, using the table of measurements provided.
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Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			Semester Work practical Exam
c1-	Perform manual wax carving for all permanent maxillary molars and mandibular premolar and molars		
c2-	Replace missing tooth surfaces with wax to normal anatomical and morphological features		
c3-	Draw to scale two dimensions of posterior teeth following the lectures outline, using the table of measurements provided.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D3	d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.
	D4	d2-	Manage time during lab work

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills	Teaching	Methods of
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After participating in the course, students would be able to:		Discussions Demonstrations	Direct Observation Practical Exam Semester Work
d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.		
d2-	Manage time during lab work		

V. Course Content:

I – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Fundamentals of Dental Anatomy and terminology	a1, a2, a3, b1, d1	1. Anatomy of orofacial complex: form and function 2. Dento-osseous structures 3. Types of human dentitions 4. Tooth surfaces, line and point angles. 5. Dental formula and notation systems 6. Anatomical landmarks	3	6
2	Morphology of permanent teeth	a1, a2, a3, b1, d1	7. Crown, root, surfaces and divisions into thirds 8. pulp chambers and canals (endodontic space)	1	2
3	The permanent maxillary central incisors.	a1, a2, a3, b1, d1	9. Descriptive Anatomy of Maxillary Permanent central incisors.	1	2
4	The permanent maxillary lateral incisors.	a1, a2, a3, b1, d1	10. Descriptive Anatomy of Maxillary Permanent lateral incisors	1	2
5	The permanent mandibular central incisors.	a1, a2, a3, b1, d1	Descriptive Anatomy of mandibular Permanent central incisors	1	2
6	Midterm Examination	a1, a2,	11 MCQs and essay	1	2

		d1	questions		
7	The permanent mandibular lateral incisors.	a1, a2, a3, b1, d1	12. Descriptive Anatomy of mandibular Permanent lateral incisors	1	2
8	The permanent maxillary canine.	a1, a2, a3, b1, d1	13. Descriptive Anatomy of Permanent maxillary canine	1	2
9	The permanent mandibular canine.	a1, a2, a3, b1, d1	14. Descriptive Anatomy of Permanent mandibular canine	1	2
10	Geometric forms and functions of teeth	a1, a2, a3, b1, d1	15. Forms and functions of teeth 16. Crown outline 17. Facial and lingual crown outline of all teeth 18. Proximal crown outline of anterior teeth, maxillary and mandibular posterior teeth	1	2
	The Permanent maxillary 1 st premolars.	a1, a2, a3, b1, d1	19. Descriptive Anatomy of Permanent maxillary 1 st premolars.	1	2
	The Permanent maxillary 2 nd premolars	a1, a2, a3, b1, d1	20. Descriptive Anatomy of Permanent maxillary 2 nd premolars.	1	2
	Physiologic tooth form	a1, a2, a3, b1, b2, d1	21. Contours 22. Proximal contact area 23. Embrasures 24. Oral mucosa 25. Periodontium and attachment apparatus	1	2
	Final Theoretical Exam	a1, a2, a3, b1, b2, d1	26. MCQs and essay questions	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Introduction	a1, a2, a3, b1, d1, c3	3	2 nd
2	Carving of maxillary central incisor	c1, c2, c3, d1, d2	6	3 rd and 4 th
3	Carving of maxillary lateral incisor	c1, c2, c3, d1, d2	3	5 th
4	Carving of mandibular central incisor	c1, c2, c3, d1, d2	3	6 th
5	Carving of mandibular lateral incisor	c1, c2, c3, d1, d2	3	7 th
6	Carving of maxillary canine	c1, c2, c3, d1, d2	6	8 th and 9 th
7	Carving of mandibular canine	c1, c2, c3, d1, d2	6	10 th and 11 th
8	Carving of maxillary premolars	c1, c2, c3, d1, d2	6	12 th and 13 th
9	Carving of maxillary premolars	c1, c2, c3, d1, d2	3	14 th
10	Final Practical Examination	c1, c2, c3, d1, d2	3	15 th
Number of Weeks / Units per Semester			14	42

VI. Teaching strategies of the course

Lectures
Lab Sessions
Demonstrations
Discussions

VII. Teaching Strategies of the Course:

Quizzes
Midterm Exam
Final Exam
Practical Exam
Semester Work
Direct Observation

VIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester work -wax carving technique for anterior and premolars teeth (laboratory work)	2 -14	10	c1, c2, c3, d1, d2
Total			10	

IX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	6 - 12	10	10 %	a1, a2, a3, b1, b2
2	Midterm Exam	8	20	20 %	a1, a2, a3, b1, d1
3	Final Exam	16	40	40 %	a1, a2, a3, b1, b2, d1
Total			70	70%	
Assessment of Practical Part					
1	Assignments	2 -14	10	10%	c1, c2, c3, d1, d2
2	Practical Exam	15	20	20 %	c1, c2, c3, d1, d2
Total			30	30%	

X. Learning Resources:

1- Required Textbook(s) (maximum two)

1. Ash & Nelson, 2010: Wheeler's Dental Anatomy Physiology and Occlusion, 9th edition, Saunders
2. Kumar, 2004: Textbook of Dental Anatomy and Tooth Morphology, Jaypee

	Brothers Publishers
2- Essential References	
	<p>1. Heather J. H. Edgar. 2017. Dental Morphology for Anthropology, An Illustrated Manual, 1st Edition. Published by Routledge</p> <p>2. Margaret J., Fehrenbach, 2007: Dental Anatomy Coloring Book.</p> <p>3. Lippincott Williams & Wilkins) by Rickne C. Scheid.Woelfel's, 2007: Dental Anatomy: Relevance to Dentistry.</p>
3- Electronic Materials and Web Sites, etc.	
	<p>1- Dental anatomy by British Dental Association</p> <p>2- http://www.3dmouth.org/4/4_intro.cfm</p> <p>3- Pub med.</p> <p>4- Sciencedirect</p>

XI. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the



Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Plan (Syllabus) of Dental Morphology 1

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

THE NATIONAL UNIVERSITY

2021/2022

II. Course Identification and General Information:						
1	Course Title:	Dental Morphology 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	1 st Level / 1 st Semester				
5	Prerequisites:	None				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				

		Department of Dentistry
11	Prepared by:	Dr. Ibrahim Z. Al-Shami
12	Date of Approval	2020-2021

III. Course Description:

This course comprises lectures and laboratory sessions. aims to encourage students with the basic elements of tooth morphology, physiology and occlusion to be able to apply critical thinking of detailed intraoral anatomy during treatment of dental patients. Laboratory exercises focuses on the anatomy of anterior and premolars teeth and incorporation carving procedures by Using wax for wax carving technique, this is designed to reinforce the theoretical knowledge gained in the lectures and aims to develop in students an awareness of the role of morphology of natural teeth and their normal forms and functions. This course is an essential pre-requisite for other dental courses.

IV. Outcomes of the Course

The students would be learn the basic knowledge on Morphology of and development of dentition, evolutionary development of jaws and compare between teeth according to shape, size and function. in addition to differential between deciduous and permanents teeth

V. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the identification principles of different types of teeth, and terminology.
a2-	Identify, the anatomical landmarks, nomenclature of the oral cavity and all teeth.
a3-	Describe the specific anatomical features of anterior teeth and premolars which are important in diagnosis and treatment of oral diseases.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Discuss dental formulas and dental notation systems
b2-	Interpret the physiological tooth form that affects the supporting dental and para-dental tissues

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Perform manual wax carving for all permanent maxillary molars and mandibular premolar and molars
c2-	Replace missing tooth surfaces with wax to normal anatomical and morphological features
c3-	Draw to scale two dimensions of posterior teeth following the lectures outline, using the table of measurements provided.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.
d2-	Manage time during lab work

VI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Fundamentals of Dental Anatomy and terminology	Anatomy of orofacial complex: form and function Dento-osseous structures Types of human dentitions Tooth surfaces, line and point angles. Dental formula and notation systems Anatomical landmarks	3	6
2	Morphology of permanent teeth	Crown, root, surfaces and divisions into thirds pulp chambers and canals (endodontic space)	1	2
3	The permanent maxillary central incisors.	Descriptive Anatomy of Maxillary Permanent central incisors.	1	2

4	The permanent maxillary lateral incisors.	Descriptive Anatomy of Maxillary Permanent lateral incisors	1	2
5	The permanent mandibular central incisors.	Descriptive Anatomy of mandibular Permanent central incisors	1	2
6	Midterm Examination	MCQs and essay questions	1	2
7	The permanent mandibular lateral incisors.	Descriptive Anatomy of mandibular Permanent lateral incisors	1	2
8	The permanent maxillary canine.	Descriptive Anatomy of Permanent maxillary canine	1	2
9	The permanent mandibular canine.	Descriptive Anatomy of Permanent mandibular canine	1	2
10	Geometric forms and functions of teeth	Forms and functions of teeth Crown outline Facial and lingual crown outline of all teeth Proximal crown outline of anterior teeth, maxillary and mandibular posterior teeth	1	2
11	The Permanent maxillary 1 st premolars.	Descriptive Anatomy of Permanent maxillary 1 st premolars.	1	2
12	The Permanent maxillary 2 nd premolars	Descriptive Anatomy of Permanent maxillary 2 nd premolars.	1	2
13	Physiologic tooth form	Contours Proximal contact area Embrasures Oral mucosa Periodontium and attachment apparatus	1	2
14	Final Theoretical Exam	MCQs and essay questions	1	2
Number of Weeks /and Units per Semester			16	32

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Introduction	2 nd	3
2	Carving of maxillary central incisor	3 rd and 4 th	6
3	Carving of maxillary lateral incisor	5 th	3
4	Carving of mandibular central incisor	6 th	3
5	Carving of mandibular lateral incisor	7 th	3
6	Carving of maxillary canine	8 th and 9 th	6
7	Carving of mandibular canine	10 th and 11 th	6
8	Carving of maxillary premolars	12 th and 13 th	6
9	Carving of maxillary premolars	14 th	3
10	Final Practical Examination	15 th	3
Number of Weeks / Units per Semester		14	42

VII. Teaching strategies of the course

Lectures
Lab Sessions
Demonstrations
Discussions

VIII. Assessment Methods of the Course:

Quizzes
Midterm Exam
Final Exam
Practical Exam
Semester Work
Direct Observation

IX. Assignments:

No.	Assignments	Week due	Mark
1	Semester work - wax carving technique for anterior and premolars teeth (laboratory work)	2 -14	10
Total			10

X. Schedule of Assessment Tasks for Students During the Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	6 - 12	10	10 %
2	Midterm Exam	8	20	20 %
3	Final Exam	16	40	40 %
Total			70	70%
Assessment of Practical Part				
1	Assignments	2 -14	10	10%
2	Practical Exam	15	20	20 %
Total			30	30%

XI. Learning Resources:	
1- Required Textbook(s) (maximum two)	
	1. Ash & Nelson, 2010: Wheeler's Dental Anatomy Physiology and Occlusion, 9th edition, Saunders 2. Kumar, 2004: Textbook of Dental Anatomy and Tooth Morphology, Jaypee Brothers Publishers
2- Essential References	
	1. Heather J. H. Edgar. 2017. Dental Morphology for Anthropology, An Illustrated Manual, 1st Edition. Published by Routledge 2. Margaret J., Fehrenbach, 2007: Dental Anatomy Coloring Book. 3. Lippincott Williams & Wilkins) by Rickne C. Scheid. Woelfel's, 2007: Dental Anatomy: Its Relevance to Dentistry.
3- Electronic Materials and Web Sites, etc.	
	1- Dental anatomy by British Dental Association 2- http://www.3dmouth.org/4/4_intro.cfm

4- Sciencedirect

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Course Specification of Dental Morphology II

Course No.()

2021/2022



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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:



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VI. Course Identification and General Information:						
1	Course Title:	Dental Morphology 2				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	1 st Level / 2 nd Semester				
5	Prerequisites:	Dental Morphology 1				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

VII. Course Description:	
<p>Dental morphology II is a continuous course with the former that focuses on theoretical knowledge of the anatomy of teeth and related structures and carving of posterior teeth from wax blocks. The course comprises lectures and laboratory sessions. It deals with the dental anatomy and morphology of human dentition, (permanent and deciduous) includes the dental arches relationship, teeth alignment, occlusion and the characteristics that maintain anatomical form which promotes health of the dental supporting structures. Upon completion of lectures and laboratory, students will be able to carve posterior teeth with proper anatomy, occlusion and contour.</p>	

VIII. Outcomes of the Course	
<p>The students would be learn the basic knowledge on Morphology of and development of dentition, evolutionary development of jaws and compare between teeth according to shape, size and function. in addition to differential between deciduous and permanent teeth</p>	

IX. Intended learning outcomes (ILOs) of the course	
<p> </p>	

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.	
PILOs in knowledge and understanding	CILOs in knowledge and understanding
After completing this program, students would be able to:	After participating in the course, students would be able to:
A1	a1- Define the primary, mixed and permanent dentitions.
A2	a2- Distinguish the morphological characteristics of different kinds of teeth.
A1	a3- Understand eruption schedule of deciduous and permanent teeth.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:		
CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	Lectures Demonstrations Discussion	Quizzes Midterm Exam Final Exam
a1- Define the primary, mixed and permanent dentitions.		
a2- Distinguish the morphological characteristics of different kinds of teeth.		
a3- Understand eruption schedule of deciduous and permanent teeth.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:	
PILOs in intellectual skills	CILOs of intellectual skills
After completing this program, students would be able to:	After participating in the course, students would be able to:
B1	b1- Explain the differences among primary, permanent, and mixed dentitions and describe the general and specific features of each.
B4	b2- Explain the teeth alignments, articulation and the self-protective feature of the dentition.

	B1	b3-	Interpret the relationship between tooth contours and periodontal health
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:			
CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Lab Sessions Demonstrations Discussion	Quizzes Midterm Exam Final Exam Practical Exam Semester work
b1-	Explain the differences among primary, permanent, and mixed dentitions and describe the general and specific features of each.		
b2-	Explain the teeth alignments, articulation and the self-protective feature of the dentition.		
b3-	Interpret the relationship between tooth contours and periodontal health		

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C7	c1-	Perform manual wax carving for all permanent maxillary molars and mandibular premolar and molars
	C2	c2-	Replace missing tooth surfaces with wax to normal anatomical and morphological features
	C7	c3-	Draw to scale two dimensions of posterior teeth following the lectures outline, using the table of measurements provided.
Teaching and Assessment Methods for Achieving Learning Outcomes			

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Demonstration Lab Sessions	Semester Work practical Exam
c1-	Perform manual wax carving for all permanent maxillary molars and mandibular premolar and molars		
c2-	Replace missing tooth surfaces with wax to normal anatomical and morphological features		
c3-	Draw to scale two dimensions of posterior teeth following the lectures outline, using the table of measurements provided.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D3	d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.
	D4	d2-	Manage time during lab work

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Discussions Demonstrations	Direct Observation Practical Exam Semester Work
d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.		
d2-	Manage time during lab work		

X. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	The Permanent mandibular 1 st premolars.	a1, a2, b1, b2,	– Descriptive Anatomy of mandibular 1 st premolars.	1	2
2	The Permanent mandibular 2 ^{ed} premolars.	a1, a2, b1, b2	– Descriptive Anatomy of mandibular 2 ^{ed} premolars.	1	2
3	The Permanent maxillary molars	a1, a2, b1, b2	– Descriptive Anatomy of maxillary 1 st , 2 nd and 3 rd molars	3	6
4	The Permanent mandibular molars	a1, a2, b1, b2	- Descriptive Anatomy of mandibular 1 st , 2 nd and 3 rd molars	2	6
5	Midterm Exam	a1, a2, b1, b2	– MCQs and essay questions	1	2
6	The deciduous teeth	a1, a2, a3, b1,	– Primary anterior teeth – Primary posterior teeth – characteristics – Geometric outlines – Difference between deciduous and permanent dentition	3	6
7	General consideration in the Physiologic form of the teeth and periodontium	a1, b1, b2, b3	– dental arches relationship – tooth contours and periodontal health	1	2
8	Occlusion of the primary and permanent teeth	a1, b1, b2, b3	– teeth alignment and occlusion. – occlusion of the primary and permanent teeth	2	4
9	Review	a1, a2, a3, b1, b2, b3	– All previews topics	1	2
10	Final Exam	a1, a2, a3, b1, b2, b3	– MCQs and essay questions	1	2

	a3, b1, b2, b3			
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Revision on upper premolars	b1, b2,c3, d1	1 st - 2 nd	6
2	Carving of mandibular first premolar	c1, c2, c3, d1, d2	3 th - 4 th	6
3	Carving of mandibular second premolar	c1, c2, c3, d1, d2	5 th - 6 th	6
4	Carving of maxillary first molar	c1, c2, c3, d1, d2	7 th - 8 th	6
5	Carving of maxillary second molar	c1, c2, c3, d1, d2	9 th - 10 th	6
6	Carving mandibular first molar	c1, c2, c3, d1, d2	11 th -12 th	6
7	Carving of mandibular second molar	c1, c2, c3, d1, d2	13 th - 14 th	6
8	Practical Exam	c1, c2, c3, d1, d2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

Lectures
 Lab Sessions
 Demonstrations
 Discussions

XII. Teaching Strategies of the Course:

Quizzes
 Midterm Exam
 Final Exam

Semester Work
 Direct Observation

XIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester work -wax carving technique for anterior and premolars teeth (laboratory work)	2 -14	10	c1, c2, c3, d1, d2
Total			10	

XIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	6 - 12	10	10 %	a1, a2, a3, b1, b2
2	Midterm Exam	8	20	20 %	a1, a2, b1, b2
3	Final Exam	16	40	40 %	a1, a2, a3, b1, b2, b3
Total			70	70%	

Assessment of Practical Part

1	Assignments	2 -14	10	10%	c1, c2, c3, d1, d2
2	Practical Exam	15	20	20 %	c1, c2, c3, d1, d2
Total			30	30%	

XV. Learning Resources:

4- Required Textbook(s) (maximum two)

- Ash & Nelson, 2010: Wheeler's Dental Anatomy Physiology and Occlusion, 9th edition, Saunders
- Kumar, 2004: Textbook of Dental Anatomy and Tooth Morphology, Jaypee Brothers Publishers

5- Essential References

- Heather J. H. Edgar. 2017. Dental Morphology for Anthropology, An Illustrated Manual, 1st Edition. Published by Routledge

	<p>2. Margaret J., Fehrenbach, 2007: Dental Anatomy Coloring Book.</p> <p>3. Lippincott Williams & Wilkins) by Rickne C. Scheid.Woelfel's, 2007: Dental Anatomy: Relevance to Dentistry.</p>
6- Electronic Materials and Web Sites, etc.	
	<p>5- Dental anatomy by British Dental Association</p> <p>6- http://www.3dmouth.org/4/4_intro.cfm</p> <p>7- Pub med.</p> <p>8- Sciencedirect</p>

XVI. Course Policies:	
1	<p>Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.</p>
2	<p>Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.</p>
3	<p>Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.</p>
4	<p>Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.</p>
5	<p>Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>
6	<p>Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>
7	<p>Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Dental Morphology 2

Course No. (----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

XII. Course Identification and General Information:						
1	Course Title:	Dental Morphology 2				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	1 st Level / 2 nd Semester				
5	Prerequisites:	Dental Morphology 1				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				

11	Prepared by:	Dr. Ibrahim Z. Al-Shami
12	Date of Approval	2020-2021

XIII. Course Description:

Dental morphology II is a continuous course with the former that focuses on theoretical knowledge of the anatomy of teeth and related structures and carving of posterior teeth from wax blocks. The course comprises lectures and laboratory sessions. It deals with the dental anatomy and morphology of human dentition, (permanent and deciduous) includes the dental arches relationship, teeth alignment, occlusion and the characteristics that maintain anatomical form which promotes health of the dental supporting structures. Upon completion of lectures and laboratory, students will be able to carve posterior teeth with proper anatomy, occlusion and contour.

XIV. Outcomes of the Course

The students would be learn the basic knowledge on Morphology of and development of dentition, evolutionary development of jaws and compare between teeth according to shape, size and function. in addition to differential between deciduous and permanent teeth

XV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Define the primary, mixed and permanent dentitions. |
| a2- | Distinguish the morphological characteristics of different kinds of teeth. |
| a3- | Understand eruption schedule of deciduous and permanent teeth. |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Explain the differences among primary, permanent, and mixed dentitions and describe the general and specific features of each. |
| b2- | Explain the teeth alignments, articulation and the self-protective feature of the dentition. |
| b3- | Interpret the relationship between tooth contours and periodontal health |

(C) Professional and Practical Skills

c1-	Perform manual wax carving for all permanent maxillary molars and mandibular premolar and molars
c2-	Replace missing tooth surfaces with wax to normal anatomical and morphological features
c3-	Draw to scale two dimensions of posterior teeth following the lectures outline, using the table of measurements provided.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.
d2-	Manage time during lab work

XVI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	The Permanent mandibular 1 st premolars.	– Descriptive Anatomy of mandibular 1 st premolars.	1	2
2	The Permanent mandibular 2 ^{ed} premolars.	– Descriptive Anatomy of mandibular 2 ^{ed} premolars.	1	2
3	The Permanent maxillary molars	– Descriptive Anatomy of maxillary 1 st , 2 nd and 3 rd molars	3	6
4	The Permanent mandibular molars	- Descriptive Anatomy of mandibular 1 st , 2 nd and 3 rd molars	2	6
5	Midterm Exam	– MCQs and essay questions	1	2
6	The deciduous teeth	– Primary anterior teeth – Primary posterior teeth – characteristics – Geometric outlines – Difference between deciduous and permanent dentition	3	6
7	General consideration in the	– dental arches relationship	1	2

	and periodontium	- tooth contours and periodontal health		
8	Occlusion of the primary and permanent teeth	- teeth alignment and occlusion. - occlusion of the primary and permanent teeth	2	4
9	Review	- All previews topics	1	2
10	Final Exam	- MCQs and essay questions	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Revision on upper premolars	1 st - 2 nd	6
2	Carving of mandibular first premolar	3 th - 4 th	6
3	Carving of mandibular second premolar	5 th - 6 th	6
4	Carving of maxillary first molar	7 th - 8 th	6
5	Carving of maxillary second molar	9 th - 10 th	6
6	Carving mandibular first molar	11 th -12 th	6
7	Carving of mandibular second molar	13 th - 14 th	6
8	Practical Exam	15 th	3
Number of Weeks / Units per Semester		13	45

XVII. Teaching strategies of the course
Lectures Lab Sessions Demonstrations Discussions
XVIII. Assessment Methods of the Course:
Quizzes Midterm Exam Final Exam

Practical Exam
Semester Work
Direct Observation

XIX. Assignments:

No.	Assignments	Week due	Mark
1	Semester work - wax carving technique for anterior and premolars teeth (laboratory work)	2 -14	10
Total			

XX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	6 - 12	10	10 %
2	Midterm Exam	8	20	20 %
3	Final Exam	16	40	40 %
Total			70	70%
Assessment of Practical Part				
1	Assignments	2 -14	10	10%
2	Practical Exam	15	20	20 %
Total			30	30%

XXI. Learning Resources:

4- Required Textbook(s) (maximum two)

1. Ash & Nelson, 2010: Wheeler's Dental Anatomy Physiology and Occlusion, 9th edition, Saunders
2. Kumar, 2004: Textbook of Dental Anatomy and Tooth Morphology, Jaypee Brothers Publishers

5- Essential References

1. Heather J. H. Edgar. 2017. Dental Morphology for Anthropology, An Illustrated Manual, 1st Edition. Published by Routledge

	2. Margaret J., Fehrenbach, 2007: Dental Anatomy Coloring Book. 3. Lippincott Williams & Wilkins) by Rickne C. Scheid.Woelfel's, 2007: Dental Anatomy: Its Relevance to Dentistry.
6- Electronic Materials and Web Sites, etc.	
	5- Dental anatomy by British Dental Association 6- http://www.3dmouth.org/4/4_intro.cfm 7- Pub med. 8- Sciencedirect

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of General Anatomy

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:

XI. Course Identification and General Information:						
1	Course Title:	General Anatomy				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	1 st Level / 2 nd Semester				
5	Prerequisites:	None				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

XII. Course Description:

This course planned to provide comprehensive knowledge about the basic structure of the human body and its clinical significance that provides a strong foundation for future studies. It deals with human morphology in a systematic approach that starts with the cellular level of organization followed by tissue, organ and system.

XIII. Outcomes of the Course

Dental student with knowledge on normal disposition of the structures in the body, microscopic structure of the various tissues, nervous system to locate the site of lesions, sectional anatomy of head, neck and brain.

XIV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding	CILOs in knowledge and understanding
After completing this program, students would be able to:	After participating in the course, students would be able to:

			systems, Regions, parts, organs, cavities of human body.
	A2	a2-	Understand a clear idea about the different disciplines of anatomy, the anatomical terms of positions and movements and the different tissues of the body.
	A2	a3-	Describe the structure and functions of the different systems of the human body with reference to the clinical significance of each.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Identify the structures, components, systems, Regions, parts, organs, cavities of human body.	Lecture Demonstration Discussion	Quizzes Midterm Exam Final Exam
a2-	Understand a clear idea about the different disciplines of anatomy, the anatomical terms of positions and movements and the different tissues of the body.	Presentation	Assignment Oral Exam
a3-	describe the structure and functions of the different systems of the human body with reference to the clinical significance of each.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B1	b1-	Identify different body structures, different systems and organs of the human body.

	B1	b2-	Enhance the manual and surgical skills of the student
	B1	b3-	Distinguish position, relation, blood supply and drainage, lymphatics and nerve supply of different organs and structures

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lecture	Quizzes
b1-	Identify different body structures, different systems and organs of the human body.	Demonstration	Midterm Exam
b2-	Enhance the manual and surgical skills of the student	Discussion	Final Exam
b3-	Distinguish position, relation, blood supply and drainage, lymphatics and nerve supply of different organs and structures	Presentation	Assignment
			Oral Exam

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C1	c1-	Teaching the student how to deal with the human body
	C1	c2-	Correlation between structure and function of different organs and systems of the body.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
c1	Teaching the student how to deal with	exercise	Homework

	the human body	Debate	
c1	Correlation between structure and function of different organs and systems of the body.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D8		d1-	Understanding and integration between anatomy and different subjects learned.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Exercise Discussion Brainstorming Debate Self-study	Homework Group work Research
d1-	Understanding and integration between anatomy and different subjects learned.		

XV. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to anatomy	a 1,a2,b1	– Definitions, body cavities, term of positions, Planes, movements and relation	1 st	2
2	Skeletal system	a1-a3, b1-b3	-Bones: structure, forms, functions, classifications and fontanels - Cartilages: types, functions – - joints: types	2 nd - 5 th	8

3	Muscular system	a1-a3, b1-b3	Types and Examples	6 th	2
4	Cardiovascular system	a1-a3, b1-b3	Pericardium and heart size, shape, chambers and valves	7 th	2
5	Midterm Exam	a1-a3, b1-b3	–	8 th	2
6	Cardiovascular system	a1-a3, b1-b3	Blood vessels and circulation –	9 th	2
7	Respiratory system	a1-a3, b1-b3	– Nose, paranasal sinuses, pharynx, Larynx, trachea, Bronchi, bronchioles, alveoli Lungs, pleura,	10 th	2
8	Nervous system	a1-a3, b1-b3	CNS, PNS	11 th	
9	Sensory organs	a1-a3, b1-b3	Eye, Ear, Nose, Skin and Tongue	12 th	2
10	Digestive system	a1-a3, b1-b3	Mouth, pharynx, esophagus, stomach, intestine and accessory organs	13 th	2
11	Urinary system	a1-a3, b1-b3	Kidney, ureter, urinary bladder and urethra	14 th	2
12	Endocrine system	a1-a3, b1-b3	Pituitary, thyroid, parathyroid, thymus, and adrenal gland	15 th	2
13	Final Exam	a1-a3, b1-b3		16 th	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Bones	c1-c2	1 st -3 rd	6
2	Joints	c1-c2	4 th	2
3	Muscles	c1-c2	5 th	2

4	Cardiovascular system	c1-c2	6 th -7 th	4
5	Respiratory system	c1-c2	8 th	2
6	Nervoussystem	c1-c2	9 th -10 th	4
7	Sensory organs	c1-c2	11 th	2
8	Digestive system	c1-c2	12 th	2
9	Urinary system	c1-c2	13 th	2
10	Endocrine system	c1-c2	14 th	2
11	Practical exam	c1-c2	15 th	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course

- Lectures
- Exercise
- Discussion
- Brainstorming
- Debate
- Self-study
- Demonstration
- Presentation

XVII. Teaching Strategies of the Course:

- Quizzes
- Midterm Exam
- Final Exam
- Oral Exam
- Practical Exam
- Homework
- Group work
- Research

XVIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Research, Group work and practical work	14 th	10	b1-b3, d1

XIX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	4 th	5	5%	a1,a2,b1
2	Midterm Exam	8 th	20	20%	a1-a3, b1-b3
3	Final Exam	16 th	40	40%	a1-a3, b1-b3
4	Oral Exam	15 th	5	5%	a1-a3, b1-b3
Total			70	70%	
Assessment of Practical Part					
1	Assignments	14 th	10	10%	b1-b3, d1
2	Practical Exam	15 th	20	20%	c1-c2
Total			30	30%	

XX. Learning Resources:

7- Required Textbook(s) (maximum two)

- 1- Standring, S., Borley, N. R., & Gray, H. (2008). Gray's anatomy: the anatomical basis of clinical practice. 40th ed., anniversary ed. Edinburgh: Churchill Livingstone/Elsevier

8- Essential References

- 1- Hamilton, W. J. (et al.).2001, Hamilton`s textbook of basic anatomy, 6th edition.
2- Martin E. Atkinson. 2000. Anatomy for dental students ,Latest Edition. Mosby

9- Electronic Materials and Web Sites, etc.

- 9- <https://onlinelibrary.wiley.com> › journal of Anatomy

XXI. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time. and shall not



	leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of General Anatomy

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:									
Name of Faculty Member:				Office Hours					
Location & Telephone No.:									
E-mail:				SAT	SUN	MON	TUE	WED	THU

2021/2022

XXII. Course Identification and General Information:	
1	Course Title: General Anatomy

2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	1 st Level / 2 nd Semester				
5	Prerequisites:	None				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

XXIII. Course Description:

This course planned to provide comprehensive knowledge about the basic structure of the human body and its clinical significance that provides a strong foundation for future studies. It deals with human morphology in a systematic approach that starts with the cellular level of organization followed by tissue, organ and system.

XXIV. Outcomes of the Course

Dental student with knowledge on normal disposition of the structures in the body, microscopic structure of the various tissues, nervous system to locate the site of lesions, sectional anatomy of head, neck and brain.

XXV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Identify the structures, components, systems, Regions, parts, organs, cavities of human body. |
| a2- | Understand a clear idea about the different disciplines of anatomy, the anatomical terms of positions and movements and the different tissues of the body. |
| a3- | Describe the structure and functions of the different systems of the human body with reference to the clinical significance of each. |

(B) Intellectual Skills

After participating in the course, students would be able to:	
b1-	Identify different body structures, different systems and organs of the human body.
b2-	Enhance the manual and surgical skills of the student
b3-	Distinguish position, relation, blood supply and drainage, lymphatics and nerve supply of different organs and structures

(C) Professional and Practical Skills

After participating in the course, students would be able to:	
c1-	Teaching the student how to deal with the human body
c2-	Correlation between structure and function of different organs and systems of the body.

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1-	Understanding and integration between anatomy and different subjects learned.

XXVI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to anatomy	– Definitions, body cavities, term of positions, Planes, movements and relation	1 st	2
2	Skeletal system	-Bones: structure, forms, functions, classifications and fontanels - Cartilages: types, functions – - joints: types	2 nd -5 th	8
3	Muscular system	– Types and Examples	6 th	2
4	Cardiovascular system	– Pericardium and heart size, shape, chambers and valves	7 th	2
5	Midterm exam	–	8 th	2
6	Cardiovascular system	Blood vessels and circulation	9 th	2

7	Respiratory system	– Nose, paranasal sinuses, pharynx, Larynx, trachea, Bronchi, bronchioles, alveoli Lungs, pleura,	10 th	2
8	Nervous system	– CNS, PNS	11 th	
9	Sensory organs	– Eye, Ear, Nose, Skin and Tongue	12 th	2
10	Digestive system	– Mouth, pharynx, esophagus, stomach, intestine and accessory organs	13 th	2
11	Urinary system	Kidney, ureter, urinary bladder and urethra –	14 th	2
12	Endocrine system	Pituitary, thyroid, parathyroid, thymus, and adrenal gland	15 th	2
13	Final Theoretical Exam		16 th	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect				
Order	Tasks/ Experiments		Number of Weeks	Contact Hours
1	Bones		1 st -3 rd	6
2	Joints		4 th	2
3	Muscles		5 th	2
4	Cardiovascular system		6 th -7 th	4
5	Respiratory system		8 th	2
6	Nervous system		9 th -10 th	4
7	Sensory organs		11 th	2
8	Digestive system		12 th	2
9	Urinary system		13 th	2
10	Endocrine system		14 th	2
11	Practical exam		15 th	2
Number of Weeks / Units per Semester			15	30

XXVII. Teaching strategies of the course

- Lectures
- Exercise
- Discussion
- Brainstorming
- Debate
- Self-study
- Demonstration
- Presentation

XXVIII. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Exam
- Oral Exam
- Practical Exam
- Homework
- Group work
- Research

XXIX. Assignments:

No.	Assignments	Week due	Mark
1	Research, Group work and practical work	14 th	10
Total			10

XXX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	4 th	5	5%
2	Midterm Exam	8 th	20	20%
3	Final Exam	16 th	40	40%
4	Oral Exam	15 th	5	5%
Total			70	70%
Assessment of Practical Part				
1	Assignments	14 th	10	10%
2	Practical Exam	15 th	20	20%

	Total	30	30%
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XXXI. Learning Resources:	
7- Required Textbook(s) (maximum two)	
	1- Standring, S., Borley, N. R., & Gray, H. (2008). Gray's anatomy: the anatomical basis of clinical practice. 40th ed., anniversary ed. Edinburgh: Churchill Livingstone/Elsevier
2- Essential References	
	1- Hamilton, W. J. (et al.).2001, Hamilton`s textbook of basic anatomy, 6th edition. 2- Martin E. Atkinson. 2000. Anatomy for dental students ,Latest Edition. Mosby
2- Electronic Materials and Web Sites, etc.	
	https://onlinelibrary.wiley.com > journal of Anatomy

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam,

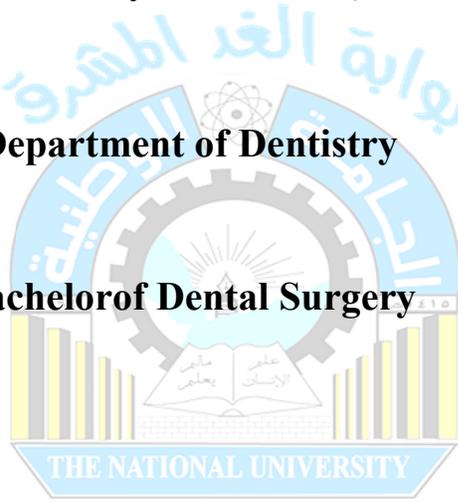


Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery



Course Specification of General histology & Embryology

Course No.()

2021/2022



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Prepared by:

Prof. Saeed M. Saeed

Reviewed by:

Dr.

Quality Assurance

Dean:

XVI. Course Identification and General Information:

1	Course Title:	General histology& Embryology				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	1 st Level / 2 nd Semester				
5	Prerequisites:	General Biology				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof. Saeed M. Saeed				
12	Date of Approval	2020-2021				

XVII. Course Description:

This course will explore cells and tissues of the human body (histology or micro-anatomy) by the use of various microscopic techniques. Special emphasis will be placed on the structure-function relationship in different tissues and organs and the role of stem cells in tissue regeneration. The lectures will be supplemented by the practical analysis of various organs, tissues and cells using virtual microscopy. At the end of the course students should be able to recognize and interpret microscopic tissue images and understand how the cellular organization of organs enables them to perform their specific functions.

XVIII. Outcomes of the Course

1. Dental graduate with basic skills in Identifying the basic histology slides by microscopy.
2. Dental graduate with potential to efficiently communicate physiological development, morphology, structure & functions of tissues & its variations.

XIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A2	a1-	Describe the levels of organization of living matter and define major concepts of cytology, histology, and organology.
	A1	a2-	Define the term tissue and analyze the morphological and functional characteristics of the basic tissues.
	A4	a3-	Mention the different steps required in preparing specimens for light and electron microscopy.
	A1	a4-	Describe the normal histological structure of some of various body systems (CVS - integumentary system- Lymphatic system)

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the levels of organization of living matter and define major concepts of cytology, histology, and organology.	Lecture Demonstration Discussion Presentation	Quizzes Midterm Exam Final Exam Assignment Oral Exam
a2-	Define the term tissue and analyze the morphological and functional characteristics of the basic tissues.		
a3-	Mention the different steps required in preparing specimens for light and electron microscopy.		
a4-	Describe the normal histological structure of some of various body systems (CVS - integumentary system-		

Lymphatic system)		
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(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B1	b1-	Name the structures appointed to, mentioning its function and relation to cellular regulation.
	B1	b2-	Differentiate between PAS and hematoxylin/eosin in staining lipid secreting cells.
	B1	b3-	Analyze the presence of simple or stratified epithelium, loose or dense connective tissue, circular or longitudinally disposed smooth muscle in the functions of an organ
	B1	b4-	Correlate between histological structure and function of different organs of all studied systems.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lecture Discussion Presentation	Quizzes
b1-	Name the structures appointed to, mentioning its function and relation to cellular regulation.		Midterm Exam Final Exam
b2-	Differentiate between PAS and hematoxylin/eosin in staining lipid secreting cells.		Assignment Oral Exam
b3-	Analyze the presence of simple or stratified epithelium, loose or dense connective tissue, circular or longitudinally disposed		

b4-	Correlate between histological structure and function of different organs of all studied systems.		
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(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C2	c1-	Demonstrate proficiency and expertise in the proper use of the light microscope in examining histological specimens on glass slides.
	C1	c2-	Recognize the characteristic structures of cells, tissues and organ systems of the body at the light microscope histologic level, and for selected tissues, at the electron microscopic ultrastructural level...
	C1	c3-	Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lab Experiments	Exam Homework
c1-	Demonstrate proficiency and expertise in the proper use of the light microscope in examining histological specimens on glass slides.		
c2-	Recognize the characteristic structures of cells, tissues and organ systems of the body at the light microscope		

	tissues, at the electron microscopic ultrastructural level...		
c3-	Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D2	d1-	Utilize the resources of biomedical information including the available electronic facilities to update his/her knowledge
	D6	d2-	Deal with the instruments and equipment in a responsible manner keeping them intact and clean
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Discussion Seminars Brainstorming Self-study	Homework Group work Research
d1-	Utilize the resources of biomedical information including the available electronic facilities to update his/her knowledge		
d2-	Deal with the instruments and equipment in a responsible manner keeping them intact and clean		

XX. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction and microtechniques	a3, b2	Definition and history of histology Light microscopy and electron microscopy Preparation of slides and stains	1 st	2
2	Cytology &Cytogenetics	a1, b1	Cell; concept and structure Membranous organelles Non-membranous organelles Inclusions Nucleus and chromatin Cell division; types Chromosomal aberrations	2 nd	2
3	Epithelium	a1, a2, b1	Epithelial membranes Glandular epithelium Myoepithelium Neuroepithelium	3 rd	2
4	Connective tissue	a2,b2	Concepts and components C.T. cells Intercellular substances Types of C.T.	4 th	2
5	Cartilage	a1, a2, b1, b2	Concept and types Cartilage cells Nutrition and growth	5 th	2
6	Bone	a1, a2, b1	Concept and types Bone cells Ossification; intramembranous and intra-cartilagenous	6 th	2
7	Blood &hemopoiesis	a1, a2, b1, b3	Concept and components RBC _s ; structure and function WBC _s ; types, structure and functions Platelets; structure and function Hemopoiesis; types	7 th	2
8	Midterm exam	a1,a2, a3 b1-b3	-MCQs and essay questions	8 th	2
9	Muscle tissue	a1, a2, b1, b2	Concept and types Skeletal muscles; structure and function Cardiac muscle; structure and function Smooth muscle; structure and function Neuromuscular junction	9 th	2
10	Nervous tissue	a1, a2, b1, b2	Concept Neurons and neuroglia; classifications, types, site and function	10 th	2

11	CVS	a4,b4	The heart Large, medium, small arteries and arterioles Large, medium, small veins and venules Capillaries ; types	11 th	2
12	Lymphatic system	a4,b4	Diffuse lymphatic system Tonsils Lymph nodes, spleen and thymus	12 th	2
13	Integumentary system	a4,b4	Skin; epidermis and dermis Glands; sweat glands (eccrine and apocrine), sebaceous glands Hair follicles	13 th	2
14	Review	a1-a4, b1-b4		14 th 15 th	4
15	Final Exam	a1-a4, b1-b4	-MCQs and essay questions	16 th	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	The usage of microscope and staining of tissues	c1-c3	1 st	2
2	Cell organelles at LM and EM Cell division	c1-c3	2 nd	2
3	Types of epithelium, Types of glands	c1-c3	3 rd	2
4	Types of C.T. (loose), Types of C.T. (dense)	c1-c3	4 th	2
5	Types of cartilage, Compact and spongy bone	c1-c3	5 th	2
6	Types of blood cells	c1-c3	6 th	2
7	Skeletal, smooth and cardiac muscle, Nissl bodies, Dendrites and axons	c1-c3	7 th	2
8	Heart and large Arteries Muscular arteries	c1-c3	8 th	2
9	Veins and capillaries	c1-c3	9 th	2
10	Payer's patches and lymph nodes, Spleen and Thymus	c1-c3	10 th	2
11	Skin (epidermis and dermis)	c1-c3	11 th	2
12	Glands (sweat and sebaceous)	c1-c3	12 th	2
13	Revision	c1-c3	13 th	2

14	Practical Exam	c1-c3	14 th	2
Number of Weeks / Units per Semester			14	28

VI. Teaching strategies of the course

- Lectures
- Discussion
- Seminars
- Presentation
- Brainstorming
- Lab Experiments
- Self-Learning

XXII. Teaching Strategies of the Course:

- Quizzes
- Midterm Exam
- Final Exam
- Practical Exam
- Research
- Homework
- Group work

XXIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Laboratory logbooks and reports. Research Homework Group work Discussion	weekly	5	b1, b2, b3, b4, d1, d2
Total			5	

XXIV. Schedule of Assessment Tasks for Students During the Semester

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	5 th	5	5%	a1, a2; b1, b2
2	Midterm Exam	8 th	20	20%	a1-a3, b1-b3
3	Final Exam	16 th	50	50%	a1-a4, b1-b4
Total			75	75%	
Assessment of Practical Part					
1	Assignments	weekly	5	5%	b1, b2, b3, b4, d1, d2
2	Practical Exam	15 th	20	20%	c1-c3
Total			25	25%	

XXV. Learning Resources:

10- Required Textbook(s) (maximum two)

1. Anthony L. Mescher, PhD; JUNQUEIRA'S Basic Histology--TEXT & ATLAS. 13th ed.
2. SMSaeed (2019): Textbook of human histology. 4 Ed.

11- Essential References

Michael H. Ross; WojciechPawlina, 2010, Histology: A Text and Atlas, with Correlated Cell and Molecular Biology, 6th Ed.

12- Electronic Materials and Web Sites, etc.

Websites of Histology:

<https://www.imedpub.com/scholarly/histology-journals-articles-ppts-list.php>
<https://www.tandfonline.com/toc/yhis20/current>

XXVI. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.



5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of General histology& Embryology

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location& Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

XXXII. Course Identification and General Information:						
1	Course Title:	General histology& Embryology				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	1 st Level / 2 nd Semester				
5	Prerequisites:	General Biology				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof. Saeed M. Saeed				
12	Date of Approval	2020-2021				

XXXIII. Course Description:
<p>This course will explore cells and tissues of the human body (histology or micro-anatomy) by the use of various microscopic techniques. Special emphasis will be placed on the structure-function relationship in different tissues and organs and the role of stem cells in tissue regeneration. The lectures will be supplemented by the practical analysis of various organs, tissues and cells using virtual microscopy. At the end of the course students should be able to recognize and interpret microscopic tissue images and understand how the cellular organization of organs enables them to perform their specific functions.</p>

XXXIV. Outcomes of the Course
<p>3. Dental graduate with basic skills in Identifying the basic histology slides by microscopy.</p> <p>4. Dental graduate with potential to efficiently communicate physiological development, morphology, structure & functions of tissues & its variations.</p>

XXXV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the levels of organization of living matter and define major concepts of cytology, histology, and organology.
a2-	Define the term tissue and analyze the morphological and functional characteristics of the basic tissues.
a3-	Mention the different steps required in preparing specimens for light and electron microscopy.
a4-	Describe the normal histological structure of some of various body systems (CVS - integumentary system- Lymphatic system)

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Name the structures appointed to, mentioning its function and relation to cellular regulation.
b2-	Differentiate between PAS and hematoxylin/eosin in staining lipid secreting cells.
b3-	Analyze the presence of simple or stratified epithelium, loose or dense connective tissue, circular or longitudinally disposed smooth muscle in the functions of an organ
b4-	Correlate between histological structure and function of different organs of all studied systems.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Demonstrate proficiency and expertise in the proper use of the light microscope in examining histological specimens on glass slides.
c2-	Recognize, identify and describe the characteristic structures of cells, tissues and organ systems of the body at the light microscope histologic level, and for selected tissues, at the electron microscopic ultrastructural level...
c3-	Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Utilize the resources of biomedical information including the available electronic
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	facilities to update his/her knowledge
d2-	Deal with the instruments and equipment in a responsible manner keeping them intact and clean

XXXVI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction and microtechniques	Definition and history of histology Light microscopy and electron microscopy Preparation of slides and stains	1 st	2
2	Cytology &Cytogenetics	Cell; concept and structure Membranous organelles Non-membranous organelles Inclusions Nucleus and chromatin Cell division; types Chromosomal aberrations	2 nd	2
3	Epithelium	Epithelial membranes Glandular epithelium Myoepithelium Neuroepithelium	3 rd	2
4	Connective tissue	Concepts and components C.T. cells Intercellular substances Types of C.T.	4 th	2
5	Cartilage	Concept and types Cartilage cells Nutrition and growth	5 th	2
6	Bone	Concept and types Bone cells Ossification; intramembranous and intra-cartilagenous	6 th	2
7	Blood &hemopoiesis	Concept and components RBCs ; structure and function WBCs; types, structure and functions Platelets; structure and function Hemopoiesis; types	7 th	2
8	Midterm exam	-MCQs and essay questions	8 th	2
9	Muscle tissue	Concept and types Skeletal muscles; structure and function Cardiac muscle; structure and function Smooth muscle; structure and function Neuromuscular junction	9 th	2
10	Nervous tissue	Concept	10 th	2

		site and function		
11	CVS	The heart Large, medium, small arteries and arterioles Large, medium, small veins and venules Capillaries ; types	11 th	2
12	Lymphatic system	Diffuse lymphatic system Tonsils Lymph nodes, spleen and thymus	12 th	2
13	Integumentary system	Skin; epidermis and dermis Glands; sweat glands (eccrine and apocrine), sebaceous glands Hair follicles	13 th	2
14	Review		14 th 15 th	4
15	Final Exam	-MCQs and essay questions	16 th	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	The usage of microscope and staining of tissues	1 st	2
2	Cell organelles at LM and EM Cell division	2 nd	2
3	Types of epithelium, Types of glands	3 rd	2
4	Types of C.T. (loose), Types of C.T. (dense)	4 th	2
5	Types of cartilage, Compact and spongy bone	5 th	2
6	Types of blood cells	6 th	2
7	Skeletal, smooth and cardiac muscle, Nissl bodies, Dendrites and axons	7 th	2
8	Heart and large Arteries Muscular arteries	8 th	2
9	Veins and capillaries	9 th	2
10	Payer's patches and lymph nodes, Spleen and Thymus	10 th	2
11	Skin (epidermis and dermis)	11 th	2
12	Glands (sweat and sebaceous)	12 th	2
13	Revision	13 th	2

14	Practical Exam	14 th	2
Number of Weeks / Units per Semester		14	28

XXXVII. Teaching strategies of the course

- Lectures
- Discussion
- Seminars
- Presentation
- Brainstorming
- Lab Experiments
- Self-Learning

XXXVIII. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Exam
- Practical Exam
- Research
- Homework
- Group work

XXXIX. Assignments:

No.	Assignments	Week due	Mark
1	Laboratory logbooks and reports. Research Homework Group work Discussion	weekly	5
Total			5

XL. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment

1	Quizzes	5 th	5	5%
2	Midterm Exam	8 th	20	20%
3	Final Exam	16 th	50	50%
Total			75	75%
Assessment of Practical Part				
1	Assignments	weekly	5	5%
2	Practical Exam	15 th	20	20%
Total			25	25%

XLI. Learning Resources:

8- Required Textbook(s) (maximum two)

1. Anthony L. Mescher, PhD; JUNQUEIRA 'S Basic Histology--TEXT & ATLAS. 13th ed.
2. SMSaeed (2019): Textbook of human histology. 4 Ed.

2- Essential References

Michael H. Ross; WojciechPawlina, 2010, Histology: A Text and Atlas, with Correlated Cell and Molecular Biology, 6th Ed.

3- Electronic Materials and Web Sites, etc.

Websites of Histology:

<https://www.imedpub.com/scholarly/histology-journals-articles-ppts-list.php>
<https://www.tandfonline.com/toc/yhis20/current>

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3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating:



	Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Organic Chemistry

Course No.()

2021/2022



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Prepared by:

Reviewed by:

Quality Assurance

Dean:

Dr. Abdul hafeedh Ali Abdulaah

Dr. M.AIGHorafi

XXI. Course Identification and General Information:

1	Course Title:	Organic Chemistry				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		3	2	--		3
4	Study level/ semester at which this course is offered:	1 st Level / 2 nd Semester				
5	Prerequisites:	General Chemistry				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr Abdul Hafeedh Ali Abdulaah				
12	Date of Approval	2020-2021				

XXII. Course Description:

This course will cover the different organic functional groups carried by organic compounds and drugs. The topics will include the physical and chemical properties, chemical reactions, methods of preparation and mechanisms including the aliphatic and aromatic compounds, include the physical and chemical properties, methods of preparation, chemical reactions, and the important of hydrocarbon, alkyl halide, alcohol, ethers, aldehydes, ketones, carboxylic acid and amine in medicine. The course will be frequently illustrated will linked to other scientific disciplines, in particular to the field of life of sciences.

XXIII. Outcomes of the Course

1. To provide students with the significance of different functional groups in organic compounds, and the importance of these functional groups in the structural formula of biomedical compounds.
2. Students should understand the chemical and physical behavior and synthetic reactions of different functional groups and their significance in pharmacy.
3. Students will be able to understand the different chemical reactions, methods of preparation and mechanisms for the different classes of organic compounds.

XXIV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1.	Describe the scientific basis of dentistry and the relevant biomedical and behavioral sciences which form the basis for understanding human growth, development and health.	a1-	Understand the basic principle of functional group in aliphatic ,aromatic organic compounds and synthesis.
A1.	Describe the scientific basis of dentistry and the relevant biomedical and behavioral sciences which form the basis for understanding human growth, development and health.	a2-	Describe the systematic methods of identification, synthesis of various classes of organic compounds.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Understand the basic principle of functional group in aliphatic ,aromatic organic compounds and synthesis.	Lectures Presentation	-Quizzes -Midterm Exam -Final Written Exam
a2-	Describe the systematic methods of identification, synthesis of various classes of organic compounds.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1.	Incorporate theoretical basic biomedical, behavioral and dental sciences with the clinical signs and symptoms for appropriate understanding of disease and its management.	b1-	Describe the physical, chemical properties and the methods of synthesis of organic medicinal agents.
B1.	Incorporate theoretical basic biomedical, behavioral and dental sciences with the clinical signs and symptoms for appropriate understanding of disease and its management	b2-	Explain the biological role of aliphatic and aromatic organic compounds in biomedical field

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Describe the physical, chemical properties and the methods of synthesis of organic medicinal agents.	-Lectures - Discussion	-Quizzes and Home work Midterm Exam -Final Practical Exam
b2-	Explain the biological role of aliphatic and aromatic organic compounds in biomedical field		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1.	Obtain and record a comprehensive history, perform an appropriate physical examination, and carry out different investigations to reach a correct diagnosis and treatment.	c1-	Acquire good theoretical skills regarding chemical and physical identification and classification of these basic organic functional groups,

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1	Acquire good theoretical skills regarding chemical and physical identification and classification of these basic organic functional groups,	<ul style="list-style-type: none"> ▪ Lectures. ▪ Lab Experiments 	<ul style="list-style-type: none"> ▪ laboratory and other written reports ▪ Quizzes ▪ Final Practical Exam

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills	CILOs in general and transferable skills

After completing this program, students would be able to:		After participating in the course, students would be able to:	
D3.	Demonstrate leadership and teamwork skills with colleagues and other oral health team for effective delivery of oral health care.	d1-	Communicate in team and apply time management principles effectively.
D1.	Commit to continuous education, self-development and lifelong learning to remain updated with advances in dental practice.	d2-	Adopt the principles of lifelong learning needed for continuous professional development.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Use of communication and information technology ▪ Self-learning 	<ul style="list-style-type: none"> ▪ Discussion. ▪ Group work
d1-	Communicate in team and apply time management principles effectively.		
d2-	Adopt the principles of lifelong learning needed for continuous professional development.		

V. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Organic Compounds:	a1,b1,b2	Introduction, solubility , type of chemical bonds, -hybridization and their types chemical bonding in drug–receptor interactions -Representation of organic -Types chemical bond cleavage	1	2
2	Organic reaction	a1,b1,b2	-Type of organic reactions, and type of their mechanisms Substitution -Addition -Elimination	1	2

			-Types of reagents		
3	Alkanes	a1,a2,b1,b2	--nomenclature, preparations, and reaction properties), and free radical substitution reaction mechanism.)	1	2
4	Aromatic compounds	a1,a2,b1,b2	Name Physical and chemical properties Aromaticity	1	2
5	Alkenes	a1,a2,b1,b2	Alkenes and cycloalkenes (nomenclature, preparations, and reaction properties), and elimination & addition reaction mechanism Pharmaceutical importance of alken (Isomer, activity, stability and metabolism)	2	4
6	Alkynes	a1,a2,b1,b2	Alkynes (nomenclature, preparations, and properties), acidity of acetylene physical and chemical properties of alkyne group	1	2
7	Aliphatic and aromatic organic halides	a1,a2,b1,b2	Alkyl halides (nomenclature, preparations, and properties), Nucleophilic substitution reactions mechanism, and reactions of organometallic compounds. Pharmaceutical importance of alkyl halide	1	2
8	Midterm	a1,a2,b1,b2		1	
9	Alcohols, ether and phenol	a1,a2,b1,b2	-Alcohols (nomenclature, preparations, and properties), esterification reaction mechanisms – Ethers (nomenclature, preparations, and properties) physical and chemical properties of d	2	4

			prodrug and metabolism)		
10	Aliphatic and aromatic aldehydes and ketones	a1,a2,b1,b2	Aliphatic and aromatic aldehydes & Ketones (nomenclature, preparations, and properties), Addition, condensation (Aldol) reaction mechanism, and cannizaro reaction	1	2
11	Aliphatic and aromatic Carboxylic acid	a1,a2,b1,b2	Aliphatic and aromatic carboxylic acids (nomenclature, preparations, and properties), factors affecting on the acidity of drugs	1	2
12	Derivatives of carboxylic acid	a1,a2,b1,b2	-Acyl halides -Anhydride -Esters -Amides Stability of drugs containing one or more of that compounds.	1	2
13	Aliphatic and aromatic amines	a1,a2,b1,b2	Aliphatic amines (nomenclature, preparations, and properties), factors affecting on the basicity of drugs	1	2
14	Final Theoretical Exam	a1,a2,b1,b2	-MCQs and essay questions	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Laboratory safety	c1	1	2
2	Test of alkene	c1	1	2
3	Test of alcohols	c1	1	2
4	Test of aldehydes	c1	1	2
5	Test of ketones	c1	1	2
6	Test of acids	c1	1	2
7	Test of acid derivatives	c1	1	2

8	Test of amines	c1	1	2
9	Test of ammonium salt	c1	2	4
10	Lassaigne's test, test for nitrogen	c1	1	2
11	Test for sulfur	c1	1	2
12	Test for halogen in absence of nitrogen and sulfur	c1	1	2
13	Revision	c1	1	2
14	Final exam	c1	1	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course

- Lectures
- Presentation
- Discussion
- Self-learning
- Lab Experiments
- Use of communication and information technology
- Self-learning

XXVII. Teaching Strategies of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Home work
- Final Practical Exam
- laboratory and other written reports
- Lab Experiments
- Discussion.

XXVIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Assignments : Searching about related subjects of functional groups in organic chemistry	10 th	5	a1,b1,c1,d1,d2

Total	5
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XXIX. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Assignments	10 th	5	5 %	a1,b1,c1,d1,d2
2	Quiz	6 th	5	5 %	a1,a2,b1,b2
3	Mid-Term Theoretical Exam	8 th	20	20 %	a1,a2,b1,b2
4	Final Theoretical Exam	16 th	50	50 %	a1,a2,b1,b2
			80	80%	
Assessment of Practical Part					
1	Midterm Practical Exam	7 th	10	10%	c1
2	Final Practical Exam	15 th	10	10 %	c1
Total			20	20%	

XXX. Learning Resources:	
13- Required Textbook(s) (maximum two)	
	1. Bruice, Paula Yurkanis. 2004. Organic Chemistry. 8th Ed, Upper Saddle River, NJ: Pears .on/Prentice Hall. Harvard 2. Solomons, T. W. G., & FRYHLE, C. B. (2017). Organic Chemistry. Hoboken, NJ, John .Wiley , 12th Edition
14- Essential References	
	1- .McMurry, J. (2008) Organic Chemistry. 7th Edition, Thomson Brooks Cole
15- Electronic Materials and Web Sites, etc.	
	Websites: 10- www.pubmed.com 11- http://www.sciencedirect.com 12- https://www.khanacademy.org/science/organic-chemistry

XXXI. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from



	taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Organic Chemistry

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours
Location & Telephone No.:		

E-mail:		SAT	SUN	MON	TUE	WED	THU
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2021/2022

XLII. Course Identification and General Information:						
1	Course Title:	Organic Chemistry				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		3	2	--	3	
4	Study level/ semester at which this course is offered:	1 st Level / 2 nd Semester				
5	Prerequisites:	General Chemistry				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr Abdul Hafeedh Alia Abdulaah				
12	Date of Approval	2020-2021				

XLIII. Course Description:
<p>This course will cover the different organic functional groups carried by organic compounds and drugs, The topics will include the physical and chemical properties, chemical reactions, methods of preparation and mechanisms including the aliphatic and aromatic compounds, include the physical and chemical properties, methods of preparation, chemical reactions, and the important of hydrocarbon, alkyl halide, alcohol, ethers, aldehydes, ketones, carboxylic acid and amine in medicine. The course will be frequently illustrated will linked to other scientific disciplines, in particular to the field of life of sciences</p>

XLIV. Outcomes of the Course
<ol style="list-style-type: none"> To provide students with the significance of different functional groups in organic compounds, and the importance of these functional groups in the structural formula of biomedical compounds. Students should understand the chemical and physical behavior and synthetic reactions of different functional groups and their significance in pharmacy. Students will be able to understand the different chemical reactions, methods of preparation

and mechanisms for the different classes of organic compounds.

XLV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Understand the basic principle of functional group in aliphatic ,aromatic organic compounds and synthesis.
a2-	Describe the systematic methods of identification, synthesis of various classes of organic compounds.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Describe the physical, chemical properties and the methods of synthesis of organic medicinal agents.
b2-	Explain the biological role of aliphatic and aromatic organic compounds in biomedical field

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Acquire good theoretical skills regarding chemical and physical identification and classification of these basic organic functional groups,
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(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Communicate in team and apply time management principles effectively.
d2-	Adopt the principles of lifelong learning needed for continuous professional development.

VI.Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Organic Compounds:	Introduction, solubility , type of chemical bonds, -hybridization and their types chemical bonding in drug-receptor interactions -Representation of organic - Types chemical bond cleavage	1	2
2	Organic reaction	-Type of organic reactions, and type of	1	

		Substitution -Addition -Elimination -Types of reagents		2
3	Alkanes	--nomenclature, preparations, and reaction properties), and free radical substitution reaction mechanism.)	1	2
4	Aromatic compounds	Name Physical and chemical properties Aromaticity	1	2
5	Alkenes	Alkenes and cycloalkenes (nomenclature, preparations, and reaction properties), and elimination & addition reaction mechanism Pharmaceutical importance of alken (Isomer, activity, stability and metabolism)	2	4
6	Alkynes	Alkynes (nomenclature, preparations, and properties), acidity of acetylene physical and chemical properties of alkyne group	1	2
7	Aliphatic and aromatic organic halides	Alkyl halides (nomenclature, preparations, and properties), Nucleophilic substitution reactions mechanism, and reactions of organometallic compounds. Pharmaceutical importance of alkyl halide	1	2
8	Midterm Exam		1	
9	Alcohols, ether and phenol	-Alcohols (nomenclature, preparations, and properties), esterification reaction mechanisms – Ethers (nomenclature, preparations, and properties) physical and chemical properties of drugs contain alcohol functional group (prodrug and metabolism)	2	4
10	Aliphatic and aromatic aldehydes and ketones	Aliphatic and aromatic aldehydes & Ketones (nomenclature, preparations, and properties), Addition, condensation (Aldol) reaction mechanism, and cannizzaro reaction	1	2

11	Aliphatic and aromatic Carboxylic acid	Aliphatic and aromatic carboxylic acids (nomenclature, preparations, and properties), factors affecting on the acidity of drugs	1	2
12	Derivatives of carboxylic acid	-Acyl halides -Anhydride -Esters -Amides Stability of drugs containing one or more of that compounds	1	2
13	Aliphatic and aromatic amines	Aliphatic amines (nomenclature, preparations, and properties), factors affecting on the acidity of drugs	1	2
14	Final Theoretical Exam	-MCQs and essay questions	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Laboratory safety	1	2
2	Test of alkene	1	2
3	Test of alcohols	1	2
4	Test of aldehydes	1	2
5	Test of ketones	1	2
6	Test of acids	1	2
7	Test of acid derivatives	1	2
8	Test of amines	1	2
9	Test of ammonium salt	2	4
10	Lassaigne's test, test for nitrogen	1	2
11	Test for sulfur	1	2
12	Test for halogen in absence of nitrogen and sulfur	1	2
	Revision	1	2



14	Final exam	1	2
Number of Weeks / Units per Semester		15	30

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Biochemistry 1

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

Prepared by:

Prof. Dr/ WaleedAldubae

Reviewed by:

Assoc.Prof. Dr

Al-Ghoury A

Quality Assurance

Dean:

XXVI. Course Identification and General Information:

1	Course Title:	Biochemistry 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester				
5	Prerequisites:	General biology, general and organic chemistry				
6	Co-requisite:					
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof. Dr/ WaleedAldubae				
12	Date of Approval	2020-2021				

XXVII. Course Description:

Biochemistry I helps students to recognize the importance of biomolecules in the body during health and diseases, biochemistry I is concerned with structure, composition, classification, and importance of carbohydrates. lipids, proteins, vitamins and enzymes.

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XVIII. Outcomes of the Course

This course is designed to:

- 1-Introduce the students to importance of biological macromolecules
- 2-Acquire knowledge in the structure of biomolecules and qualitative identification of biomolecules

XXIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1	Describe the scientific basis of dentistry and the relevant biomedical and behavioral sciences which form the basis for understanding human growth, development and health.	a1-	Explain the importance and the composition of proteins, carbohydrates, lipids, enzymes and vitamins.
		a2-	Classify carbohydrates, lipids, proteins, enzymes and vitamins.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Interactive lecture Presentation	Midterm exam Final term exam Class attendance
a1-	Explain the importance and the composition of proteins, carbohydrates, lipids, enzymes and vitamins.		
a2-	Classify carbohydrates, lipids, proteins, enzymes and vitamins.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills

CILOs of intellectual skills

After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1	Incorporate theoretical basic biomedical, behavioral and dental sciences with the clinical signs and symptoms for appropriate understanding of disease and its management.	b1-	Integrate between the symptoms of diseases and deficiency biomolecules.
		b2-	Interpret the result of lab tests of biochemistry

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:			
CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Presentation Case study	Midterm exam Final term exam Practical exam
b1-	Integrate between the symptoms of diseases and deficiency biomolecules.		
b2-	Interpret the result of lab tests of biochemistry		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1.	Obtain and record a comprehensive history, perform an appropriate physical examination, and carry out different investigations to reach a correct diagnosis and treatment.	c1-	Perform lab investigations to distinguish between carbohydrates, lipids, and proteins with lab safety.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lab experiments	Final Practical exam
c1	Perform lab investigations to distinguish between carbohydrates, lipids, and proteins with lab safety.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1.	Commit to continuous education, self-development and lifelong learning to remain updated with advances in dental practice.	d1-	Use internet as tool for self-learning and continuous education
D3.	Demonstrate leadership and teamwork skills with colleagues and other oral health team for effective delivery of oral health care.	d2-	Work effectively with team

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			Assignments Reports Direct observation
d1-	Use internet as tool for self-learning and continuous education	Self-learning Presentation	
d2-	Work effectively with team		

XX. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Carbohydrates Chemistry	a1,a2,b1,d1	-Biochemistry and medicine -Defenation and function of carbohydrates Classification of carbohydrates -Monosaccharides (classification, importance, properties) -Disaccharides (types, importance,	3	6

			-Polysaccharides (classification, importance, properties)		
2	Lipid chemistry	a1,a2,b1,d1	-Classification of lipids -Simple lipids and their importance -Compound lipids -Phospholipids (types, structure, importance) -Lipoproteins (types, structure, importance) -Derived lipids (types, structure, importance)	3	6
3	Protein chemistry	a1,a2,b1,d1	-Definition and importance of proteins -Aminoacids (classification , structure, properties, importance) -Structure of proteins (primary, secondary, tertiary, quaternary) -Classification of proteins with examples	4	8
4	Mid-Term Theoretical Exam	a1,a2,b1,d1	MCQs and essay questions	1	2
5	Vitamins and Enzymes	a1,a2,b1,d1	-Definition and classification of vitamins -Fat soluble vitamins and Water soluble vitamins (sources, structure, active forms, absorption, storage, stability, functions, deficiency and clinical manifestation , toxicity). -Definition and classification of enzymes -Cofactors -Mechanism of enzyme action -Factors that affect the rate of enzyme action -Enzymes inhibitors and isoenzymes -Clinical application of enzymes	4	8
6	Final Theoretical Exam	a1,a2,b1	MCQs and essay questions	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
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1	Introduction to lab safety	b1	2	4
2	-Identification of carbohydrates: Molisch's test, Iodine test, Barfoed's test Benedict's test, Seliwanoff's test Carbohydrate scheme tests	b1,c2,d2	3	6
3	-Protein identification: Biuret test, Isoelectricpoint test, Heat and acid tests Proteins Scheme tests.	b1,c2,d2	3	6
4	-Lipid identification tests: Test for solubility, Sudan IV, Salkowski reaction, Dichromate test	b1,c2,d2	3	6
5	- Final practical test	b1,c2,d2	1	2
Number of Weeks / Units per Semester			12	24

VI. Teaching strategies of the course

- Interactive lecture
- Presentation
- Case study
- Lab experiments
- Self-learning

XXXII. Assessment Strategies of the Course:

- Midterm exam
- Final term exam
- Practical exam
- Class attendance
- Assignments
- Reports
- Direct observation

XXXIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Searching information related to biochemistry 1	9 th	5	d1

Total	5
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XXXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Assignment	9 th	5	5%	d1
2	Class attendance	14 th	5	5%	
3	Midterm exam	7 th	20	20%	a1,a2,b1,d1
4	Final theoretical exam	16 th	50	50%	b1,c2,d2
Total			80	80%	
Assessment of Practical Part					
1	Final Practical exam	14 th	20	20%	a1,a2,b1
Total				20%	

XXXV. Learning Resources:

16- Required Textbook(s) (maximum two)	
	1- David, L. N., Michael, M. C (2017) Lehninger principles of biochemistry.7th edn. England: Macmillan Higher Education. 2- Victor, R.W., David, A.B., Kathleen, M.B., Peter, j. k., Anthony, P.W (2018). Harper's Illustrated Biochemistry.31st edn. United States : McGraw-Hill Education
17- Essential References	
	2- Michael, L., Alisa, P (2014) Marks' Essentials of Medical Biochemistry: A Clinical Approach. edn. China: Wolters Kluwer. 3- Bhagavan, N. V., Chung-Eun Ha (2015) Essentials of Medical Biochemistry with Clinical Cas 2nd edn. China: Academic Press..
18- Electronic Materials and Web Sites, etc.	
	4- The Medical Biochemistry Page https://themedicalbiochemistrypage.org/ 2-Biochemistry Animations https://maxanim.com/biochemistry/

XXXVI. Course Policies:

1	Class Attendance:
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	taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistr

Department of Dentistr

Bachelor of Dental Surgery

Course Plan (Syllabus) of Biochemistry 1

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

XLVI. Course Identification and General Information:

1	Course Title:	Biochemistry 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester				
5	Prerequisites:	General and organic chemistry, general biology				
6	Co-requisite:					
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof. Dr/ WaleedAldubae				
12	Date of Approval	2020-2021				

XLVII. Course Description:

Biochemistry I helps students to recognize the importance of biomolecules in the body during health and diseases, biochemistry I is concerned with structure, composition, classification, and importance of carbohydrates, lipids, proteins, vitamins and enzymes.

XLVIII. Outcomes of the Course

This course is designed to:

1-Introduce the students to importance of biological macromolecules

2-Acquire knowledge in the structure of biomolecules and qualitative identification of biomolecules

XLIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Explain the importance and the composition of proteins, carbohydrates, lipids, enzymes and vitamins.
a2-	Classify carbohydrates, lipids, proteins, enzymes and vitamins.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Integrate between the symptoms of diseases and deficiency biomolecules.
b2-	Interpret the result of lab tests of biochemistry

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Perform lab investigations to distinguish between carbohydrates, lipids, and proteins with lab safety.
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(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Use internet as tool for self-learning and continuous education
d2-	Work effectively with team

VI-Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Carbohydrates Chemistry	-Biochemistry and medicine -Defenation and function of carbohydrates	3	6

		-Monosaccharides (classification, importance, properties) -Disaccharides (types, importance, properties) -Polysaccharides (classification, importance, properties)		
2	Lipid chemistry	-Classification of lipids -Simple lipids and their importance -Compound lipids -Phospholipids (types, structure, importance) -Lipoproteins (types, structure, importance) -Derived lipids (types, structure, importance)	3	6
3	Protein chemistry	-Definition and importance of proteins -Aminoacids (classification, structure, properties, importance) -Structure of proteins (primary, secondary, tertiary, quaternary) -Classification of proteins with examples	4	8
4	Mid-Term Theoretical Exam	MCQs and essay questions	1	2
5	Vitamins and Enzymes	-Definition and classification of vitamins -Fat soluble vitamins and Water soluble vitamins (sources, structure, active forms, absorption, storage, stability, functions, deficiency and clinical manifestation, toxicity). -Definition and classification of enzymes -Cofactors -Mechanism of enzyme action -Factors that affect the rate of enzyme action -Enzymes inhibitors and isoenzymes -Clinical application of enzymes	4	8
6	Final Theoretical Exam	MCQs and essay questions	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Introduction to lab safety	2	4
2	-Identification of carbohydrates: Molisch's test, Iodine test, Barfoed's test Benedict's test, Seliwanoff's test	3	6

	Carbohydrate scheme tests		
3	-Protein identification: Biuret test, Isoelectricpoint test, Heat and acid tests Proteins Scheme tests.	3	6
4	-Lipid identification tests: Test for solubility, Sudan IV, Salkowski reaction, Dichromate test	3	6
5	- Final practical test	1	2
Number of Weeks / Units per Semester		12	24

VII. Teaching strategies of the course

- Interactive lecture
- Presentation
- Case study
- Lab experiments
- Self-learning

VIII- Assessment Strategies of the Course:

- Midterm exam
- Final term exam
- Practical exam
- Class attendance
- Assignments
- Reports
- Direct observation
-

IX-Assignments:

No.	Assignments	Week due	Mark
1	Searching information related to biochemistry 1	9 th	5
Total			5

X-Schedule of Assessment Tasks for Students During the Semester

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Assignment	9 th	5	5%	d1
2	Class attendance	14 th	5	5%	
3	Midterm exam	7 th	20	20%	a1,a2,b1,d1
4	Final theoretical exam	16 th	50	50%	b1,c2,d2
Total			80	80%	
Assessment of Practical Part					
1	Final Practical exam	14 th	20	20%	a1,a2,b1
Total				20%	

XI-Learning Resources:

19- Required Textbook(s) (maximum two)

- 3- David, L. N., Michael, M. C (2017) Lehninger principles of biochemistry.7th edn. England: Macmillan Higher Education.
- 4- Victor, R.W., David, A.B., Kathleen, M.B., Peter, j. k., Anthony, P.W (2018). Harper's Illustrated Biochemistry.31st edn. United States : McGraw-Hill Education

20- Essential References

- 4- Michael, L., Alisa, P (2014) Marks' Essentials of Medical Biochemistry: A Clinical Approach. edn. China: Wolters Kluwer.
- 5- Bhagavan, N. V., Chung-Eun Ha (2015) Essentials of Medical Biochemistry with Clinical Cases. 2nd edn. China: Academic Press..

21- Electronic Materials and Web Sites, etc.

- 5- The Medical Biochemistry Page
<https://themedicalbiochemistrypage.org/>
- 2-Biochemistry Animations
<https://maxanim.com/biochemistry/>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not

	leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

L. Teaching strategies of the course

- Lectures
- Presentation
- Discussion
- Self-learning
- Lab Experiments
- Use of communication and information technology
- Self-learning

LI. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Home work
- Final Practical Exam
- laboratory and other written reports
- Lab Experiments
- Discussion.

LII. Assignments:

No.	Assionments	Week due	Mark
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1	Assignments : Searching about related subjects of functional groups in organic chemistry	10 th	5
Total			5

LIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Assignments	10 th	5	5 %
2	Quiz	6 th	5	5 %
3	Mid-Term Theoretical Exam	8 th	20	20 %
4	Final Theoretical Exam	16 th	50	50 %
			80	80%

Assessment of Practical Part

1	Midterm Practical Exam	7 th	10	10%
2	Final Practical Exam	15 th	10	10 %
Total			20	20%

X. Learning Resources:

22- Required Textbook(s) (maximum two)

1. Bruice, Paula Yurkanis. 2004. Organic Chemistry. 8th Ed, Upper Saddle River, NJ: Pearson/Prentice Hall. Harvard
2. Solomons, T. W. G., & FRYHLE, C. B. (2017). Organic Chemistry. Hoboken, NJ, John Wiley, 12th Edition

23- Essential References

- 1- McMurry, J. (2008) Organic Chemistry. 7th Edition, Thomson Brooks Cole

2- Electronic Materials and Web Sites, etc.

Websites:

1. www.pubmed.com
2. <http://www.sciencedirect.com>
3. <https://www.khanacademy.org/science/organic-chemistry>



1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
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4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
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7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistr

Department of Dentistry

Bachelorof Dental Surgery

Course Specification of Dental materials (1)

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

XXXI. Course Identification and General Information:						
1	Course Title:	Dental materials (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2			2	
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester				
5	Prerequisites:	None				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				

11	Prepared by:	Dr. Ibrahim Z. Al-Shami
XXXII. Course Description:		
<p>This is an essential course designed to provide students with basic knowledge of the terminology, composition, properties, biocompatibility, manipulation and mixing of dental materials used in the dental office and dental laboratory including gypsum products, impression materials (hydrocolloids and rubber base), resins, waxes, restorative materials, cements, cavity liners, varnishes, amalgam, casting metals and alloys, ceramics with practical applications. This course helps students in differentiation between dental materials and selection of the most appropriate ones.</p>		



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I. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A1	a1-	Describe the composition, physical and chemical properties of various dental materials and how these allow the materials to behave.
	A4	a2-	Recognize the criteria for the selection of materials for specific dental procedures and Describe the fundamental strength and weakness of each material.
	A5	a3-	explain indirect restorations and the technique and material used in casting procedures.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Demonstrations Discussion	Quizzes Midterm Exam Final Exam
a1-	Describe the composition, physical and chemical properties of various dental materials and how these allow the materials to behave.		
a2-	Recognize the criteria for the selection of materials for specific dental procedures and Describe the fundamental strength and weakness of each material.		
a3-	explain indirect restorations and the technique and material used in casting procedures.		

Alignment of Course CILOs to PILOs in intellectual skills:	
PILOs in intellectual skills	CILOs of intellectual skills
After completing this program, students would be able to:	
B5	b1- Discuss the effect of various clinical procedures on materials' properties
B1	b2- Demonstrate the properties, handling characteristics, advantages and disadvantages of dental materials
B5	Differentiate between different types of impression materials.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		
b1- Discuss the effect of various clinical procedures on materials' properties	Lectures Demonstrations Discussion	Quizzes Midterm Exam Final Exam Semester work
b2- Demonstrate the properties, handling characteristics, advantages and disadvantages of dental materials		
b3- Differentiate between different types of impression materials.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills	CILOs in professional and practical skills
After completing this program, students would be able to:	
C7	c1- Select and evaluate various dental materials based on scientific understanding of their structure and properties

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Demonstration	Semester Work
c1-	Select and evaluate various dental materials based on scientific understanding of their structure and properties		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D3		d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.
D4		d2-	Manage time during lab work

Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Discussions Demonstrations	Direct Observation Semester Work
d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.		
d2-	Manage time during lab work		

II. Course Content:
1 – Course Topics/Items:
a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Dental Materials	a3, b1, d1	<ul style="list-style-type: none"> - Materials in Dentistry - Definition and importance. - Structure of dental materials - Classifications 	1 week	2
2	Dental materials properties	a1, a3, b1, b2, d1	<ul style="list-style-type: none"> - Physical, mechanical, chemical and biological properties 	2 weeks	4
3	Gypsum products	a1, a3, b1, b2, d1	<ul style="list-style-type: none"> - Types - Indication - Usage 	1 week	2
4	Impression materials	a1, a3, b1, b2, b3, d1	<ul style="list-style-type: none"> - Classification - Indication - Usage - Properties of impression materials 	3 weeks	6
5	Mid-Term Theoretical Exam	a1, a3, b1, b2, d1	MCQs and essay questions	1 week	2
6	Investments	a1, a3, b1, b2, d1	<ul style="list-style-type: none"> - Types - Materials - Indication - Usage 	1 week	2
7	Waxes	a1, a3, b1, b2, d1	<ul style="list-style-type: none"> - Types - Composition - Indication and Usage - Investment 	2 weeks	4
8	Non-metallic denture base material	a1, a3, b1, b2, d1	<ul style="list-style-type: none"> - History, types. - Polymers, polymerization, PMMA. - Heat and cold cure. - Properties. 	2 weeks	4
9	Metallic dental materials		<ul style="list-style-type: none"> - Precious non-precious 	2	4

		b1, b2, d1	metals, – Stainless steel and metallic denture base materials – Metals for crown and bridge	weeks	
10	Final Theoretical Exam	a1, a2, a3, b1, b2, b3, d1	MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester				16	32

VI. Teaching strategies of the course

Lectures
Demonstrations
Discussions

XXXVII. Teaching Strategies of the Course:

Quizzes
Midterm Exam
Final Exam
Semester Work
Direct Observation

XXXVIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	□ Semester work:	2 -14	10	c1,d1, d2
Total			10	

XXXIX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	6 - 12	10	10 %	a1, a2, a3, b1, b2

2	Assignments	2 -14	10	10%	c1,d1, d2
3	Midterm Exam	8	30	30 %	a1,a3, b1, b2, d1
4	Final Exam	16	50	50 %	a1, a2, a3, b1, b2, d1
Total			100	100%	

XL. Learning Resources:

24- Required Textbook(s) (maximum two)

- 6- Kenneth Anusavice, ChiayiShen H., Ralph Rawls, 2012: Phillips Science of Dental Materials- 12th edition, Saunders, USA.
- 7- Ronald Sakaguchi, Jack Ferracane, John Powers, 2018: Craig's Restorative Dental Materials. 14th edition, Mosby, USA.

25- Essential References

- 1- John Powers, John Wataha, 2012: Dental Materials: properties and manipulation 10th edition, Mosby, USA.
- 2- John F. McCabe, Angus Walls, 2008: Applied dental materials, 9th edition, Blackwell, USA.

26- Electronic Materials and Web Sites, etc.

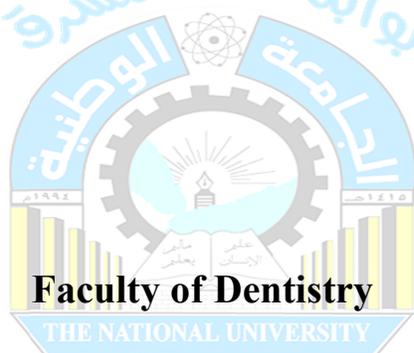
- 1- Academy of Dental Materials
<https://www.journals.elsevier.com/dental-materials>
- 2- International Journal of Dental Materials (IJDM)
<https://www.ijdm.co.in>
- 3- Dental Materials Journal
[https:// www.academydentalmaterials.com](https://www.academydentalmaterials.com)

XLI. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
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7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



الجامعة الوطنية
Department of Dentistry
NU

Bachelor of Dental Surgery

Course Plan (Syllabus) of Dental materials (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

LIV. Course Identification and General Information:

1	Course Title:	Dental materials (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2				2
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester				
5	Prerequisites:	None				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

LV. Course Description:

This is an essential course designed to provide students with basic knowledge of the terminology, composition, properties, biocompatibility, manipulation and mixing of dental materials used in the dental office and dental laboratory including gypsum products, impression materials

(hydrocolloids and rubber base), resins, waxes, restorative materials, cements, cavity liners, varnishes, amalgam, casting metals and alloys, ceramics with practical applications. This course helps students in differentiation between dental materials and selection of the most appropriate ones.

LVI. Outcomes of the Course

1. Dental student with knowledge of physical, chemical, mechanical and biological properties of all materials used in dentistry.
2. Dental student with an ability to manipulate various dental materials

LVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the composition, physical and chemical properties of various dental materials and how these allow the materials to behave.
a2-	Recognize the criteria for the selection of materials for specific dental procedures and Describe the fundamental strength and weakness of each material.
a3-	explain indirect restorations and the technique and material used in casting procedures.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Discuss the effect of various clinical procedures on materials' properties
b2-	Demonstrate the properties, handling characteristics, advantages and disadvantages of dental materials
b3-	Differentiate between different types of impression materials.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Select and evaluate various dental materials based on scientific understanding of their structure and properties
-----	--

(D) General and Transferable Skills

d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.
d2-	Manage time during lab work

LVIII. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Dental Materials	<ul style="list-style-type: none"> – Materials in Dentistry – Definition and importance. – Structure of dental materials – Classifications 	1 week	2
2	Dental materials properties	<ul style="list-style-type: none"> – Physical, mechanical, chemical and biological properties 	2 weeks	4
3	Gypsum products	<ul style="list-style-type: none"> – Types – Indication – Usage 	1 week	2
4	Impression materials	<ul style="list-style-type: none"> – Classification – Indication – Usage – Properties of impression materials 	3 weeks	6
5	Mid-Term Theoretical Exam	MCQs and essay questions	1 week	2
6	Investments	<ul style="list-style-type: none"> – Types – Materials – Indication – Usage 	1 week	2
7	Waxes	<ul style="list-style-type: none"> – Types – Composition – Indication and Usage – Investment 	2 weeks	4
8	Non-metallic denture base	---	2 weeks	4

		<ul style="list-style-type: none"> - Polymers, polymerization, PMMA. - Heat and cold cure. - Properties. 		
9	Metallic dental materials	<ul style="list-style-type: none"> - Precious, non-precious metals, - Stainless steel and metallic denture base materials - Metals for crown and bridge 	2 weeks	4
10	Final Theoretical Exam	MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester			16	32

LIX. Teaching strategies of the course

Lectures
Demonstrations
Discussions

LX. Assessment Methods of the Course:

Quizzes
Midterm Exam
Final Exam
Semester Work
Direct Observation

LXI. Assignments:

No.	Assignments	Week due	Mark
1	Semester work	2 -14	10
Total			10

LXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	6 - 12	10	10 %
2	Assignments	2 -14	10	10%

3	Midterm Exam	8	30	30 %
4	Final Exam	16	50	50 %
Total		100		70%

LXIII. Learning Resources:

9- Required Textbook(s) (maximum two)

- 1- Kenneth Anusavice, ChiayiShen H., Ralph Rawls, 2012: Phillips Science of Dental Materials- 12th edition, Saunders, USA.
- 2- Ronald Sakaguchi, Jack Ferracane, John Powers, 2018: Craig's Restorative Dental Materials. 14th edition, Mosby, USA.

10- Essential References

- 1- John Powers, John Wataha, 2012: Dental Materials: properties and manipulation 10th edition, Mosby, USA.
- 2- John F. McCabe, Angus Walls, 2008: Applied dental materials, 9th edition, Blackwell, USA.

11- Electronic Materials and Web Sites, etc.

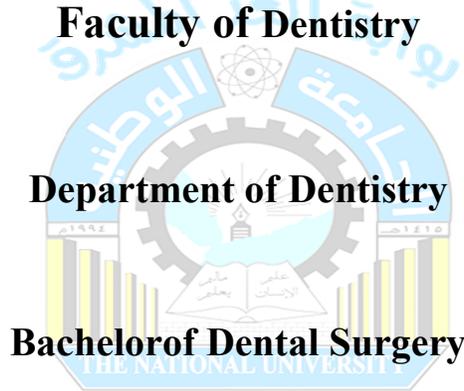
- 1- Academy of Dental Materials
<https://www.journals.elsevier.com/dental-materials>
- 2- International Journal of Dental Materials (IJDM)
<https://www.ijdm.co.in>
- 3- Dental Materials Journal
[https:// www.academydentalmaterials.com](https://www.academydentalmaterials.com)

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancellation of the student's exam or

	assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery



Course Specification of Anatomy (Head and Neck)

Course No.()

2021/2022



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Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:

III. Course Identification and General Information:

1	Course Title:	Anatomy (Head and Neck)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	General anatomy				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

IV. Course Description:

This course planned to provide comprehensive knowledge about the basic structure of the human body and its clinical significance that provides a strong foundation for future studies. It deals with human morphology in a systematic approach that starts with the cellular level of organization followed by tissue, organ and system.

V. Outcomes of the Course

On completion of the course,

1. the student would demonstrate sound theoretical knowledge and understanding of basic relevant sciences namely, the applied anatomy of the face and oral cavity.
2. Dental student with knowledge on normal disposition of the structures in the body, microscopic structure of the various tissues, nervous system to locate the site of lesions, sectional anatomy of head, neck and brain.
3. Dental student possessing skills to locate various structures of head and neck of the body, identify various tissues under microscope, 3. Dental student with an integrated knowledge on basic sciences and clinical subjects.

VI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A1, A2	a1-	Identify the structures, components, cavities of the skull .
	A2	a2-	Describe the relationship of vessels, nerves, muscles, bones and organs to each other
	A2	a3-	Relate the anatomical complex of the head and neck to other systemic body functions.
	A1	a4-	Identify vessels, nerves, muscles, bones and organs of the human body as well as identify specific cells and microanatomical structures in the structural tissues of the body.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lecture Demonstration Discussion Presentation	Quizzes Midterm Exam Final Exam Assignment Oral Exam
a1-	Identify the structures, components, cavities of the skull .		
a2-	Describe the relationship of vessels, nerves, muscles, bones and organs to each other		
a3-	Relate the anatomical complex of the head and neck to other systemic body functions.		
a4-	Identify vessels, nerves, muscles, bones and organs of the human body as well as identify specific cells and microanatomical structures in the structural tissues of the body.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B1	b1-	Evaluate the anatomical complex of the head and neck to other systemic body functions.
	B1	b2-	Demonstrate how the body functions in health.
	B2	b3-	Differentiate between the body functions are altered in disease.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Evaluate the anatomical complex of the head and neck to other systemic body functions.	Lecture Demonstration Discussion	Quizzes Midterm Exam Final Exam
b2-	Demonstrate how the body functions in health.	Presentation	Assignment Oral Exam
b3-	Differentiate between the body functions are altered in disease.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C1	c1-	Demonstrate relationship between the different structures and organs.
	C1	c2-	Given a clinical correlation, identify the anatomical landmarks important in understanding normal function.

	C2	c3-	Prescribe a clinical correlation, anatomical knowledge to solve clinical situations of bones, muscles, arteries, veins, nerves and lymphatics drainage
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Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Semester Work Practical Exam
c1	Demonstrate relationship between the different structures and organs.		
c1	Given a clinical correlation, identify the anatomical landmarks important in understanding normal function.		
c3	Prescribe a clinical correlation, anatomical knowledge to solve clinical situations of bones, muscles, arteries, veins, nerves and lymphatics drainage		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D8	d1-	Develop Excellent Communication skills with wide range of individuals.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Exercise Discussion Brainstorming Debate Self study	Homework Group work Research
d1-	Develop Excellent Communication skills with wide range of individuals.		

II. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Osteology	a1,a2, b1	– Skull, hyoid bone, cervical vertebra, foramina, joints	1 ST - 2 nd	4
2	Scalp	a1-a4, b1- b3	-Bones: structure, forms, functions, classifications and fontanels - Cartilages: types, functions – - joints: types	3 rd	2
3	Face	a1-a4, b1- b3	Types and Examples	4 th	2
4	Temporal and infratemporal fossa	a1-a4, b1- b3	Pericardium and heart size, shape, chambers and valves	5 th	2
5	Orbital cavity and Ear	a1-a4, b1- b3	–	6 th	2
6	Nasal cavity, Paranasal sinuses and Oral cavity	a1-a4, b1- b3	Blood vessels and circulation –	7 th	2
7	Midterm exam	a1-a4, b1- b3	– Nose, paranasal sinuses, pharynx, Larynx, trachea, Bronchi, bronchioles, alveoli Lungs,pleura,	8 th	2
8	Neck Muscles	a1-a4, b1- b3	CNS,PNS	9 th	2
9	Glands, pharynx, larynx and trachea	a1-a4, b1- b3	Eye, Ear, Nose, Skin and Tongue	10 th	2
10	Nerves of head and neck	a1-a4, b1- b3	Mouth, pharynx, esophagus, stomach, intestine and accessory organs	11 th - 12 th	4
11	Blood supply of head and neck	a1-a4, b1- b3	Kidney, ureter, urinary bladder and urethra	13 th	2
12	Lymphatic drainage of head and neck	a1-a4, b1- b3	Pituitary, thyroid, parathyroid, thymus, and adrenal gland	14 th	2

13	Cranial Cavity	a1-a4, b1- b3		15 th	2
14	Final Exam	a1-a4, b1- b3		16 th	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Skull	c1-c3	1 st -2 nd	4
2	Hyoid bone, cervical vertebra and TMJ	c1-c3	3 rd	2
3	Scalp, face	c1-c3	4 th	2
4	Temporal, infratemporal fossae	c1-c3	5 th	2
5	Orbital cavity and ear	c1-c3	6 th	2
6	Nasal cavity and oral cavity	c1-c3	7 th -8 th	4
7	Neck muscles: Posterior neck triangles	c1-c3	9 th	2
8	Neck muscles: Anterior neck triangles	c1-c3	10 th	2
9	Thyroid and parathyroid glands, Pharynx & Larynx and trachea	c1-c3	11 th	2
10	Nerves of head and neck	c1-c3	12 th	2
11	Blood supply of head and neck	c1-c3	13 th	2
12	Cranial cavity	c1-c3	14 th	2
13	Practical exam	c1-c3	15 th	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course

- Lectures
- Exercise
- Discussion
- Brainstorming
- Debate
- Self-study
- Demonstration
- Presentation

XLII. Teaching Strategies of the Course:

- Quizzes
- Midterm Exam
- Final Exam
- Oral Exam
- Practical Exam
- Homework
- Group work
- Research
- Semester Work

XLIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Research, Group work and practical work	14 th	10	b1-b3, d1
Total			10	

XLIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	4 th	5	5%	a1,a3,b1
2	Midterm Exam	8 th	20	20%	a1-a4, b1-b3
3	Final Exam	16 th	40	40%	a1-a4, b1-b3
4	Oral Exam	15 th	5	5%	a1-a4, b1-b3
Total			70	70%	

Assessment of Practical Part

1	Assignments	14 th	10	10%	b1-b3, d1
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2	Practical Exam	15 th	20	20%	c1-c3
Total			30	30%	

XLV. Learning Resources:

27- Required Textbook(s) (maximum two)

8- Standring, S., Borley, N. R., & Gray, H. (2008). Gray's anatomy: the anatomical basis of clinical practice. 40th ed., anniversary ed. Edinburgh: Churchill Livingstone/Elsevier

28- Essential References

1- Hamilton, W. J. (et al.).2001, Hamilton`s textbook of basic anatomy, 6th edition.
2- Martin E. Atkinson. 2000. Anatomy for dental students ,Latest Edition. Mosby

29- Electronic Materials and Web Sites, etc.

<https://onlinelibrary.wiley.com> › journal of Anatomy
1- <http://imcip.meded.com/integrated/ha/>

XLVI. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



Forgery/Impersonation is an act of fraud that results in the cancellation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Medical Science

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Anatomy (Head and Neck)

Course No. (----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

LXIV. Course Identification and General Information:

2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	General anatomy				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

LXV. Course Description:

This course planned to provide comprehensive knowledge about the basic structure of the human body and its clinical significance that provides a strong foundation for future studies. It deals with human morphology in a systematic approach that starts with the cellular level of organization followed by tissue, organ and system.

LXVI. Outcomes of the Course

On completion of the course,

1. the student would demonstrate sound theoretical knowledge and understanding of basic relevant sciences namely, the applied anatomy of the face and oral cavity.
2. Dental student with knowledge on normal disposition of the structures in the body, microscopic structure of the various tissues, nervous system to locate the site of lesions, sectional anatomy of head, neck and brain.
3. Dental student possessing skills to locate various structures of head and neck of the body, identify various tissues under microscope, 3. Dental student with an integrated knowledge on basic sciences and clinical subjects.

4. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Identify the structures, components, cavities of the skull . |
| a2- | Describe the relationship of vessels, nerves, muscles, bones and organs to each other |

a3-	Relate the anatomical complex of the head and neck to other systemic body functions.
a4-	Identify vessels, nerves, muscles, bones and organs of the human body as well as identify specific cells and microanatomical structures in the structural tissues of the body.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Evaluate the anatomical complex of the head and neck to other systemic body functions.
b2-	Demonstrate how the body functions in health.
b3-	Differentiate between the body functions are altered in disease.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Demonstrate relationship between the different structures and organs.
c2-	Given a clinical correlation, identify the anatomical landmarks important in understanding normal function.
c3-	Prescribe a clinical correlation, anatomical knowledge to solve clinical situations of bones, muscles, arteries, veins, nerves and lymphatics drainage

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Develop Excellent Communication skills with wide range of individuals.
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5. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to anatomy	– Definitions, body cavities, term of positions, Planes, movements and relation	1 st	2
2	Skeletal system	-Bones: structure, forms, functions, classifications and fontanels - Cartilages: types, functions – - joints: types	2 nd -5 th	8
3	Muscular system	– Types and Examples	6 th	2

4	Cardiovascular system	– Pericardium and heart size, shape, chambers and valves	7 th	2
5	Midterm exam	–	8 th	2
6	Cardiovascular system	Blood vessels and circulation	9 th	2
7	Respiratory system	– Nose, paranasal sinuses, pharynx, Larynx, trachea, Bronchi, bronchioles, alveoli Lungs, pleura,	10 th	2
8	Nervous system	– CNS, PNS	11 th	2
9	Sensory organs	– Eye, Ear, Nose, Skin and Tongue	12 th	2
10	Digestive system	– Mouth, pharynx, esophagus, stomach, intestine and accessory organs	13 th	2
11	Urinary system	Kidney, ureter, urinary bladder and urethra	14 th	2
12	Endocrine system	Pituitary, thyroid, parathyroid, thymus, and adrenal gland	15 th	2
13	Final Theoretical Exam		16 th	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Bones	1 st -3 rd	6
2	Joints	4 th	2
3	Muscles	5 th	2
4	Cardiovascular system	6 th -7 th	4
5	Respiratory system	8 th	2
6	Nervoussystem	9 th -10 th	4
7	Sensory organs	11 th	2
8	Digestive system	12 th	2
9	Urinary system	13 th	2
10		14 th	2

11	Practical exam	15 th	2
Number of Weeks / Units per Semester		15	30

6. Teaching strategies of the course

- Lectures
- Exercise
- Discussion
- Brainstorming
- Debate
- Self-study
- Demonstration
- Presentation

7. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Exam
- Oral Exam
- Practical Exam
- Homework
- Group work
- Research
- Semester Work

8. Assignments:

No.	Assignments	Week due	Mark
1	Research, Group work and practical work	14 th	10
Total			10

9. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	4 th	5	5%
2	Midterm Exam	8 th	20	20%
3	Final Exam	16 th	40	40%
4	Oral Exam	15 th	5	5%

Assessment of Practical Part				
1	Assignments	14 th	10	10%
2	Practical Exam	15 th	20	20%
Total			30	30%

10. Learning Resources:	
12- Required Textbook(s) (maximum two)	
	2- Standring, S., Borley, N. R., & Gray, H. (2008). Gray's anatomy: the anatomical basis of clinical practice. 40th ed., anniversary ed. Edinburgh: Churchill Livingstone/Elsevier
2- Essential References	
	1- Hamilton, W. J. (et al.).2001, Hamilton's textbook of basic anatomy, 6th edition. 2- Martin E. Atkinson. 2000. Anatomy for dental students ,Latest Edition. Mosby
9- Electronic Materials and Web Sites, etc.	
	https://onlinelibrary.wiley.com > journal of Anatomy 10- http://imcip.meded.com/integrated/ha/

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forærv/Impersonation is an act of fraud that results in the cancelation of the student's exam.



	assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Medical Ethics

Course No.()

2021/2022



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Prepared by:

Prof. Dr. Redhwan Al-Naggar

Reviewed by:

Assoc. Pro.Dr. Alghoury
A.A.

Quality Assurance

Dean:

VIII. Course Identification and General Information:						
1	Course Title:	Medical Ethics				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2			2	
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester				
5	Prerequisites:	Islamic culture				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof. Dr. Redhwan Ahmed Al-Naggar				
12	Date of Approval	2020-2021				

IX. Course Description:

This course includes the study of vocabulary and theoretical models important in determining ethical behavior and identifying legal concepts in dentistry. The course focus will be to apply the principles of ethics and elements of jurisprudence in a way that is highly applied to the dentist. The course will make students familiar with the dentistry job requested behaviors in addition to the laws for this job through the followings: ethics rules in dentistry, the most important ethics issues, ethics rules for dentistry in European Union, ethics rules for dentistry in middle east.

The course aims to provide students with introduction to the importance of the dentist-patient relationship and to the process of ethical decision-making for the welfare of public.

X. Outcomes of the Course

Upon completion of this course the student should be able to:

- Review and apply basic concepts pertaining to ethics and professionalism in the dental practice.
- Comprehend key ethical theories and principles.

- Promote an awareness of ethical issues in dentistry.
- Critically analyze the legal system as it relates to the dental profession.
- Recognize ethical components of conflicts that occur in the practice of dentistry.
- Compare between ethics rules for dentistry in European Union and middle east
- Promote group discussions regarding legal and ethical issues affecting the practice of dentistry.

XI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A3	Identify the rules and ethics governing dental practices.	a1-	Recall the ethical values and the responsibilities of healthcare professional.
A4	Describe the different clinical, laboratory and special investigatory procedures practiced in dentistry.	a2-	Introduce various ethical problems that arise in the field of health care.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		- Lectures - Group discussion	Questions in Written exams . Assignments
a1-	Recall the ethical values and the responsibilities of healthcare professional.		
a2-	Introduce various ethical problems that arise in the field of health care.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills

CILOs of intellectual skills

		to:	
B1	Incorporate theoretical basic biomedical, behavioral and dental sciences with the clinical signs and symptoms for appropriate understanding of disease and its management.	b1-	Examine ethical issues that arise in medical settings.
B2	Apply critical thinking and evidence-based problem solving when providing patient's care.	b2-	Understanding the relevant ethical principles.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> - Lectures - Group discussion 	Questions in Written exams . Assignments
b1-	Examine ethical issues that arise in medical settings.		
b2-	Understanding the relevant ethical principles.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1	Obtain and record a comprehensive history, perform an appropriate physical examination, and carry out different investigations to reach a correct diagnosis and treatment.	c1-	Identify the healthcare professional's ethical and legal responsibilities in legally challenges cases.
C6	Assess the risk of medical emergencies and be competent in their management within the dental practice setup.	c2-	Demonstrate leadership skills, behavior and coordination towards the staff and fellow colleagues during practices.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills	Teaching strategies/methods	Methods of assessment
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After participating in the course, students would be able to:		- Lectures - Group discussion	Questions in Written exams . Office hours
c1	Identify the healthcare professional's ethical and legal responsibilities in legally challenges cases.		
C2	Demonstrate leadership skills, behavior and coordination towards the staff and fellow colleagues during practices.		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D3	Demonstrate leadership and teamwork skills with colleagues and other oral health team for effective delivery of oral health care.	d1-	Conform importance of teamwork.
D6	Display appropriate attitudes both on personal and professional levels to keep an excellent regard of the profession in the society	d2-	Practice effective interpersonal communication.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		- Seminars - Group discussion	- Group task - Assignment
d1-	Conform importance of teamwork.		
d2-	Practice effective interpersonal communication.		

II. Course Content:

I – Course Tonics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Ethics	a1,2, b1,2	- Introducing Ethics to the dental students - explaining its meaning and terminology	1	2
2	History of Evolution of Medical Ethics	a1,2, b1,2, c1,2	- Evolution of medical ethics originated - Hippocrates oath - what were the triggering factors lead to the postulation of ethical principles - ethical codes of modern era	2	4
3	Principles of Ethics	a1,2, b1,2, c1	Discussing various principles of ethics Its implication on professional life. Ethics & risk management	1	2
4	The duties of the Dentist	a1,2, b1,2, c1,2	Explaining the duties of the dentist with patients Explaining the duties of the Dentists with colleagues and in general	2	4
5	Doctor-Patient contract	a1,2, b1,2, c1,2	Defining what is contract Various types of contracts used In Dentistry.	1	2
6	Midterm exam	a1,2, b1,2, c1	Midterm theoretical exam	1	2
7	Consent & confidentiality	a1,2, b1,2, c1,2, d1,2	Defining consent explaining various types of consents when the consent is valid and when it is invalid	2	4
8	Professional negligence	a1,2, b1,2, c1,2	Explaining the professional negligence Steps to avoid professional negligence.	2	4
9	Rules and Regulations governing the practice of Dentistry in Yemen.	a1,2, b1,2, c1,2, d1	rules and regulations governing the practice of dentistry in Yemen	2	4
10	Forensic dentistry	a1,2, b1,2, c1,2	Introduction to the basics of forensic dentistry	1	2
11	Final term exam	a1,2, b1,2, c1,2	Final term theoretical exam	1	2
Number of Weeks /and Units per Semester				16	32

VI. Teaching strategies of the course

- Interactive lectures,
- Discussion-oriented teaching (such as brainstorming)
- Seminar
- Problem based learning
- Team work (group learning)..

XLVII. Assessments Strategies of the Course:

- Written tests (mid and final terms and quizzes),
- Essays and assignments

XLVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	- Quizzes	4&10	10	10%	a1, a2, b1, b2,
2	- Mid exam	8	30	30%	a1, a2, b1, b2, c1,c2, d1,d2
3	- Final exam	6	60	60%	a1, a2, b1, b2, c1,c2, d1,d2
Total			100	100%	

XLIX. Learning Resources:

30- Required Textbook(s) (maximum two)

5- Ghaly M (2016). Islamic perspective on the principles of Biomedical ethics. World scientific Publishing. Imperial College Press.

31- Essential References

6- .Nasseri A (2020). Medical Ethics: Real-World Application. Independently published, ISBN-13 : 979-8648575752.

32- Electronic Materials and Web Sites, etc.

- 13- CMAJ Bioethics for Clinicians Series
- 14- https://www.cmaj.ca/collections/bioethics_for_clinicians_series
- 15- Ethics in Medicine
- 16- <http://depts.washington.edu/bioethx/index.html>

L. Course Policies:

1 | Class Attendance:

	taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Medical Ethics

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

LXVII. Course Identification and General Information:

1	Course Title:	Medical Ethics				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2				2
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester				
5	Prerequisites:	Islamic culture				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof. Dr. Redhwan Ahmed Al-Naggar				
12	Date of Approval	2020-2021				

LXVIII. Course Description:

This course includes the study of vocabulary and theoretical models important in determining ethical behavior and identifying legal concepts in dentistry. The course focus will be to apply the principles of ethics and elements of jurisprudence in a way that is highly applied to the dentist. The course will make students familiar with the dentist job requested behaviors in addition to the laws for this job through the followings: ethics rules in dentistry, the most important ethics issues, ethics rules for dentistry in European Union, ethics rules for dentistry in middle east. The course aims to provide students with introduction to the importance of the dentist-patient relationship and the process of ethical decision-making for the welfare of public.

LXIX. Outcomes of the Course

Upon completion of this course the student should be able to:

- Review and apply basic concepts pertaining to ethics and professionalism in the dental practice.
- Comprehend key ethical theories and principles.
- Promote an awareness of ethical issues in dentistry.
- Critically analyze the legal system as it relates to the dental profession.
- Recognize ethical components of conflicts that occur in the practice of dentistry.
- Compare between ethics rules for dentistry in European Union and middle east
- Promote group discussions regarding legal and ethical issues affecting the practice of dentistry

LXX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Recall the ethical values and the responsibilities of healthcare professional. |
| a2- | Introduce various ethical problems that arise in the field of health care. |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Examine ethical issues that arise in medical settings. |
| b2- | Understanding the relevant ethical principles. |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| c1- | Identify the healthcare professional's ethical and legal responsibilities in legally challenges cases. |
| c2- | Demonstrate leadership skills, behavior and coordination towards the staff and fellow colleagues during practices. |

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|---------------------------------|
| d1- | Conform importance of teamwork. |
|-----|---------------------------------|

d2- Practice effective interpersonal communication.

LXXI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Ethics	- Introducing Ethics to the dental students - explaining its meaning and terminology	1	2
2	History of Evolution of Medical Ethics	- Evolution of medical ethics originated - Hippocrates oath - what were the triggering factors lead to the postulation of ethical principles - ethical codes of modern era	2	4
3	Principles of Ethics	Discussing various principles of ethics Its implication on professional life. Ethics & risk management	1	2
4	The duties of the Dentist	Explaining the duties of the dentist with patients Explaining the duties of the Dentists with colleagues and in general	2	4
5	Doctor-Patient contract	Defining what is contract Various types of contracts used In Dentistry.	1	2
6	Midterm exam	Midterm theoretical exam	1	2
7	Consent & confidentiality	Defining consent explaining various types of consents when the consent is valid and when it is invalid	2	4
8	Professional negligence	Explaining the professional negligence Steps to avoid professional negligence.	2	4
9	Rules and Regulations governing the practice of Dentistry in Yemen.	rules and regulations governing the practice of dentistry in Yemen	2	4
10	Forensic dentistry	Introduction to the basics of forensic dentistry	1	2
11	Final term exam	Final term theoretical exam	1	2
Number of Weeks /and Units per Semester			16	32

LXXII. Teaching strategies of the course

- Interactive lectures,
- Discussion-oriented teaching (such as brainstorming)
- Seminar
- Problem based learning
- Team work (group learning)..

LXXIII. Assessment Methods of the Course:

- Written tests (mid and final terms and quizzes),
- Essays and assignments

LXXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	- Quizzes	4&10	10	10%
2	- Mid exam	8	30	30%
3	- Final exam	16	60	60%
Total			100	100%

LXXV. Learning Resources:

13- Required Textbook(s) (maximum two)

- 1- Ghaly M (2016). Islamic perspective on the principles of Biomedical ethics. World scientific Publishing. Imperial College Press.

2- Essential References

- 1- .Nasseri A (2020). Medical Ethics: Real-World Application. Independently published. ISBN-13 : 979-8648575752.

3- Electronic Materials and Web Sites, etc.

- 1- CMAJ Bioethics for Clinicians Series
- 2- https://www.cmaj.ca/collections/bioethics_for_clinicians_series
- 3- Ethics in Medicine
- 4- <http://depts.washington.edu/bioethx/index.html>

XII. Course Policies:

- | | |
|----------|---|
| 1 | <p>Class Attendance:
Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.</p> |
| 2 | <p>Tardiness:
A student will be considered late if he/she is not in class after 10 minutes of the start time of class.</p> |

	No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Microbiology and Immunology

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Reviewed by:

Quality Assurance

Dean:

Assoc.Prof. Dr/ Abdulbaset Al-
Ghoury

Dr. JameelObaid

XIV. Course Identification and General Information:						
1	Course Title:	Microbiology and Immunology				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		3	2			4
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester				
5	Prerequisites:	General Biology				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc.Prof. Dr/ Abdulbaset Al- Ghoury				
12	Date of Approval	2020-2021				

XIII. Course Description:

The course is concerning with the microorganisms which play a role in human oral infection to prepare the students for understanding of infectious diseases and their management. This course is designed to provide the student with knowledge essential for the general medical dentistry practitioner related to microbes of medical significance regarding their structures; host parasite relationship; epidemiological and host factors regulating microbial diseases transmission pattern. It concerned with basic immunology, microbial pathogenesis and immune responses and the different methods of management and control of microbial diseases. Furthermore, to provide the student with the skills and attitude of observation, interpretation and integration of data needed to diagnose human oral microbial infections.

XV. Outcomes of the Course

At the end of this course, the students will be able to:

1. Define major concepts of Microbiology and Immunology.
2. Describe the definition, classification, morphology, mode(s) of transmission, pathogenesis and virulence factors that cause oral disease in humans.
3. Differentiate between types of microorganisms and I.R. related to oral microbial infections.
4. Apply safety measures and precautions in Microbiology laboratories to work in risk-free environment.
5. Use effectively different computer skills such as internet, word processing and data sheet to interpret and analysis of result and compare it with other internal or external laboratories.
6. Work independently or as a member of team effectively, lead teams carrying out various professional tasks, and accept the view of others.

XVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1	Describe the scientific basis of dentistry and the relevant biomedical and behavioral sciences which form the basis for understanding human growth, development and health.	a1-	Describe the basic concepts of microbes; terminology, morphology, structures, transmission, pathology, pathogenesis, immune responses, clinical picture, host parasite relationship, treatment, prevention and control of microbial diseases.
A4	Describe the different clinical, laboratory and special investigatory procedures practiced in dentistry.	a2-	Define the principles of management for common microbial oral infection and human life-threatening conditions.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		-Interactive Lectures - Seminars - Discussion - Office Hours	-Quizzes -Mid-term Exam -Final Written Exam
a1-	Describe the basic concepts of microbes; terminology, morphology, structures,		

(C) Professional and Practical Skills



PILOs in professional and practical skills	CILOs in professional and practical skills				
After completing this program, students would be able to:					
C1	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">c1-</td> <td>Perform different methods in the diagnosis of microbial diseases.</td> </tr> <tr> <td style="text-align: center;">c2-</td> <td>Apply preventive measures and biosafety in clinic and laboratory according to standard guidelines.</td> </tr> </table>	c1-	Perform different methods in the diagnosis of microbial diseases.	c2-	Apply preventive measures and biosafety in clinic and laboratory according to standard guidelines.
c1-	Perform different methods in the diagnosis of microbial diseases.				
c2-	Apply preventive measures and biosafety in clinic and laboratory according to standard guidelines.				
C3					

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

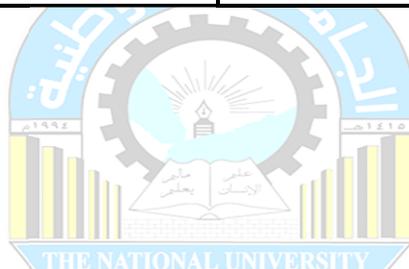
CILOs in professional and practical skills	Teaching strategies/methods	Methods of assessment	
After participating in the course, students would be able to:	-Demonstration -Lab Practice -Case Study	- Quizzes -Midterm Exam - Final Practical Exam -Problem solving.	
c1			Perform different methods in the diagnosis of microbial diseases.
c2			Apply preventive measures and biosafety in clinic and laboratory according to standard guidelines.
	immune responses, clinical picture, host parasite relationship, treatment, prevention and control of microbial diseases.	- Self learning	
a2-	Define the principles of management for common microbial oral infection and human life-threatening conditions.	-Final Practical Exam	

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills	CILOs of intellectual skills				
After completing this program, students would be able to:	After participating in the course, students would be able to:				
B1	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">b1-</td> <td>Integrate the concepts and principles of the medical microbiology and immunology in various fields of medical sciences.</td> </tr> <tr> <td style="text-align: center;">b2-</td> <td>Analyze clinical laboratory data related to infectious diseases to reach a final</td> </tr> </table>	b1-	Integrate the concepts and principles of the medical microbiology and immunology in various fields of medical sciences.	b2-	Analyze clinical laboratory data related to infectious diseases to reach a final
b1-	Integrate the concepts and principles of the medical microbiology and immunology in various fields of medical sciences.				
b2-	Analyze clinical laboratory data related to infectious diseases to reach a final				
B2					

			patients.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:			
CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> -Interactive Lectures - Presentation -Group Discussion - Office Hours - Self learning 	<ul style="list-style-type: none"> -Assignment -Mid-term Exam -Final Written Exam -Final Practical Exam
b1-	Integrate the concepts and principles of the medical microbiology and immunology in various fields of medical sciences.		
b2-	Analyze clinical laboratory data related to infectious diseases to reach a final diagnosis and plan the management of patients.		



(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D3	Demonstrate leadership and teamwork skills with colleagues and other oral health team for effective delivery of oral health care.	d1-	Communicate effectively and respectfully with colleagues, supervisors and staff members.
D1	Commit to continuous education, self-development and lifelong learning to remain updated with advances in dental practice	d2-	Implementation of e-learning tool of education to communicate ideas, widen the scope of medical Microbiology knowledge and stimulate fruitful arguments effectively
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> - Seminars - Group Discussion - Case Study - Self Learning - Presentation 	<ul style="list-style-type: none"> - Research - Medical reports - Oral Discussion Evaluation.
d1-	Communicate effectively and respectfully with colleagues, supervisors and staff members.		
d2-	Implementation of e-learning tool of education to communicate ideas, widen the scope of medical Microbiology knowledge and stimulate fruitful arguments effectively		
d3-			

II. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction	a1-2, b1-2,	<ul style="list-style-type: none"> - Definition, purpose, philosophy and organization. - Taxonomy. - Morphology. - Structures 	1 st	3
2	General Bacteriology	a1-2, b1-2, c1	<ul style="list-style-type: none"> - Bacterial Classification, Morphology and Cell Structure. - Bacterial growth and metabolism. 	2 nd	3
3	General Bacteriology	a1-2, b1-2, c1	<ul style="list-style-type: none"> - Bacterial Genetics. - Mechanisms of Bacterial Pathogenesis and General Methods for identification of bacteria. 	3 rd	3

4	General Bacteriology	a1-2, b1-2, c1	<ul style="list-style-type: none"> - Sterilization and Disinfection and Antisepsis. - Antimicrobial Chemotherapy 	4 th	3
5	General Bacteriology	a1-2, b1-2, c1	<ul style="list-style-type: none"> - Normal microbiota. - Dental black and carries with normal micobiom. 	5 th	3
6	Systematic Bacteriology	a1-2, b1-2, c1	<ul style="list-style-type: none"> - Bacillus, Clostridium. - Corynebacterium, Nocardia, actinomycetes. - Staphylococci. - Streptococc. 	6 th 7 th	6
7	Mid-Term Theoretical Exam	a1-2, b1-2	Mid-Term Theoretical Exam	8 th	3
8	Systematic Bacteriology	a1-2, b1-2, c1	□ Oral bacterial infections	9 th	3
9	Immunology	a1-2, b1-2,	<ul style="list-style-type: none"> - Principles and immune system components. - Immune responses. 	10 th	3
10	Immunology	a1-2, b1-2, c1	- Innate and adaptive Immune responses.	11 th	3
11	Immunology	a1-2, b1-2, c1	- Clinical immunology	12 th	3
12	Medical Mycology	a1-2, b1-2, c1	<ul style="list-style-type: none"> - Introduction, taxonomy, and Superficial Mycoses. - Cutaneous Mycoses. 	13 Th	3
13	Medical Mycology	a1-2, b1-2, c1	<ul style="list-style-type: none"> - Subcutaneous Mycoses - Systemic and Opportunistic Mycoses. 	13 th	3
14	Medical virology	a1-2, b1-2, c1	<ul style="list-style-type: none"> - Introduction ,Viral Pathogenesis and management. - Herpes and Papilloma. 	14 th	3
15	Medical virology	a1-2, b1-2, c1	<ul style="list-style-type: none"> - Viral hepatitis - Orthomxoviruses. coxakies 	15 th	3

			viruses, Retroviruses		
16	FINAL Theoretical Exam	a1-2, b1-2, c1	• FINAL Theoretical Exam	16 th	3
Number of Weeks /and Units per Semester				16	48

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Lab.Safety and instrumentation	c1-2,	1 st	2
2	- Bacterial morphology	c1-2,	2 nd	2
3	- Bacterial stains	c1-2,	3 rd	2
4	- Bacterial stains	c1-2,	4 th	2
5	- Bacterial cultures	c1-2,	5 th	2
6	- Bacterial identification and diagnosis	c1-2,	6 th	2
7	- Midterm exam.	c1-2, a1	7 th	2
8	- Staphylococci	c1-2,	8 th	2
9	- Streptococci	c1-2,	9 th	2
10	- Fungal morphology and Mycoses diagnosis.	c1-2,	10 th	2
11	- Viral detection and diagnosis.	c1-2,	11 th	2
12	- Viral detection and diagnosis	c1-2,	12 th	2
13	- General revision	c1-2, a1	13 th	2
14	- FINAL PRACTICAL EXAM.	c1-2, a1	14 th	2
Number of Weeks / Units per Semester			14	28

VI. Teaching strategies of the course

- Interactive Lectures
- Seminars

- Office Hours
- Self learning
- Demonstration
- Lab Practice
- Case Study

LI. Teaching Strategies of the Course:

- Quizzes
- Mid-term Exam
- Final Written Exam
- Final Practical Exam
- Assignment
- Research
- Medical reports
- Oral Discussion Evaluation.

LII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Assignment: Topics related to oral microbial infections in Yemen.	4 th & 12 th	5	b1-2
Total			5	

LIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Assignments	4 th & 12 th	5	5%	b1-2
2	Quizzes	5 th & 10 th	5	5%	a1-2,
3	Midterm theoretical exam	8 th	20	20%	a1-2, b1-2,
4	Final theoretical exam	16 th	30	30%	a1-2, b1-2, c1
Total			60	60%	
Assessment of Practical Part					
1	Midterm Practical exam	7 th	10	10%	a1-, c1-2,
2	Medical reports	8 th , 13 th	10	10%	d1-2
3	Midterm Practical exam	14 th	20	20%	a1-, c1-2,
Total			40	40%	

LIV. Learning Resources:

33- Required Textbook(s) (maximum two)	
	11-Geo. F. Brooks, et al (2012): Jawetz, Melnick, &Adelberg's Medical Microbiology, 25th edition, USA.
34- Essential References	
	7- .Marsh, P & Martin M. (2014): Oral Microbiology, 6 th Edit. Elsevier Limited, USA.
35- Electronic Materials and Web Sites, etc.	
	<p>☞ http://www.phage.org/black09.htm</p> <p>☞ http://www.microbe.org/microbes/virus_or_bacterium.asp</p> <p>☞ http://www.bact.wisc.edu/Bact330/330Lecturetopics</p> <p>☞ http://whyfiles.org/012mad_cow/7.html</p> <p>☞ http://www.microbelibrary.org/</p> <p>☞ http://www.hepnet.com/hepb.htm</p> <p>☞ http://www.tulane.edu/~dmsander/Big_Virology/BVHomePage.html</p>

LV. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism:



	Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Microbiology and Immunology

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

LXXVI. Course Identification and General Information:						
1	Course Title:	Microbiology and Immunology				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		3	2			4
4	Study level/ semester at which this course is offered:	2nd Level / 1st Semester				
5	Prerequisites:	General Biology				
6	Co-requisite:	None				

8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Assoc.Prof. Dr/ Abdulbaset Al-Ghoury
12	Date of Approval	2020-2021

LXXVII. Course Description:

The course is concerning with the microorganisms which play a role in human oral infection to prepare the students for understanding of infectious diseases and their management. This course is designed to provide the student with knowledge essential for the general medical dentistry practitioner related to microbes of medical significance regarding their structures; host parasite relationship; epidemiological and host factors regulating microbial diseases transmission pattern. It concerned with basic immunology, microbial pathogenesis and immune responses and the different methods of management and control of microbial diseases. Furthermore, to provide the student with the skills and attitude of observation, interpretation and integration of data needed to diagnose human oral microbial infections.

LXXVIII. Outcomes of the Course

At the end of this course, the students will be able to:

1. Define major concepts of Microbiology and Immunology.
2. Describe the definition, classification, morphology, mode(s) of transmission, pathogenesis and virulence factors that cause oral disease in humans.
3. Differentiate between types of microorganisms and I.R. related to oral microbial infections.
4. Apply safety measures and precautions in Microbiology laboratories to work in risk-free environment.
5. Use effectively different computer skills such as internet, word processing and data sheet to interpret and analysis of result and compare it with other internal or external laboratories.
6. Work independently or as a member of team effectively, lead teams carrying out various professional tasks, and accept the view of other

LXXIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Describe the basic concepts of microbes; terminology, morphology, structures, transmission, pathology, pathogenesis, immune responses, clinical picture, host parasite relationship, treatment, prevention and control of microbial diseases. |
|-----|---|

	threatening conditions.
--	-------------------------

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Integrate the concepts and principles of the medical microbiology and immunology in various fields of medical sciences.
b2-	Analyze clinical laboratory data related to infectious diseases to reach a final diagnosis and plan the management of patients.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Perform different methods in the diagnosis of microbial diseases.
c2-	Apply preventive measures and biosafety in clinic and laboratory according to standard guidelines.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Communicate effectively and respectfully with colleagues, supervisors and staff members.
d2-	Implementation of e-learning tool of education to communicate ideas, widen the scope of medical Microbiology knowledge and stimulate fruitful arguments effectively

LXXX. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction	<ul style="list-style-type: none"> – Definition, purpose, philosophy and organization. – Taxonomy. – Morphology. – Structures 	1 st	3
2	General Bacteriology	<ul style="list-style-type: none"> – Bacterial Classification, Morphology and Cell Structure. – Bacterial growth and metabolism. 	2 nd	3

3	General Bacteriology	<ul style="list-style-type: none"> - Bacterial Genetics. - Mechanisms of Bacterial Pathogenesis and General Methods for identification of bacteria. 	3 rd	3
4	General Bacteriology	<ul style="list-style-type: none"> - Sterilization and Disinfection and Antisepsis. - Antimicrobial Chemotherapy 	4 th	3
5	General Bacteriology	<ul style="list-style-type: none"> - Normal microbiota. - Dental black and carries with normal micobiom. 	5 th	3
6	<i>Systematic Bacteriology</i>	<ul style="list-style-type: none"> - Bacillus, Clostridium. - Corynebacterium, Nocardia, actinomycetes. - Staphylococci. - Streptococc. 	6 th 7 th	6
7	Mid-Term Theoretical Exam	Mid-Term Theoretical Exam	8 th	3
8	Systematic Bacteriology	<input type="checkbox"/> Oral bacterial infections	9 th	3
9	Immunology	<ul style="list-style-type: none"> - Principles and immune system components. - Immune responses. 	10 th	3
10	Immunology	- Innate and adaptive Immune responses.	11 th	3
11	Immunology	- Clinical immunology	12 th	3
12	Medical Mycology	<ul style="list-style-type: none"> - Introduction, taxonomy, and Superficial Mycoses. - Cutaneous Mycoses. 	13 Th	3
13	Medical Mycology	<ul style="list-style-type: none"> - Subcutaneous Mycoses - Systemic and Opportunistic Mycoses. 	13 th	3
14	Medical virology	- Introduction ,Viral Pathogenesis and management.	14 th	3

15	Medical virology	- Viral hepatitis - Orthomyxoviruses, coxakies viruses, Retroviruses	15 th	3
16	FINAL Theoretical Exam	• FINAL Theoretical Exam	16 th	3
Number of Weeks /and Units per Semester			16	48

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Lab.Safety and instrumentation	1 st	2
2	- Bacterial morphology	2 nd	2
3	- Bacterial stains	3 rd	2
4	- Bacterial stains	4 th	2
5	- Bacterial cultures	5 th	2
6	- Bacterial identification and diagnosis	6 th	2
7	- Midterm exam.	7 th	2
8	- Staphylococci	8 th	2
9	- Streptococci	9 th	2
10	- Fungal morphology and Mycoses diagnosis.	10 th	2
11	- Viral detection and diagnosis.	11 th	2
12	- Viral detection and diagnosis	12 th	2
13	- General revision	13 th	2
14	- FINAL PRACTICAL EXAM.	14 th	2
Number of Weeks / Units per Semester		14	28

LXXXI. Teaching strategies of the course

- Interactive Lectures
- Seminars
- Discussion
- Office Hours
- Self learning
- Demonstration
- Lab Practice
- Case Study

LXXXII. Assessment Methods of the Course:

- Quizzes
- Mid-term Exam
- Final Written Exam
- Final Practical Exam
- Assignment
- Research
- Medical reports
- Oral Discussion Evaluation.

LXXXIII. Assignments:

No.	Assignments	Week due	Mark
1	Assignment: Topics related to oral microbial infections in Yemen.	4 th & 12 th	5
Total			5

LXXXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Assignments	4 th & 12 th	5	5%
2	Quizzes	5 th & 10 th	5	5%
3	Midterm theoretical exam	8 th	20	20%
4	Final theoretical exam	16 th	30	30%
Total			60	60%
Assessment of Practical Part				
1	Midterm Practical exam	7 th	10	10%
2	Medical reports	8 th , 13 th	10	10%

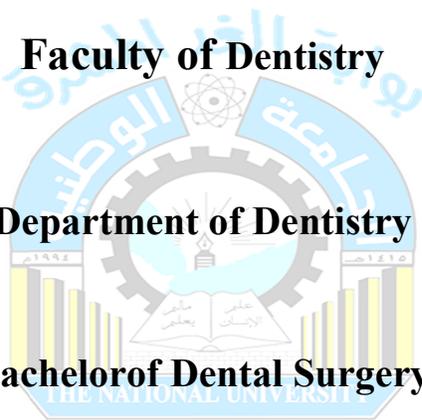
Total	40	40%
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LVI. Learning Resources:	
36- Required Textbook(s) (maximum two)	
	12-Geo. F. Brooks, et al (2012): Jawetz, Melnick, &Adelberg's Medical Microbiology, 25th edition, USA.
37- Essential References	
	8- .Marsh, P & Martin M. (2014): Oral Microbiology, 6 th Edit. Elsevier Limited, USA.
38- Electronic Materials and Web Sites, etc.	
	http://www.phage.org/black09.htm <input type="checkbox"/> http://www.microbe.org/microbes/virus_or_bacterium.asp <input type="checkbox"/> http://www.bact.wisc.edu/Bact330/330Lecturetopics <input type="checkbox"/> http://whyfiles.org/012mad_cow/7.html <input type="checkbox"/> http://www.microbelibrary.org/ <input type="checkbox"/> http://www.hepnet.com/hepb.htm <input type="checkbox"/> http://www.tulane.edu/~dmsander/Big_Virology/BVHomePage.html

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform

	Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery



Course Specification of Oral Histology (1)

Course No.()

2021/2022



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Prepared by:

Prof..Saeed M. Saeed

Reviewed by:

Dr.

Quality Assurance

Dean:

VIII. Course Identification and General Information:					
1	Course Title:	Oral Histology (1)			
2	Course Number & Code:				
3	Credit hours:	C.H			Total
		Th.	Pr.	Tr.	
		2	2		3
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester			
5	Prerequisites:	General histology & embryology			
6	Co-requisite:	None			
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery			
8	Language of teaching the course:	English			
9	Study System:	Semester based System			
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry			
11	Prepared by:	Prof..Saeed M. Saeed			
12	Date of Approval	2020-2021			

XIX. Course Description:

Oral histology include the study of surface form of the oral structures and the detailed histological structure and development of hard and soft oral and para-oral structures. Oral Histology includes the study of the development and physiology of the oral structures and their associated structures. Knowledge of oral histology is essential to understanding of the pathological changes in structure or function.

XX. Outcomes of the Course

- The major goal of this course is to provide you with current, basic knowledge of the development, structure and function of the oral tissues.
- This course deals with the histology of:
 - The structures in and around the mouth. Our objective is to integrate the histology of the oral tissues with their functions.
 - The material presented in this course is based upon you having a working knowledge of the general histology of cells and tissues as presented in General Histology.

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Describe the tooth proper and its supporting structures including their primary functions
A2-	A1	a2-	Describe the 3 stages of intrauterine life, namely, pre-embryonic, embryonic, and fetal period.
A3-	A1	a3-	Describe the 1st week of development with the 4 main events, namely, fertilization, cleavage, blastocyst formation, and implantation.
A4-	A2	a4-	Describe Inner cell mass or embryoblast and the formation of bilaminar germ disc and outer cell mass (trophoblast): and formation of cytotrophoblast, and syncytiotrophoblast which erodes maternal tissues
A5-	A1	a5-	Describe Development of face, nose, tongue and thyroid gland , maxilla and mandible including tooth development

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the tooth proper and its supporting structures including their primary functions	<ul style="list-style-type: none"> ▪ Lectures ▪ Presentation 	<ul style="list-style-type: none"> ▪ Quizzes ▪ Midterm Exam ▪ Final Written Exam
a2-	Describe the 3 stages of intrauterine life, namely, pre-embryonic, embryonic, and fetal period.		
a3-	Describe the 1st week of development with the 4 main events, namely, fertilization, cleavage, blastocyst formation, and implantation.		
a4-	Describe Inner cell mass or embryoblast and		

	the formation of bilaminar germ disc and outer cell mass (trophoblast): and formation of cytotrophoblast, and syncytiotrophoblast which erodes maternal tissues		
a5-	Describe Development of face, nose, tongue and thyroid gland , maxilla and mandible including tooth development		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Name the structures appointed to, mentioning its function and relation to cellular regulation.
B2-	B2	b2-	Differentiate between decalcification and ground sections of hard tissues and their utilities
B3-	B1	b3-	Correlate between histological structure and function of different hard and soft tissue forming cells and pathology.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Name the structures appointed to, mentioning its function and relation to cellular regulation.	<ul style="list-style-type: none"> ▪ Lectures ▪ Discussion 	<ul style="list-style-type: none"> ▪ Quizzes ▪ Midterm Exam ▪ Final Written Exam
b2-	Differentiate between decalcification and ground sections of hard tissues and their utilities		
b3-	Correlate between histological structure and function of different hard and soft tissue forming cells and pathology.		

Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C2	c1-	Demonstrate proficiency and expertise in the proper use of the light microscope in examining histological specimens on glass slides.
C2-	C1	c2-	Recognize, identify and describe the characteristic structures of teeth at the light microscope histologic level, and for selected tissues, at the electron microscopic ultrastructural level.
C3-	C1	c3-	Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Lab Experiments 	<ul style="list-style-type: none"> ▪ Practical reports ▪ Final Practical Exam
c1-	Demonstrate proficiency and expertise in the proper use of the light microscope in examining histological specimens on glass slides.		
c2-	Recognize, identify and describe the characteristic structures of teeth at the light microscope histologic level, and for selected tissues, at the electron microscopic ultrastructural level...		
c3-	Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D1	d1-	Study independently for continuous self-learning and plan research studies to achieve goals.
D2-	D2	d2-	Utilize the resources of biomedical information including the available electronic facilities to update his/her knowledge
D3-	D6	d3-	Deal with the instruments and equipment in a responsible manner keeping them intact and clean

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
d1-	Study independently for continuous self-learning and plan research studies to achieve goals.	<ul style="list-style-type: none"> ▪ Discussion ▪ Self-Learning ▪ Presentation ▪ Seminars 	<ul style="list-style-type: none"> ▪ Research ▪ Homework ▪ Group work
d2-	Utilize the resources of biomedical information including the available electronic facilities to update his/her knowledge		
d3-	Deal with the instruments and equipment in a responsible manner keeping them intact and clean		

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	introduction to tooth proper and its associated structures	a1, b1, d1	regions of the oral cavity brief description of different types of hard tissues, soft tissues and salivary glands	1 st	2
2	introduction to general and	a1, b1,	THE IMPORTANCE OF	2 nd	2

	oral embryology	c1, d1	THE 3 STAGES OF INTRAUTERINE LIFE Gametogenesis		
3	First week of development	a3, d1	Fertilization Cleavage Blastocyst formation Beginning of implantation Clinical consideration	3 rd	2
4	the second week of human development and the formation of the bilaminar germ disc	a3, b1, d1	the end of Implantation, outer cell mass (trophoblast) and its derivatives, Inner cell mass and its derivatives	4 th	2
5	The third week of human development	a3, b1, d1	the formation of trilaminar germ disc gastrulation and neurulation derivatives of ectoderm, mesoderm and endoderm	5 th	2
6	DEVELOPMENT OF FACE AND ORAL CAVITY	a3, b1, d1	development of face, nose, tongue and thyroid gland	6 th -7 th	4
7	Mid-semester exam	a1,a2, a3, b1, d2	-MCQs and essay questions	8 th	2
8	DEVELOPMENT AND GROWTH OF TEETH	a3, b1, d1	the histological and physiological stages of tooth development the role of induction in tooth formation the causes of anodontia and hyperdontia	9 th	2
9	Root formation	a3,5, b1, b2, d1	the origin, components of Cervical loop formation of Hertwig's epithelial root sheath including the Epithelial diaphragm and multi-rooted teeth differences in formation of permanent and deciduous teeth	10 th	2
10	Eruption	a3,5, b1, b2, d1,2,3	Pattern of Tooth Movement Histology of Tooth Movement Mechanism of Tooth Movement Clinical Considerations	11 th	2
11	Shedding	a3,5, b1, b2, d1	Pattern of Shedding Histology of Shedding Mechanism of Resorption and		2

			clinical consideration		
12	formation of hard tissues	a3,5, b1, b2, d1	principles of formation of hard tissues formation of organic matrix calcification	13 th - 14 th	4
13	Revision	a3,5, b1, b2, d1	revision of all previous topics	15 th	2
14	Final Theoretical Exam	a1-a5, b1-b3 d1-d3	-MCQs and essay questions	16 th	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	first week of human development	c1-c3	1 st	2
2	second week of human development	c1-c3	2 nd	2
3	1. trilaminar germ disc	c1-c3	3 rd	2
4	karyotyping	c1-c3	4 th	2
5	Stages of tooth development (1) dental lamina, Bud stage,	c1-c3	5 th	2
6	Stages of tooth development (2) Cap stage , Bell stage	c1-c3	6 th	2
7	Midterm practical exam	c1-c3	7 th	2
8	Stages of tooth development (3) apposition stage	c1-c3	8 th	2
9	sheath of Hertwig	c1-c3	9 th	2
10	Epithelial Diaphragm	c1-c3	10 th	2
11	Successional Teeth	c1-c3	11 th	2
12	Eruption	c1-c3	12 th	2
13	Shedding	c1-c3	13 th	2
14	Final Exam	c1-c3	14 th	2

VI. Teaching strategies of the course

- Lectures using power point presentation.
- Discussion-oriented and interactive teaching (such as brainstorming)
- Seminars
- Self-study modules
- Laboratory demonstrations and practice

LVII. Teaching Strategies of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Final Practical Exam
- Research
- Homework
- Group work
- Oral discussion
- Direct observation



LVIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	- Short exams (quizzes), discussions and oral tests. - Laboratory logbooks and reports.	weekly	5	d2
Total			5	

LIX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Participation and quizzes	weekly	5	5%	a1-a5; b1-b3 c1-c3; d1-

					d3
2	Theoretical mid-semester exam	8 th	20	20%	a1,a2, a3 b1, d2
3	Final Exam (theoretical)	16 th	40	40%	a1-a5,b1-b3, d1-d3
Total			65	65%	
Assessment of Practical Part					
1	Assignments	1 st -15 th	5	5%	d2
2	Practical mid-semester exam	7 th	10	10%	c1-c3
3	Final Exam (practical)	14 th	20	20%	c1-c3
Total			35	35%	

LX. Learning Resources:

39- Required Textbook(s) (maximum two)

- 13- SMSaeed (2019): Oral histology and embryology. 4 Ed.
14- G S Kumar; Orban's, 2011, Oral Histology and Embryology. 13th ed. Elsevier

40- Essential References

1. B. K. B. Berkovitz, G. R. Holland and B. J. Moxham;, 2009, Oral Anatomy, Histology and Embryology, Fourth Edition, Mosby Elsevier
2. Arthur R. Hand and Marion E. Frank, 2015 Fundamentals of Oral Histology and Physiology, First Edition, Wiley Blackwell

3. Electronic Materials and Web Sites, etc.

- <https://onlinelibrary.wiley.com/journal/16000714>
<http://edehweisspublications.com/keyword/30/1194/Oral-Mucosa>

LXI. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.



	No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of

Course No. (----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

LXXXV. Course Identification and General Information:						
1	Course Title:	Oral Histology (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2		3	
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester				
5	Prerequisites:	General histology& embryology				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof..Saeed M. Saeed				
12	Date of Approval	2020-2021				

LXXXVI. Course Description:
<p>Oral histology include the study of surface form of the oral structures and the detailed histological structure and development of hard and soft oral and para-oral structures.Oral Histology includes the study of the development and physiology of the oral structures and their associated structures. Knowledge of oral histology is essential to understanding of the pathological changes in structure or function.</p>

LXXXVII. Outcomes of the Course
<p>1. The major goal of this course is to provide you with current, basic knowledge of the development, structure and function of the oral tissues.</p> <p>2.This course deals with the histology of:</p> <p>A. The structures in and around the mouth. Our objective is to integrate the histology of the oral tissues with their functions.</p> <p>B. The material presented in this course is based upon you having a working knowledge of the general histology of cells and tissues as presented in General Histology.</p>

LXXXVIII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the tooth proper and its supporting structures including their primary functions
a2-	Describe the 3 stages of intrauterine life, namely, pre-embryonic, embryonic, and fetal period.
a3-	Describe the 1st week of development with the 4 main events, namely, fertilization, cleavage, blastocyst formation, and implantation.
a4-	Describe Inner cell mass or embryoblast and the formation of bilaminar germ disc and outer cell mass (trophoblast): and formation of cytotrophoblast, and syncytiotrophoblast which erodes maternal tissues
a5-	Describe Development of face, nose, tongue and thyroid gland , maxilla and mandible including tooth development

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Name the structures appointed to, mentioning its function and relation to cellular regulation.
b2-	Differentiate between decalcification and ground sections of hard tissues and their utilities
b3-	Correlate between histological structure and function of different hard and soft tissue forming cells and pathology.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Demonstrate proficiency and expertise in the proper use of the light microscope in examining histological specimens on glass slides.
c2-	Recognize, identify and describe the characteristic structures of teeth at the light microscope histologic level, and for selected tissues, at the electron microscopic ultrastructural level.
c3-	Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Study independently for continuous self-learning and plan research studies to achieve goals.
d2-	Utilize the resources of biomedical information including the available electronic facilities to

d3- Deal with the instruments and equipment in a responsible manner keeping them intact and clean

LXXXIX. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	introduction to tooth proper and its associated structures	regions of the oral cavity brief description of different types of hard tissues, soft tissues and salivary glands	1 st	2
2	introduction to general and oral embryology	THE IMPORTANCE OF EMBRYOLOGY THE 3 STAGES OF INTRAUTERINE LIFE Gametogenesis	2 nd	2
3	First week of development	Fertilization Cleavage Blastocyst formation Beginning of implantation Clinical consideration	3 rd	2
4	the second week of human development and the formation of the bilaminar germ disc	the end of Implantation, outer cell mass (trophoblast) and its derivatives, Inner cell mass and its derivatives	4 th	2
5	The third week of human development	the formation of trilaminar germ disc gastrulation and neurulation derivatives of ectoderm, mesoderm and endoderm	5 th	2
6	DEVELOPMENT OF FACE AND ORAL CAVITY	development of face, nose, tongue and thyroid gland	6 th -7 th	4
7	Mid-semester exam	-MCQs and essay questions	8 th	2
8	DEVELOPMENT AND GROWTH OF TEETH	the histological and physiological stages of tooth development the role of induction in tooth formation the causes of anodontia and hyperdontia	9 th	2
9	Root formation	the origin, components of Cervical loop	10 th	2

		including the Epithelial diaphragm and multi-rooted teeth differences in formation of permanent and deciduous teeth		
10	Eruption	Pattern of Tooth Movement Histology of Tooth Movement Mechanism of Tooth Movement Clinical Considerations	11 th	2
11	Shedding	Pattern of Shedding Histology of Shedding Mechanism of Resorption and Shedding clinical consideration	12 th	2
12	formation of hard tissues	principles of formation of hard tissues formation of organic matrix calcification	13 th - 14 th	4
13	Revision	revision of all previous topics	15 th	2
14	Final Theoretical Exam	-MCQs and essay questions	16 th	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	first week of human development	1 st	2
2	second week of human development	2 nd	2
3	trilaminar germ disc	3 rd	2
4	karyotyping	4 th	2
5	Stages of tooth development (1) dental lamina, Bud stage,	5 th	2
6	Stages of tooth development (2) Cap stage , Bell stage	6 th	2
7	Midterm practical exam	7 th	2
8	Stages of tooth development (3) apposition stage	8 th	2
9	sheath of Hertwig	9 th	2
10	Epithelial Diaphragm	10 th	2
11	Successional Teeth	11 th	2

12	Eruption	12 th	2
13	Shedding	13 th	2
14	Final Exam	14 th	2
Number of Weeks / Units per Semester		14	28

XC. Teaching strategies of the course

- Lectures using power point presentation.
- Discussion-oriented and interactive teaching (such as brainstorming)
- Seminars
- Self-study modules
- Laboratory demonstrations and practice

XCI. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Final Practical Exam
- Research
- Homework
- Group work
- Oral discussion
- Direct observation

XCII. Assignments:

No.	Assignments	Week due	Mark
1	- Short exams (quizzes), discussions and oral tests. - Laboratory logbooks and reports.	weekly	5
Total			5

XCIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Participation and quizzes	weekly	5	5%
2	Theoretical mid-semester exam	8 th	20	20%
3	Final Exam (theoretical)	16 th	40	40%
Total			65	65%
Assessment of Practical Part				
1	Assignments	1 st -15 th	5	5%
2	Practical mid-semester exam	7 th	10	10%
3	Final Exam (practical)	14 th	20	20%
Total			35	35%

XCIV. Learning Resources:

14- Required Textbook(s) (maximum two)

1. SMSaeed (2019): Oral histology and embryology. 4 Ed.
2. G S Kumar; Orban's, 2011, Oral Histology and Embryology. 13th ed. Elsevier

3. Essential References

- 1- B. K. B. Berkovitz, G. R. Holland and B. J. Moxham;, 2009, Oral Anatomy, Histology and Embryology, Fourth Edition, Mosby Elsevier
- 2- Arthur R. Hand and Marion E. Frank, 2015 Fundamentals of Oral Histology and Physiology, First Edition, Wiley Blackwell

4. Electronic Materials and Web Sites, etc.

- 9- <https://onlinelibrary.wiley.com/journal/16000714>
- 10- <http://edelweisspublications.com/keyword/30/1194/Oral-Mucosa>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.

4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Specification of Physiology (1)

Course No.()

2021/2022



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Prepared by:

Dr. SadeqAbdulgigni

Reviewed by:

Dr.

Quality Assurance

Dean:

XXIII. Course Identification and General Information:						
1	Course Title:	Physiology (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2	--	3	
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester				
5	Prerequisites:	Biology				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. SadeqAbdulgagni				
12	Date of Approval	2020-2021				

XXIV. Course Description:

Physiology I familiarizes students with basic definitions and principles related to physiology The course emphasizes the concept of internal environment and homeostasis and the concept of feedback in a biological system. It also helps students to understand body fluid and cellular physiology. The course gives an overview on the physiology and functions of blood.

XXV. Outcomes of the Course

On completion of the course:

1. the student would demonstrate sound theoretical knowledge and understanding of basic relevant sciences namely, the applied anatomy of the face and oral cavity, the basic physiologic processes.
2. the student would be proficient in physical examination of the patient, identification of normal and abnormal functioning of the various systems of the body.

XXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	Describe the scientific basis of dentistry and the relevant biomedical and behavioral sciences which form the basis for understanding human growth, development and health.	a1-	Describe the functions of the different organelles in the human cell, and describe the transport system across the cell membranes.
A2-	Explain the structure and function of the human body in health and disease related to the practice of dentistry.	a2-	Describe the body fluids, compartments, composition & functions.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Debate 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam.
a1-	Describe the functions of the different organelles in the human cell, and describe the transport system across the cell membranes.		
a2-	Describe the body fluids, compartments, composition & functions.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	Incorporate theoretical basic biomedical, behavioral and dental sciences with the clinical signs and symptoms for appropriate understanding of disease and its management.	b1-	Distinguish between physiological and pathological performance of body cells.
B2-	Apply critical thinking and evidence-based problem solving when providing patient's care.	b2-	Integrate physiology with other sciences

Teaching and Assessment Methods for Achieving Learning Outcomes

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion 	<ul style="list-style-type: none"> ▪ Oral exam. ▪ Assignments
b1-	Distinguish between physiological and pathological performance of body cells.		
b2-	Integrate physiology with other sciences		

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	Obtain and record a comprehensive history, perform an appropriate physical examination, and carry out different investigations to reach a correct diagnosis and treatment.	c1-	Choose and classify data obtained from physiological experiments.
C2-	Detect pathological conditions related to the dental practice	c2-	Determine the requirements of homeostasis.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Demonstration ▪ Exercise ▪ Debate 	<ul style="list-style-type: none"> ▪ Practical exam. ▪ Case based scenario / Problem based learning. ▪ Approved procedures documented in logbook. ▪ Assignments
c1-	Choose and classify data obtained from physiological experiments.		
c2-	Determine the requirements of homeostasis.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	Use advanced information and communication technologies to enrich and diversify professional experience.	d1-	Work separately or in a team to research and prepare a scientific topic.
D2-	Demonstrate leadership and teamwork skills with colleagues and other oral health team for effective delivery of oral health care.	d2-	Present clearly and effectively scientific topic in a tutorial, a staff meeting or the yearly scientific day.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Training ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d1-	Work separately or in a team to research and prepare a scientific topic.		
d2-	Present clearly and effectively scientific topic in a tutorial, a staff meeting or the yearly scientific day.		

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Physiology definition & organization of the cell	a1	Functional morphology of the cell - Transport across cell membranes -Functional systems of the cell that make it a living organism.	Week 1 and 2	4
2	Body fluids, compartments, composition & functions.	a1,a2, b2,c1, d1	- Distribution of body fluid - Functions of water - Osmosis, osmolality, isotonicity& body water balance. - Dehydration and hydration	Week 3,4,5	6

3	1- Composition and functions of the blood.	a1, a2 b1,b2	<ul style="list-style-type: none"> - Composition of blood: - Plasma - Blood elements - Functions of blood 	Week 6,7	4
4	Mid-Term Theoretical Exam	a1,a2, b1, d2	MCQs and essay questions	Week 8	2
5	2- RBCs, Formation and general functions	a1, a2 b1,b2	<ul style="list-style-type: none"> - Red blood corpuscles - Erythropoiesis and factors affecting it - Most common types of normal and abnormal hemoglobin - Anemia: Types of anemia - RBCs functions 	Week 9,10	4
6	Homeostasis	c2, d2	<ul style="list-style-type: none"> - Define the internal environment. - Understand the importance of homeostasis. 	Week 11	2
7	1- WBCs: structures, classifications and functions 2. Hemostasis and its disorders	a1, a2, b1,b2, c1, c2	<ul style="list-style-type: none"> - White blood cells - Types of leucocytes - White blood cells functions - Platelets - Blood group - Blood transfusion mechanism of haemostasis - WBCs disorders 	Week 12,13, 14,15	8
8	Final Theoretical Exam	a1,a2, b1, d2	MCQs and essay questions	Week 16	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Separation of the blood	a1, a2 b1,b2, c1	1 st	2
2	Measurement of the hemoglobin.	a1, a2	2 nd	2

		b1,b2,c2,		
3	Erythrocyte sedimentation rate (ESR)	a1, a2, b1,b2, c1,c2	3 rd	2
4	The hematocrit (H)	a1, a2, b1,c1,c2	4 th	2
5	Mid-Term Practical Exam	a1, a2, b1, b2	5 th	2
6	Bleeding time and Clotting time	a1, a2, b1,b2, c1,	6 th	2
7	Blood groups	a1, b1,b2, c1,c2	7 th	2
8	The white blood cells	a1, a2, b1, c1	8 th	2
9	Final practical test	b2,c1,c2 d1,d2	9 th	2
Number of Weeks / Units per Semester			9	18

VI. Teaching strategies of the course

- Lectures
- Discussion
- Self-Learning
- Presentation
- Seminars
- Lab Experiments

LXII. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Final Oral Exam

- Research
- Homework
- Group work
- Oral discussion

LXIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	10	c1-c3, d1,d2
Total			10	

LXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes 1 & 2	4 th & 12 th	10	10 %	a1, a2
2	Mid-Term Theoretical Exam	8 th	20	20%	a1, a2, b1, b2,
3	Final Theoretical Exam	16 th	40	40%	a1, a2, b1, b2
Total			70	70%	
Assessment of Practical Part					
1	Mid-Term Practical Exam	5 th	5	5%	a1, a2, b1, b2
2	Final Practical Exam including Project Presentation & Evaluation	9 th	15	15 %	c1, c2,d1, d2
3	Final oral Exam	16 th	10	10 %	a1, a2, b1, b2
Total			30	30%	

LXV. Learning Resources:

41- Required Textbook(s) (maximum two)

- 15- Guyton and Hall 2010, Text book of medical physiology, 12th Ed, Mississippi Medical Center, Jackson, Mississippi, USA
- 16- Laurie Kelly 2005, Essentials of Human Physiology for Pharmacy, 1st Ed. CRC Press,

	Pharmacy Education series
42- Essential References	
	<p>1- Kelly 2018, Essential of Human physiology. 8th edition.</p> <p>2- Fox Human physiology, 10th edition, 2010.</p> <p>3- Kaplan Medical step 1 physiology, 6th edition, 2006.</p> <p>4- Mader,2004, understanding Human anatomy and physiology, 5th edition.</p>
43- Electronic Materials and Web Sites, etc.	
	<p>17- www.csun.edu/science/biology/anatomy/anatomy.html</p> <p>18- www.cliffsnotes.com</p> <p>19- www.innerbody.com</p> <p>20- www.anatomyandphysiology.com/</p> <p>21- www.mhhe.com/biosci2/anatomyrevealed</p>

LXVI. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam,

Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Physiology (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU



XCV. Course Identification and General Information:

1	Course Title:	Physiology (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2	--	--	3
4	Study level/ semester at which this course is offered:	2 nd Level / 1 st Semester				
5	Prerequisites:	Biology				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. SadeqAbdulgogni				

12	Date of Approval	2020-2021
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XCVI. Course Description:

Physiology I familiarizes students with basic definitions and principles related to physiology. The course emphasizes the concept of internal environment and homeostasis and the concept of feedback in a biological system. It also helps students to understand body fluid and cellular physiology. The course gives an overview on the physiology and functions of blood.

XCVII. Outcomes of the Course

On completion of the course:

1. the student would demonstrate sound theoretical knowledge and understanding of basic relevant sciences namely, the applied anatomy of the face and oral cavity, the basic physiologic processes.
2. the student would be proficient in physical examination of the patient, identification of normal and abnormal functioning of the various systems of the body.

XCVIII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Describe the functions of the different organelles in the human cell, and describe the transport system across the cell membranes. |
| a2- | Describe the body fluids, compartments, composition & functions. |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | Distinguish between physiological and pathological performance of body cells. |
| b2- | Integrate physiology with other sciences |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | Choose and classify data obtained from physiological experiments. |
| c2- | Determine the requirements of homeostasis. |

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| d1- | Work separately or in a team to research and prepare a scientific topic. |
|-----|--|

d2-	Present clearly and effectively scientific topic in a tutorial, a staff meeting or the yearly scientific day.
-----	---

XCIX. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Physiology definition & organization of the cell	Functional morphology of the cell - Transport across cell membranes -Functional systems of the cell that make it a living organism.	Week 1 and 2	4
2	Body fluids, compartments, composition & functions.	- Distribution of body fluid - Functions of water - Osmosis, osmolality, isotonicity & body water balance. - Dehydration and hydration	Week 3,4,5	6
3	1- Composition and functions of the blood.	- Composition of blood: - Plasma - Blood elements - Functions of blood	Week 6,7	4
4	Mid-Term Theoretical Exam	MCQs and essay questions	Week 8	2
5	2- RBCs, Formation and general functions	- Red blood corpuscles - Erythropoiesis and factors affecting it - Most common types of normal and abnormal hemoglobin - Anemia: Types of anemia - RBCs functions	Week 9,10	4
6	Homeostasis	- Define the internal environment. - Understand the importance of homeostasis.	Week 11	2
7	2- WBCs: structures, classifications and	- White blood cells - Types of leucocytes - White blood cells functions	Week 12,13, 14,15	8

	functions 2. Hemostasis and its disorders	<ul style="list-style-type: none"> - Platelets - Blood group - Blood transfusion mechanism of haemostasis - WBCs disorders 		
8	Final Theoretical Exam	MCQs and essay questions	Week 16	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Separation of the blood	1 st	2
2	Measurement of the hemoglobin.	2 nd	2
3	Erythrocyte sedimentation rate (ESR)	3 rd	2
4	The hematocrit (H)	4 th	2
5	Mid-Term Practical Exam	5 th	2
6	Bleeding time and Clotting time	6 th	2
7	Blood groups	7 th	2
8	The white blood cells	8 th	2
9	Final practical test	9 th	2
Number of Weeks / Units per Semester		9	18

C. Teaching strategies of the course
<ul style="list-style-type: none"> - Lectures - Discussion - Self-Learning - Presentation - Seminars - Lab Experiments
CI. Assessment Methods of the Course:
<ul style="list-style-type: none"> - Quizzes

- Midterm Exam
- Final Written Exam
- Final Oral Exam
- Final Practical Exam
- Research
- Homework
- Group work
- Oral discussion

CII. Assignments:

No.	Assignments	Week due	Mark
1			
Total			

CIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes 1 & 2	4 th & 12 th	10	10 %
2	Mid-Term Theoretical Exam	8 th	20	20%
3	Final Theoretical Exam	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Mid-Term Practical Exam	5 th	5	5%
2	Final Practical Exam including Project Presentation & Evaluation	9 th	15	15 %
3	Final oral Exam	16 th	10	10 %
Total			30	30%

CIV. Learning Resources:

15- Required Textbook(s) (maximum two)

	Center, Jackson, Mississippi, USA 2- Laurie Kelly 2005, Essentials of Human Physiology for Pharmacy, 1st Ed. CRC Press, Pharmacy Education series
4- Essential References	
	1- Kelly 2018, Essential of Human physiology. 8th edition. 2- Fox Human physiology, 10th edition, 2010. 3- Kaplan Medical step 1 physiology, 6th edition, 2006. 4- Mader,2004, understanding Human anatomy and physiology, 5th edition.
2- Electronic Materials and Web Sites, etc.	
	11- www.csun.edu/science/biology/anatomy/anatomy.html 12- www.cliffsnotes.com 13- www.innerbody.com 14- www.anatomyandphysiology.com/ 15- www.mhhe.com/biosci2/anatomyrevealed

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the



Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Biochemistry 2

Course No.()

2021/2022



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Prepared by:

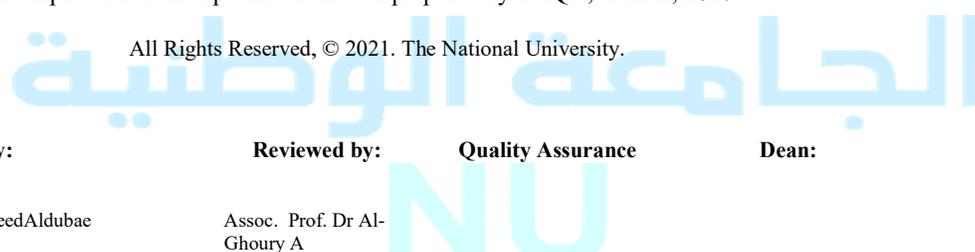
Prof. Dr/ WaleedAldubae

Reviewed by:

Assoc. Prof. Dr Al-
Ghoury A

Quality Assurance

Dean:



VIII. Course Identification and General Information:						
1	Course Title:	Biochemistry 2				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2		3	
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	Biochemistry 1				
6	Co –requisite:	Organic chemistry				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof. Dr/ WaleedAldubae				
12	Date of Approval	2020-2021				

XXIX. Course Description:

Biochemistry 2 helps students to diagnose diseases , and identify causes of many diseases and action of some drugs, biochemistry 2 covers many topics including, metabolism of carbohydrates, lipids, and proteins.

XXX. Outcomes of the Course

This course is designed to:

1-Introduce the students to metabolism of macromolecules

2-Acquire knowledge in the causes , diagnosis of diseases and quantitative estimation of biomolecules

XXXI. Intended learning outcomes (ILOs) of the course		
(A) Knowledge and Understanding:		
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.		
PILOs in knowledge and understanding		CILOs in knowledge and understanding
After completing this program, students would be able to:		After participating in the course, students would be able to:
A1	Describe the scientific basis of dentistry and the relevant biomedical and behavioral sciences which form the basis for understanding human growth, development and health.	a1- Describe the metabolism of carbohydrates, lipids, and proteins.
		a2- List the biochemical causes of metabolic disorders
Teaching and Assessment Methods for Achieving Learning Outcomes		
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:		
CILOs in Knowledge and Understanding		Teaching strategies/methods
After participating in the course, students would be able to:		Midterm exam Final term exam Class attendance
a1-	Describe the metabolism of carbohydrates, lipids, and proteins.	
a2-	List the biochemical causes of metabolic disorders	

(B) Intellectual Skills		
Alignment of Course CILOs to PILOs in intellectual skills:		
PILOs in intellectual skills		CILOs of intellectual skills
After completing this program, students would be able to:		After participating in the course, students would be able to:
B1	Incorporate theoretical basic biomedical, behavioral and dental sciences with the clinical signs and symptoms for appropriate understanding of disease and its management.	b1- Combine between causes and symptoms of metabolic disorders
		b2- Analyze abnormal biochemical lab tests results
Teaching and Assessment Methods for Achieving Learning Outcomes		
Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:		

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Presentation Case study	Midterm exam Final term exam Practical exam
b1-	Combine between causes and symptoms of metabolic disorders		
b2-	Analyze abnormal biochemical lab tests results		

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1.	Obtain and record a comprehensive history, perform an appropriate physical examination, and carry out different investigations to reach a correct diagnosis and treatment.	c1	Operate biochemical tests with biosafety for diagnosing metabolic disorders
		c2	Choose appropriate investigations used in biochemistry lab

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lab experiments	Final Practical exam
c1	Operate biochemical tests with biosafety for diagnosing metabolic disorders		
c2	Choose appropriate investigations used in biochemistry lab		

(D) General and Transferable Skills	
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills	
PILOs in general and transferable skills	CILOs in general and transferable skills

		able to:	
D1.	Commit to continuous education, self-development and lifelong learning to remain updated with advances in dental practice.	d1-	Use internet as tool for self-learning and continuous education
D3.	Demonstrate leadership and teamwork skills with colleagues and other oral health team for effective delivery of oral health care.	d2-	Work effectively with team

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Self-learning Presentation	Assignments Reports Direct observation
d1-	Use internet as tool for self-learning and continuous education		
d2-	Work effectively with team		

XII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Carbohydrate metabolism	a1,a2,b1,d1	<ul style="list-style-type: none"> – Digestion and absorption of carbohydrates – Glycolysis and oxidative decarboxylation of pyruvate – Citric acid cycle – Gluconeogenesis – Glycogen metabolism and their disorders – Diabetes mellitus HMP shunt 	5	10
2	Lipid metabolism	a1,a2,b1,d1	<ul style="list-style-type: none"> – -Digestion and absorption of lipids – Fate of absorbed lipids – Linolysis and fatty acids 	4	8

			<p>biosynthesis</p> <ul style="list-style-type: none"> - Oxidation of fatty acids - Ketogenesis and ketolysis - Metabolism of cholesterol and its disorders <p>Lipoprotein metabolism</p>		
3	Mid-Term Theoretical Exam	a1,a2,b1,d1	MCQs and essay questions	1	2
4	Proteins and nucleic acid metabolism	a1,a2,b1,d1	<ul style="list-style-type: none"> - Digestion and absorption of proteins - Fate of absorbed amino acids - Catabolic reactions of amino acids and their clinical application 4- Source and fate of ammonia - Transport of ammonia - Urea cycle - Disorders of hyperammonemia and their treatment - Mechanism of hyperammonemia toxicity - Inborn errors of amino acid metabolism <p>Purine and pyrimidine metabolism</p>	5	10
5	Final Theoretical Exam	a1,a2,b1	MCQs and essay questions	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Biohazards management	b1	2	4
2	-Spectrophotometer: Components, Principle, operation, types, and its applications	b1,c2,d2	2	4

3	- Measurement of glucose in blood	b1,c2,d2	1	2
4	- Measurement of total proteins and albumin	b1,c2,d2	1	2
5	- Measurement of lipid profile: Total cholesterol, Triglycerides, LDL-cholesterol, HDL-cholesterol.	b1,c2,d2	2	4
6	Measurement of urea and creatinine	b1,c2,d2	1	2
7	Measurement of uric acid	b1,c2,d2	1	2
8	- Final practical test	b1,c2,d2	1	2
Number of Weeks / Units per Semester			11	22

VI. Teaching strategies of the course

- Interactive lecture
- Presentation
- Case study
- Lab experiments
- Self-learning



LXVII. Assessment Strategies of the Course:

- Midterm exam
- Final term exam
- Practical exam
- Class attendance
- Assignments
- Reports
- Direct observation

LXVIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Searching information related to biochemistry 1	9 th	5	d1
Total			5	

LXIX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Assignment	9 th	5	5%	d1
2	Class attendance	14 th	5	5%	
3	Midterm exam	7 th	20	20%	a1,a2,b1,d1
4	Final theoretical exam	16 th	50	50%	b1,c2,d2
Total			80	80%	
Assessment of Practical Part					
1	Final Practical exam	14 th	20	20%	a1,a2,b1
Total				20%	

X-Learning Resources:

1. Required Textbook(s) (maximum two)

- 6- David, L. N., Michael, M. C (2017) Lehninger principles of biochemistry.7th edn. England: Macmillan Higher Education.
7- Victor, R.W., David, A.B., Kathleen, M.B., Peter, j. k., Anthony, P.W (2018). Harper's Illustrated Biochemistry.31st edn. United States : McGraw-Hill Education

2. Essential References

- 9- Michael, L., Alisa, P (2014) Marks' Essentials of Medical Biochemistry: A Clinical Approach. edn. China: Wolters Kluwer.
10- Bhagavan, N. V., Chung-Eun Ha (2015) Essentials of Medical Biochemistry with Clinical Cases. 2nd edn. China: Academic Press..

3. Electronic Materials and Web Sites, etc.

- 22- The Medical Biochemistry Page
<https://themedicalbiochemistrypage.org/>
2-Biochemistry Animations
<https://maxanim.com/biochemistry/>

LXX. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness:



	class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Biochemistry 2

Course No. (----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CV. Course Identification and General Information:						
1	Course Title:	Biochemistry 2				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	Second Level / Second Semester				
5	Prerequisites:	Biochemistry 1				
6	Co -requisite:					
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof. Dr/ WaleedAldubae				
12	Date of Approval	2020-2021				

III-Course Description:

Biochemistry 2 helps students to diagnose diseases , and identify causes of many diseases and action of some drugs, biochemistry 2 covers many topics including, metabolism of carbohydrates, lipids, and proteins.

IV-Outcomes of the Course

This course is designed to:

1-Introduce the students to metabolism of macromolecules

2-Acquire knowledge in the causes , diagnosis of diseases and quantitative estimation of biomolecules

V-Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1- Describe the metabolism of carbohydrates, lipids, and proteins.

a2-	List the biochemical causes of metabolic disorders
-----	--

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Combine between causes and symptoms of metabolic disorders
b2-	Analyze abnormal biochemical lab tests results

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Operate biochemical tests with biosafety for diagnosing metabolic disorders
c2	Choose appropriate investigations used in biochemistry lab

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Use internet as tool for self-learning and continuous education
d2-	Work effectively with team

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Carbohydrate metabolism	<ul style="list-style-type: none"> – Digestion and absorption of carbohydrates – Glycolysis and oxidative decarboxylation of pyruvate – Citric acid cycle – Gluconeogenesis – Glycogen metabolism and their disorders – Diabetes mellitus HMP shunt	5	10
2	Lipid metabolism	<ul style="list-style-type: none"> – -Digestion and absorption of lipids 	4	8

		<ul style="list-style-type: none"> - Fate of absorbed lipids - Lipolysis and fatty acids biosynthesis - Oxidation of fatty acids - Ketogenesis and ketolysis - Metabolism of cholesterol and its disorders <p>Lipoprotein metabolism</p>		
3	Mid-Term Theoretical Exam	MCQs and essay questions	1	2
4	Proteins and nucleic acid metabolism	<ul style="list-style-type: none"> - Digestion and absorption of proteins - Fate of absorbed amino acids - Catabolic reactions of amino acids and their clinical application 4- Source and fate of ammonia - Transport of ammonia - Urea cycle - Disorders of hyperammonemia and their treatment - Mechanism of hyperammonemia toxicity - Inborn errors of amino acid metabolism <p>Purine and pyrimidine metabolism</p>	5	10
5	Final Theoretical Exam	MCQs and essay questions	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Biohazards management	2	4
2	-Spectrophotometer: Components, Principle, operation, types, and its applications	2	4
3	- Measurement of glucose in blood	1	2

4	- Measurement of total proteins and albumin	1	2
5	- Measurement of lipid profile: Total cholesterol, Triglycerides, LDL-cholesterol, HDL-cholesterol.	2	4
6	Measurement of urea and creatinine	1	2
7	Measurement of uric acid	1	2
8	- Final practical test	1	2
Number of Weeks / Units per Semester		11	22

VII. Teaching strategies of the course

- Interactive lecture
- Presentation
- Case study
- Lab experiments
- Self-learning

VIII- Assessment Strategies of the Course:

- Midterm exam
- Final term exam
- Practical exam
- Class attendance
- Assignments
- Reports
- Direct observation

IX-Assignments:

No.	Assignments	Week due	Mark
1	Searching information related to biochemistry 1	9 th	5
Total			5

X-Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Assignment	9 th	5	5%	d1
2	Class attendance	14 th	5	5%	

3	Midterm exam	7 th	20	20%	a1,a2,b1,d1
4	Final theoretical exam	16 th	50	50%	b1,c2,d2
Total			80	80%	
Assessment of Practical Part					
1	Final Practical exam	14 th	20	20%	a1,a2,b1
Total				20%	

XI-Learning Resources:

4. Required Textbook(s) (maximum two)

- 8- David, L. N., Michael, M. C (2017) Lehninger principles of biochemistry.7th edn. England: Macmillan Higher Education.
- 9- Victor, R.W., David, A.B., Kathleen, M.B., Peter, j. k., Anthony, P.W (2018). Harper's Illustrated Biochemistry.31st edn. United States : McGraw-Hill Education

5. Essential References

- 11- Michael, L., Alisa, P (2014) Marks' Essentials of Medical Biochemistry: A Clinical Approach. edn. China: Wolters Kluwer.
- 12- Bhagavan, N. V., Chung-Eun Ha (2015) Essentials of Medical Biochemistry with Clinical Cases 2nd edn. China: Academic Press..

6. Electronic Materials and Web Sites, etc.

23- The Medical Biochemistry Page

<https://themedicalbiochemistrypage.org/>

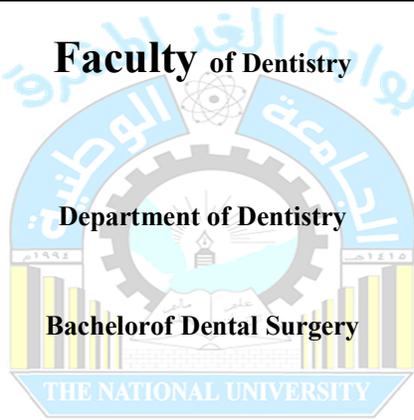
2-Biochemistry Animations

<https://maxanim.com/biochemistry/>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating:

	Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



Course Specification of Dental materials (2)

Course No.()

2021/2022



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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

XIV. Course Identification and General Information:						
1	Course Title:	Dental materials (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	Dental materials (1)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

XXXV. Course Description:	
<p>This course of the second year will continue to develop the theoretical basis of dental materials with emphasis on the practical application of the theory. It is designed to provide the student with basic knowledge of the composition, properties and manipulation of dental materials used in the dental office and dental laboratory. An understanding of the materials used in dentistry will also improve students' ability to evaluate their work, to troubleshoot clinical problems, and to differentiate between dental materials and selection of the most appropriate ones.</p> <p>At the end of the course, the student should be able to: Describe the composition, properties and manipulation of various materials used in dentistry, Select the most appropriate material and handle, manipulate various materials used in dentistry.</p>	

XXVI. Outcomes of the Course

1. Dental student with knowledge of physical, chemical, mechanical and biological properties of all materials used in dentistry.
2. Dental student with an ability to manipulate various dental materials

XXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A5		a1-	Demonstrate the knowledge of direct restorative materials and indirect restorations and their indications.
A1		a2-	Demonstrate the knowledge of properties, handling characteristics, advantages and disadvantages of dental materials
A4		a3-	Recognize the purpose, requirements, classifications as well as general Characteristics and technical considerations of different dental materials.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Demonstrate the knowledge of direct restorative materials and indirect restorations and their indications.	Lectures Demonstrations Discussion	Quizzes Midterm Exam Final Exam
a2-	Demonstrate the knowledge of properties, handling characteristics, advantages and disadvantages of dental		

a3-	Recognize the purpose, requirements, classifications as well as general Characteristics and technical considerations of different dental materials.		
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(B) Intellectual Skills			
Alignment of Course CILOs to PILOs in intellectual skills:			
PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B5	b1-	Discuss the effect of various clinical procedures on materials' properties
	B1	b2-	Interpret and demonstrate the different types of techniques for manipulation of dental materials.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:			
CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Discuss the effect of various clinical procedures on materials' properties	Lectures Lab Sessions	Quizzes Midterm Exam Final Exam
b2-	Interpret and demonstrate the different types of techniques for manipulation of dental materials.	Demonstrations Discussion	Practical Exam Semester work

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C7	c1-	Select and evaluate various dental materials based on scientific

			understanding of their structure and properties.
	C7	c2-	Perform, handle and manipulate various materials used in dentistry.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Demonstration Lab Sessions	Semester Work practical Exam
c1-	Select and evaluate various dental materials based on scientific understanding of their structure and properties.		
c2-	Perform, handle and manipulate various materials used in dentistry.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D3	d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.
	D4	d2-	Manage time during lab work

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Discussions Demonstrations	Direct Observation Practical Exam
d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.		

d2-	Manage time during lab work		Semester Work
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III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to restorative materials	a1, a2, a3, b1, d1	<ul style="list-style-type: none"> - Types - Indication - Usage - Silicate and acrylic 	2	4
2	Dental cements	a1, a2, a3, b1, b2, d1	<ul style="list-style-type: none"> - Permanent Cement Systems - Classification - composition, - manipulation, - properties and uses 	2	4
3	Dental Amalgam	a1, a2, a3, b1, b2, d1	<ul style="list-style-type: none"> - Chemistry - Types, - Setting Reaction - Properties 	2	4
4	Cavity varnish and Liners	a2, a3, b1, b2, d1	<ul style="list-style-type: none"> - Tissue conditioner - Liners 	1	2
5	Mid-Term Theoretical Exam	a1, a2, a3, b1, b2, d1	<ul style="list-style-type: none"> - MCQs and essay questions 	1	2
6	Restorative resins (composites)	a1, a2, a3, b1, b2, d1	<ul style="list-style-type: none"> - Dental Polymers - Classification - Composition - manipulation - properties and uses 	2	4
7	Bonding Agents	a2, a3, b1, b2,	<ul style="list-style-type: none"> - Introduction to adhesion in dentistry 	1	2

			<ul style="list-style-type: none"> - Properties and Performance - Dentin bonding 		
8	Temporary filling materials	a2, a3, b1, b2, d1	<ul style="list-style-type: none"> - Types - Indication - Usage 	1	2
9	Dental Ceramics	a1, a2, a3, b1, b2, d1	<ul style="list-style-type: none"> - Composition, classification and technical consideration a. Porcelain fused to metals b. Castable glass ceramics c. Porcelain veneers, inlays, only 	1	2
10	Endodontic materials	a1, a2, a3, b1, b2, d1	<ul style="list-style-type: none"> - Root Canal Sealer - GuttaPercha Points 	1	2
11	Polishing and abrasive dental materials	a1, a2, a3, b1,	<ul style="list-style-type: none"> - Types - Indication - Usage - Denture cleaners 	1	2
12	Final Theoretical Exam	a1, a2, a3, b1, b2, d1	- MCQs and essay questions	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs	Number of Weeks	Contact Hours
1	Introduction to restorative materials	a1, a2, a3, b1, d1	3 rd	2
2	<ul style="list-style-type: none"> - Dental Cements: a. Properties of various dental cements, Mixing techniques and clinical handling b. Demonstration of clinical use of various cements as liners, bases and luting agents 	c1, c2, d1, d2	4 th to 6 th	6
3	- Metal & Alloys:	c1 c2		6

	a. Mixing of dental amalgam both manually and by mechanical amalgamator b. Cavity varnish and Liners	d1, d2	7 th to 9 th	
4	- Restorative resin and their clinical use: - Composite materials manipulations - Bonding Agents	c1, c2, d1, d2	10 th to 12 th	6
5	- Abrasive and Polishing Agents: - Demonstration of: a. Porcelain applications b. Metal - ceramic application c. Dentifrices and Denture Cleansers	c1, c2, d1, d2	13 th	2
6	Endodontic materials	c1, c2, d1, d2	14 th	2
7	Final Practical Examination	c1, c2, d1, d2	15 th	2
Number of Weeks / Units per Semester			13	39

VI. Teaching strategies of the course

Lectures
Lab Sessions
Demonstrations
Discussions

LXXI. Assessments Strategies of the Course:

Quizzes
Midterm Exam
Final Exam
Practical Exam
Semester Work
Direct Observation

LXXII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	□ Semester work:	3 -14	10	c1, c2, d1, d2
Total			10	

LXXIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	4 th	10	10%	a1,a3,b1
2	Midterm Exam	8 th	20	20%	a1, a2, a3, b1, b2, d1
3	Final Exam	16 th	40	40%	a1, a2, a3, b1, b2, d1
Total			70	70%	

Assessment of Practical Part

1	Assignments	3 -14	10	10%	c1, c2, d1, d2
2	Practical Exam	15 th	20	20%	c1, c2, d1, d2
Total			30	30%	

LXXIV. Learning Resources:

44- Required Textbook(s) (maximum two)

- 24- Kenneth Anusavice, ChiayiShen H., Ralph Rawls, 2012: Phillips Science of Dental Materials- 12th edition, Saunders, USA.
25- Ronald Sakaguchi, Jack Ferracane, John Powers, 2018: Craig's Restorative Dental Materials. 14th edition, Mosby, USA.

45- Essential References

- 3- John Powers, John Wataha, 2012: Dental Materials: properties and manipulation 10th edition, Mosby, USA.
4- John F. McCabe, Angus Walls, 2008: Applied dental materials, 9th edition, Blackwell, USA.

46- Electronic Materials and Web Sites, etc.

- 1- Academy of Dental Materials
<https://www.journals.elsevier.com/dental-materials>
2- International Journal of Dental Materials (IJDM)
<https://www.ijdm.co.in>
3- Dental Materials Journal
[https:// www.academydentalmaterials.com](https://www.academydentalmaterials.com)

LXXV. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Dental materials (2)

Course No. (----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CVI. Course Identification and General Information:

1	Course Title:	Dental materials (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	Dental materials (1)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CVII. Course Description:

This course of the second year will continue to develop the theoretical basis of dental materials with emphasis on the practical application of the theory. It is designed to provide the student with basic knowledge of the composition, properties and manipulation of dental materials used in the dental office and dental laboratory. An understanding of the materials used in dentistry will also

improve students' ability to evaluate their work, to troubleshoot clinical problems, and to differentiation between dental materials and selection of the most appropriate ones.

At the end of the course, the student should be able to: Describe the composition, properties and manipulation of various materials used in dentistry, Select the most appropriate material and handle, manipulate various materials used in dentistry.

CVIII. Outcomes of the Course

1. Dental student with knowledge of physical, chemical, mechanical and biological properties of all materials used in dentistry.
2. Dental student with an ability to manipulate various dental materials

CIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Demonstrate the knowledge of direct restorative materials and indirect restorations and their indications.
a2-	Demonstrate the knowledge of properties, handling characteristics, advantages and disadvantages of dental materials
a3-	Recognize the purpose, requirements, classifications as well as general characteristics and technical considerations of different dental materials.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Discuss the effect of various clinical procedures on materials' properties
b2-	Interpret and demonstrate the different types of techniques for manipulation of dental materials.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Select and evaluate various dental materials based on scientific understanding of their structure and properties.
c2-	Perform, handle and manipulate various materials used in dentistry.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Develop a dental vocabulary and the ability to use it in communication with dental assistants and colleagues easily.
d2-	Manage time during lab work

CX. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to restorative materials	<ul style="list-style-type: none"> – Types – Indication – Usage – Silicate and acrylic 	2	4
2	Dental cements	<ul style="list-style-type: none"> – Permanent Cement Systems – Classification – composition, – manipulation, – properties and uses 	2	4
3	Dental Amalgam	<ul style="list-style-type: none"> – Chemistry – Types, – Setting Reaction – Properties 	2	4
4	Cavity varnish and Liners	<ul style="list-style-type: none"> – Tissue conditioner – Liners 	1	2
5	Mid-Term Theoretical Exam	<ul style="list-style-type: none"> – MCQs and essay questions 	1	2
6	Restorative resins (composites)	<ul style="list-style-type: none"> – Dental Polymers – Classification – Composition – manipulation – properties and uses 	2	4

7	Bonding Agents	<ul style="list-style-type: none"> - Introduction to adhesion in dentistry - Chemistry - Properties and Performance - Dentin bonding 	1	2
8	Temporary filling materials	<ul style="list-style-type: none"> - Types - Indication - Usage 	1	2
9	Dental Ceramics	<ul style="list-style-type: none"> - Composition, classification and technical consideration a. Porcelain fused to metals b. Castable glass ceramics c. Porcelain veneers, inlays, only 	1	2
10	Endodontic materials	<ul style="list-style-type: none"> - Root Canal Sealer - GuttaPercha Points 	1	2
11	Polishing and abrasive dental materials	<ul style="list-style-type: none"> - Types - Indication - Usage - Denture cleaners 	1	2
12	Final Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Introduction to restorative materials	3 rd	2
2	<ul style="list-style-type: none"> - Dental Cements: a. Properties of various dental cements, Mixing techniques and clinical handling b. Demonstration of clinical use of various cements as liners, bases and luting agents 	4 th to 6 th	6
3	<ul style="list-style-type: none"> - Metal & Alloys: a. Mixing of dental amalgam both manually and by mechanical amalgamator 	7 th to 9 th	6

	b. Cavity varnish and Liners		
4	- Restorative resin and their clinical use: - Composite materials manipulations - Bonding Agents	10 th to 12 th	6
5	- Abrasive and Polishing Agents: - Demonstration of: a. Porcelain applications b. Metal - ceramic application c. Dentifrices and Denture Cleansers	13 th	2
6	Endodontic materials	14 th	2
7	Final Practical Examination	15 th	2
Number of Weeks / Units per Semester		13	39

CXI. Teaching strategies of the course

Lectures
Lab Sessions
Demonstrations
Discussions

CXII. Assessment Methods of the Course:

Quizzes
Midterm Exam
Final Exam
Practical Exam
Semester Work
Direct Observation

CXIII. Assignments:

No.	Assignments	Week due	Mark
1	Semester work	3 -14	10
Total			10

CXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	4 th	10	10%
2	Midterm Exam	8 th	20	20%
3	Final Exam	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Assignments	3 -14	10	10%
2	Practical Exam	15 th	20	20%
Total			30	30%

CXV. Learning Resources:

16- Required Textbook(s) (maximum two)

- 3- Kenneth Anusavice, ChiayiShen H., Ralph Rawls, 2012: Phillips Science of Dental Materials- 12th edition, Saunders, USA.
- 4- Ronald Sakaguchi, Jack Ferracane, John Powers, 2018: Craig's Restorative Dental Materials. 14th edition, Mosby, USA.

17- Essential References

- 3- John Powers, John Wataha, 2012: Dental Materials: properties and manipulation 10th edition, Mosby, USA.
- 4- John F. McCabe, Angus Walls, 2008: Applied dental materials, 9th edition, Blackwell, USA.

18- Electronic Materials and Web Sites, etc.

- 1- Academy of Dental Materials
<https://www.journals.elsevier.com/dental-materials>
- 2- International Journal of Dental Materials (IJDM)
<https://www.ijdm.co.in>
- 3- Dental Materials Journal
[https:// www.academydentalmaterials.com](https://www.academydentalmaterials.com)

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery
Course Specification of General Pathology

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Yaser Alquhimy

Reviewed by:

Dr.

Quality Assurance

Dean:



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XIX. Course Identification and General Information:						
1	Course Title:	General Pathology				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2		3	
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	General Anatomy, General Histology Physiology 1&2				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr.YaserAlquhimy				
12	Date of Approval	2020-2021				

XL. Course Description:

The course allows students to learn basic concept of the various disease processes in the body as well the basic molecular, cellular and reaction to various injurious agents cell injury including adaption, necrosis and apoptosis, pathology of inflammation including causes and manifestation and hemodynamic are also discussed. The course also emphasizes neoplasia including classification, epidemiology and characteristics of benign and malignant tumors knowledge of etiology of tumors and its consequences on health are also covered

XLI. Outcomes of the Course

Under Pathology they would have learnt about inflammation, and necrosis.

1. Dental student with knowledge on pathological changes at macroscopic and microscopic levels, capabilities and limitations of morphological Pathology in its contribution to dentistry.
2. Dental student with an ability to integrate knowledge from the basic sciences to clinical application in dentistry.

XLII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Identify the sign and symptoms of various diseases and their important characteristic features.
A2-	A1	a2-	Describe the important histological, radiographic features and Histopathology feature of various diseases of head and neck region.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Identify the sign and symptoms of various diseases and their important characteristic features.	<ul style="list-style-type: none"> ▪ Lectures ▪ Presentation 	<ul style="list-style-type: none"> ▪ Quizzes ▪ Midterm Exam ▪ Final Written Exam
a2-	Describe the important histological, radiographic features and Histopathology feature of various diseases of head and neck region.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Analyze findings of various diseases, correlate interrelations between histologic, radiographic Histopathology and clinical features and diagnose them.

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:			
CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> Lectures Discussion 	<ul style="list-style-type: none"> Quizzes Midterm Exam Final Written Exam
b1-	Analyze findings of various diseases, correlate interrelations between histologic, radiographic Histopathology and clinical features and diagnose them.		

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Explain the etiopathogenesis and Mechanism of the pathogenesis) of diseases and correlate them with the clinical sign and symptoms
C2-	C7	c2-	Differentiate between normal tissue abnormal tissue and pathological lesion

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> Lectures Lab Experiments 	<ul style="list-style-type: none"> Practical reports Final Practical
c1-	Explain the etiopathogenesis and Mechanism of the pathogenesis) of diseases and correlate them with the clinical sign and symptoms		
c2-	Differentiate between normal tissue abnormal tissue and pathological lesion		

(D) General and Transferable Skills	
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills	
PILOs in general and transferable skills	CILOs in general and transferable skills

After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3	d1-	Demonstrate leadership skills and coordinate with fellow colleagues to submit a group task or assignment
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Discussion ▪ Self-Learning ▪ Presentation 	<ul style="list-style-type: none"> ▪ Research ▪ Homework
d1-	Demonstrate leadership skills and coordinate with fellow colleagues to submit a group task or assignment		

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction and Cell injury	a1, a2, b1	Definition, Branches of pathology and Terminology. Causes of cell injury Types of cell injury	1	2
2	Necrosis	a1, a2, b1	Definition Causes Types Apoptosis	2	2
3	Adaptation	a1, a2, b1	Definition Atrophy Hypertrophy Hyperplasia Metaplasia Dysplasia Carcinoma – in situ	3,4	4
4	Inflammation	a1, a2, b1	Definition Acute inflammation Chronic inflammation Suppurative inflammation	5	2
5	Repair	a1, a2, b1	Definition Types Fibrosis Wound healing Fractures healing	6	2
6	Mid-Term Exam	a1, a2, b1		7	0

7	Infection	a1, a2, b1	Definition Types Bacterial, viral, fungal and protozoal diseases	8	2
8	Immunology	a1, a2, b1	Definition Types of immune disorders Hypersensitive Autoimmune disease	9	2
9	Circulatory disturbance	a1, a2, b1	Definition Thrombosis Clot Embolism Ischemia Infarction Congestion Oedema	10,11	4
10	Bone disturbance	a1, a2, b1	Definition Types Osteosarcoma, Ewings sarcoma, Marfans syndrome, Downs syndrome	12,13	4
11	Neoplasia	a1, a2, b1	Definition Classification Characters Benign Malignant Staging, grading and Metastasis	14,15	4
12	Final Exam	a1, a2, b1		16	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Cell pathology. atrophy, hypertrophy, hyperplasia, metaplasia, dysplasia	c1, c2	3, 4	4
2	Inflammation	c1, c2	5, 6	4
3	Infection disease	c1, c2	7, 8	4
4	Tumor pathology	c1, c2	9, 10	4
5	Immunopathology disease	c1, c2	11	2
6	Diseases of the bone.	c1, c2	12, 13	4

7	Review	c1, c2	14	2
8	Final exam	c1, c2	15	2
Number of Weeks / Units per Semester			13	26

VI. Teaching strategies of the course

- Lectures
- Presentation
- Discussion
- Laboratory sessions
- Case Study
- Self-learning
- Brain storm

LXXVI. Teaching Strategies of the Course:

- Quizzes
- Assignments
- Mid-term Exam
- Final Exam
- Final Practical Exam

LXXVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirement	3 rd -14 th	10	c1, c2
2	Presentation	12 th -14 th	10	a1,a2,b1,d1
Total			20	

LXXVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes 1 & 2	4 th -12 th	10	10%	a1, a2, b1

2	Mid-Term Exam	8 th	20	20%	a1, a2, b1
3	Final Theoretical Exam	16 th	40	40%	a1, a2, b1
Total			70	70%	
Assessment of Practical Part					
1	Assignments	3 rd -14 th	20	20%	a1, a2, b1, c1, c2, d1
2	Final Practical Exam	15 th	10	10%	c1, c2
Total			30	30%	

LXXIX. Learning Resources:

47- Required Textbook(s) (maximum two)

- 1- Harsh Mohan, 2010, Textbook of Pathology, 5th Edition, Jaypee Brothers Medical Publishers, Printed in India.
- 2- Vinay Kumar, Abul K Abbas, and Jon C Aster, 2013, Robbins Basic Pathology, 9th Edition, Elsevier Saunders.

48- Essential References

- 1- Rubin, Emanuel; Reisner, Howard M, 2009, Essentials of Rubin's Pathology, 5th Edition, Lippincott Williams, Lippincott Williams and Wilkins, USA, Printed in the USA.
- 2- Manson's 2009 Manson's tropical diseases 22nd edition. Elsevier Churchill livingstone, USA
- 3- Handouts of all lectures will be available at the department

2- Other Learning Materials

- 1- <http://www.pathologyoutlines.com/>
- 2- <https://thepathologist.com/subspecialties/histology>
- 3- <https://www.med.illinois.edu/m2/pathology/pathatlasf/titlepage.html>
- 4- <http://www.kasralainy.eddu.eg/elearning/>

LXXX. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments

	or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
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7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Plan (Syllabus) of General Pathology

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CXVI. Course Identification and General Information:						
1	Course Title:	General Pathology				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3

4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester
5	Prerequisites:	General Anatomy, General Histology Physiology 1&2
6	Co –requisite:	None
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Dr.YaserAlquhimy
12	Date of Approval	2020-2021

CXVII. Course Description:

The course allows students to learn basic concept of the various disease processes in the body as well the basic molecular, cellular and reaction to various injurious agents cell injury including adaption, necrosis and apoptosis, pathology of inflammation including causes and manifestation and hemodynamic are also discussed. The course also emphasizes neoplasia including classification, epidemiology and characteristics of benign and malignant tumors knowledge of etiology of tumors and its consequences on health are also covered

CXVIII. Outcomes of the Course

Under Pathology they would have learnt about inflammation, and necrosis.

1. Dental student with knowledge on pathological changes at macroscopic and microscopic levels, capabilities and limitations of morphological Pathology in its contribution to dentistry.
2. Dental student with an ability to integrate knowledge from the basic sciences to clinical application in dentistry.

CXIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Identify the sign and symptoms of various diseases and their important characteristic features. |
| a2- | Describe the important histological, radiographic and Histopathology features of various diseases of head and neck region. |

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Analyze findings of various diseases, correlate interrelations between histologic, radiographic Histopathology feature, clinical features and diagnose them.
-----	--

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Explain the etiopathogenesis, Mechanism of the pathogenesis of diseases and correlate them with the clinical sign and symptoms
c2-	Differentiate between normal tissue, abnormal tissue and pathological lesion

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Demonstrate leadership skills and coordinate with fellow colleagues to submit a group task or assignment
-----	--

CXX. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction and Cell injury	Definition, Branches of pathology and Terminology. Causes of cell injury Types of cell injury	1	2
2	Necrosis	Definition Causes Types Apoptosis	2	2
3	Adaptation	Definition Atrophy Hypertrophy Hyperplasia Metaplasia Dysplasia Carcinoma – in situ	3.4	4
4	Inflammation	Definition Acute inflammation Chronic inflammation Suppurative inflammation	5	2
5	Repair	Definition Types	6	2

		Fibrosis Wound healing Fractures healing		
6	Mid-Term Exam		7	2
7	Infection	Definition Types Bacterial, viral, fungal and protozoal diseases	8	2
8	Immunology	Definition Types of immune disorders Hypersensitive Autoimmune disease	9	2
9	Circulatory disturbance	Definition Thrombosis Clot Embolism Ischemia Infarction Congestion Oedema	10,11	4
10	Bone disturbance	Definition Types Osteosarcoma, Ewings sarcoma, Marfans syndrome, Downs syndrome	12,13	4
11	Neoplasia	Definition Classification Characters Benign Malignant Staging, grading and Metastasis	14,15	4
12	Final Exam		16	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Cell pathology. atrophy, hypertrophy, hyperplasia, metaplasia, dysplasia	3, 4	4
2	Inflammation	5, 6	4
3	Infection disease	7, 8	4
4	Tumor pathology	9, 10	4
5	Immunopathology disease	11	2

6	Diseases of the bone.	12, 13	4
7	Review	14	2
8	Final exam	15	2
Number of Weeks / Units per Semester		13	26

CXXI. Teaching strategies of the course

- Lectures
- Presentation
- Discussion
- Laboratory sessions
- Case Study
- Self-learning
- Brain storm

CXXII. Assessment Methods of the Course:

- Quizzes
- Assignments
- Mid-term Exam
- Final Exam
- Final Practical Exam

CXXIII. Assignments:

No.	Assignments	Week due	Mark
1	Requirement	3 rd -14 th	10
2	Presentation	12 th -14 th	10
Total			20

CXXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
-----	-------------------	----------	------	--------------------------------

1	Quizzes 1 & 2	4 th -12 th	10	10%
2	Mid-Term Exam	8 th	20	20%
3	Final Theoretical Exam	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Assignments	3 rd -14 th	20	20%
2	Final Practical Exam	15 th	10	10%
Total			30	30%

CXXV. Learning Resources:

19- Required Textbook(s) (maximum two)

- 1- Harsh Mohan, 2010, Textbook of Pathology, 5th Edition, Jaypee Brothers Medical Publishers, Printed in India.
- 2- Vinay Kumar, Abul K Abbas, and Jon C Aster, 2013, Robbins Basic Pathology, 9th Edition, Elsevier Saunders.

3- Essential References

- 1- Rubin, Emanuel; Reisner, Howard M, 2009, Essentials of Rubin's Pathology, 5th Edition, Lippincott Williams, Lippincott Williams and Wilkins, USA, Printed in the USA.
- 2- Manson's 2009 Manson's tropical diseases 22nd edition. Elsevier Churchill livingstone, USA
- 3- Handouts of all lectures will be available at the department

4- Electronic Materials and Web Sites, etc.

- 1- <http://www.pathologyoutlines.com/>
- 2- <https://thepathologist.com/subspecialties/histology>
- 3- <https://www.med.illinois.edu/m2/pathology/pathatlasf/titlepage.html>
- 4- <http://www.kasralainy.eddu.eg/elearning/>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.

	Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Genetics

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:



الجامعة الوطنية
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XLIV. Course Identification and General Information:						
1	Course Title:	Genetics				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2			2	
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	Biology				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

XLV. Course Description:
<p>Through this course the students are introduced with the basics of modern biological science, which achievements today are essential for understanding, diagnostics and dental patient therapy. Students Meet the basics of cell biology, molecular and developmental biology, human genetics with special emphasis on important molecular mechanisms that are necessary in the knowledge and work of the doctor of dental medicine.</p>

XLVI. Outcomes of the Course
<p>Under Genetics they would have learnt about Cell structure, DNA, RNA, protein synthesis, cell division, Chromosomal abnormalities, Principles of orofacial genetics, Genetics in malocclusion, Molecular basis of genetics, Studies related to malocclusion, Recent advances in genetics related to malocclusion, Genetic counselling, Bioethics and relationship to Orthodontic management of patients</p>

XLVII. Intended learning outcomes (ILOs) of the course
<p>(A) Knowledge and Understanding:</p> <p style="text-align: center;">Alignment of Course-Intended Learning Outcomes (C.I.O.s) to Program-Intended Learning Outcomes (P.I.O.s)</p>

PIOs in knowledge and understanding		CIOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Demonstrate an understanding of fundamental knowledge of Genetic material functions, Central Dogma of Molecular Biology, Splicing mRNA, Eukaryotic and prokaryote gene organization. Construct differences between DNA and RNA Structure.
A2-	A1	a2-	Understanding Recombinant DNA technology.
A3-	A2	a3-	Describe the mechanisms of DNA Sequencing methods and Molecular diagnostics

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CIOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Demonstrate an understanding of fundamental knowledge of Genetic material functions, Central Dogma of Molecular Biology, Splicing mRNA, Eukaryotic and prokaryote gene organization. Construct differences between DNA and RNA Structure.	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Assignments
a2-	Understanding Recombinant DNA technology.		
a3-	Describe the mechanisms of DNA Sequencing methods and Molecular diagnostics		

(B) Intellectual Skills

Alignment of Course CIOs to PIOs in intellectual skills:

PIOs in intellectual skills	CIOs of intellectual skills
After completing this program, students would be able to:	After participating in the course, students would be able to:

B1-	B1	b1-	Evaluate gene therapy, genetic engineering and biotechnology.
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Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lecture discussion Explain using models and slides 	<ul style="list-style-type: none"> ▪ Assignments ▪ Exam
b1-	Evaluate gene therapy, genetic engineering and biotechnology.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C2	c1-	Analyzes Hereditary disorders of orofacial structures.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Demonstration ▪ Debate 	<ul style="list-style-type: none"> ▪ Case based scenario / Problem based learning. ▪ Assignments
c1-	Analyzes Hereditary disorders of orofacial structures.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3	d1-	Demonstrate collaborative teamwork and leadership spirit with responsibility to maintain professional competency.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CIOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d1-	Demonstrate collaborative teamwork and leadership spirit with responsibility to maintain professional competency.		

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CIOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction	a1	<ul style="list-style-type: none"> - Cell Biology – today, Molecular biology of cells. Evolution of prokaryotic and eukaryotic cells. - Cell as an experimental model. The general plan of the cell structure, chemical cell structure. - Endoplasmic reticle, Golgi apparatus, lysosomes, mitochondria, ribosomes. 	1	2
2	Cellular and molecular basis of inheritance	a1	<ul style="list-style-type: none"> - DNA hereditary material. Types of DNA sequences. Genetic code. - Chromosomes. Morphological, chemical and molecular structure. Chromosome analysis methods. Nomenclature of chromosomes. - The human genome. - Gene and genetic information: structure (introns, exons, promoter, terminator) and function 	2	4
3	Introduction to molecular biology	a1	<ul style="list-style-type: none"> - DNA replication (characteristics, enzymes, importance). - Cell cycle: cell cycle of the eukaryotic cell, control points, regulation of the cell cycle. - The nucleus in mitosis, the nucleolus, the mitosis stages. 	1	2

4	Meiosis, gametogenesis	a2, b1	<ul style="list-style-type: none"> - Genetic significance of meiosis, gametogenesis (spermatogenesis and oogenesis). - Genetic recombination: homologous: synapses, chiasmata, crossing-over, non-homologous (insertion sequences / transposons). Fertilization - Determination and differentiation of half of human (role of sex chromosomes). 	1	2
5	Principles of medical genetics	a2, s1, c1	<ul style="list-style-type: none"> - Consequences of meiosis: the origin and causes of non-segregation of autosomes and sex chromosomes in meiosis I and meiosis II. 	1	2
6	History and influence of genetics on medicine	a2, b1	<ul style="list-style-type: none"> - Karyotype and a human karyogram. - The importance of genetically conditioned diseases in humans. Multifactor disorders. - Syndromes and pathological conditions as a consequence of chromosomal aberrations (etiology, incidence, characteristics, consequences and risk of their expression / repetition). - Clinical genetics 	1	2
7	Midterm-Exam	a1, a2, b1, c1		1	2
8	Biosynthesis of cellular constituents	a1, a2, b1	<ul style="list-style-type: none"> - Synthesis and finishing of RNA - transcription: Molecular basis and principles of genetic information flow. Transcription - synthesis of RNA (from DNA to RNA): enzyme RNA polymerase (structure, types, function) - the stages of the transcription process, - transcription of structural genes - (DNA → mRNA; code → codon; characteristics), - the iRNA structure of pro- and eukaryotes, - processing of the primary transcript – pre-mRNK, 	1	2

			- RNA splicing.		
9	Synthesis and protein modeling	a1,a3, a1	<ul style="list-style-type: none"> - Translating genetic information (from RNA to protein), genetic code. - Activation of amino acids. Initiation, elongation and termination of translation. - the mRNA, tRNA, rRNA function in the translation process, - characteristic enzymes and protein factors. - Regulation of protein synthesis in pro- and eukaryotes 	1	2
10	Mutations	a1,a3, b1, c1	<ul style="list-style-type: none"> - Molecular biology in medicine and reparation system: Biological variability, types of gene mutations and consequences (examples), mutagenic agents - Mechanisms for reparation: pre- and post-replicative. 	1	2
11	Principles of medical genetics	a3,b1	<ul style="list-style-type: none"> - Hereditary factors and their functioning. - The chromosome inheritance theory (genetic loci, alleles, genotype, phenotype, distribution and gene traits, expressiveness and penetrability of the gene) 	1	2
12	Models of inheritance	a3, b1	<ul style="list-style-type: none"> - Interaction of non-allelic genes - polygenic inheritance (additive and complementary polygenia; epistasis). - Inheritance related to sex chromosomes (complete and incomplete sex related inheritance; sex-limited and sex-conditioned inheritance). - Mitochondrial inheritance. - Free combination of genes, genetic maps. 	1	2
13	Cancer	a3, b1	<ul style="list-style-type: none"> - Developing genes and cancer. Positional effects and developing genes. Genetics of tumors: development and causes of origin. - Proto-oncogenes, oncogenes, tumor 	1	2

			apoptosis, role of telomeres in tumors. Molecular biology in the prevention and treatment of cancer. Gene therapy, potentials and application in human genetics		
14	DNA technology and its application	a3, b1	- Principles of genetic engineering. - Cloning forms. - Banks of genes. Vectors. Ethic principles. - Recombined DNA technology. Advantages and disadvantages of using recombinant DNA technology.	1	2
15	Final Theoretical Exam	a1-a3, b1,c1		1	2
Number of Weeks /and Units per Semester				16	32

VI. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

LXXXI. Teaching Strategies of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

LXXXII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Presentation	2 nd - 15 th	10	b1,c1,d1
Total			10	

LXXXIII. Schedule of Assessment Tasks for Students' Design

the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	4 th , 12 th	10	10%	a1,a2,b1
2	Mid-term exam	8 th	30	30%	a1,a2,b1,c1
3	Assignments	2 nd - 15 th	10	10%	b1,c1,d1
4	Final theory	16 th	50	50%	a1,a2,a3, b1,c1
Total			100	100%	

LXXXIV. Learning Resources:

49- Required Textbook(s) (maximum two)

GP Pal, Niladri Kumar Mahato, 2010, Genetics in Dentistry, 1st edition

50- Essential References

Nicholl, D. S. 2008. An Introduction to Molecular biology, 3rd edition. Cambridge University Press

51- Electronic Materials and Web Sites, etc.

<https://www.ada.org/en/member-center/oral-health-topics/genetics-and-oral-health>

LXXXV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform



	Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery
Course Plan (Syllabus) of
Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CXXVI. Course Identification and General Information:						
1	Course Title:	Genetics				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2				2
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	Biology				

6	Co –requisite:	None
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Dr. Sam Da'er
12	Date of Approval	2020-2021

CXXVII. Course Description:

Through this course the students are introduced with the basics of modern biological science, which achievements today are essential for understanding, diagnostics and dental patient therapy. Students Meet the basics of cell biology, molecular and developmental biology, human genetics with special emphasis on important molecular mechanisms that are necessary in the knowledge and work of the doctor of dental medicine.

CXXVIII. Outcomes of the Course

Under Genetics they would have learnt about Cell structure, DNA, RNA, protein synthesis, cell division, Chromosomal abnormalities, Principles of orofacial genetics, Genetics in malocclusion, Molecular basis of genetics, Studies related to malocclusion, Recent advances in genetics related to malocclusion, Genetic counselling, Bioethics and relationship to Orthodontic management of patients

CXXIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Demonstrate an understanding of fundamental knowledge of Genetic material functions, Central Dogma of Molecular Biology, Splicing mRNA, Eukaryotic and prokaryote gene organization. Construct differences between DNA and RNA Structure. |
| a2- | Understanding Recombinant DNA technology. |
| a3- | Describe the mechanisms of DNA Sequencing methods and Molecular diagnostics |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | Evaluate gene therapy, genetic engineering and biotechnology. |
|-----|---|

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1- Analyzes Hereditary disorders of orofacial structures.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1- Demonstrate collaborative teamwork and leadership spirit with responsibility to maintain professional competency.

CXXX. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction	<ul style="list-style-type: none"> - Cell Biology today, Molecular biology of cells. Evolution of prokaryotic and eukaryotic cells. - Cell as an experimental model. The general plan of the cell structure, chemical cell structure. - Endoplasmic reticle, Golgi apparatus, lysosomes, mitochondria, ribosomes. 	1	2
2	Cellular and molecular basis of inheritance	<ul style="list-style-type: none"> - DNA hereditary material. Types of DNA sequences. Genetic code. - Chromosomes. Morphological, chemical and molecular structure. Chromosome analysis methods. Nomenclature of chromosomes. - The human genome. - Gene and genetic information: structure (introns, exons, promoter, terminator) and function 	2	4
3	Introduction to molecular biology	<ul style="list-style-type: none"> - DNA replication (characteristics, enzymes, importance). - Cell cycle: cell cycle of the eukaryotic cell, control points, regulation of the cell cycle. - The nucleus in mitosis, the nucleolus, the mitosis stages. 	1	2
4	Meiosis, gametogenesis	<ul style="list-style-type: none"> - Genetic significance of meiosis, gametogenesis (spermatogenesis and oogenesis). - Genetic recombination: homologous: synapses, 	1	2

		(insertion sequences / transposons). Fertilization - Determination and differentiation of half of human (role of sex chromosomes).		
5	Principles of medical genetics	- Consequences of meiosis: the origin and causes of non-segregation of autosomes and sex chromosomes in meiosis I and meiosis II.	1	2
6	History and influence of genetics on medicine	- Karyotype and a human karyogram. - The importance of genetically conditioned diseases in humans. Multifactor disorders. - Syndromes and pathological conditions as a consequence of chromosomal aberrations (etiology, incidence, characteristics, consequences and risk of their expression / repetition). - Clinical genetics	1	2
7	Midterm-Exam		1	2
8	Biosynthesis of cellular constituents	- Synthesis and finishing of RNA - transcription: Molecular basis and principles of genetic information flow. Transcription - synthesis of RNA (from DNA to RNA): enzyme RNA polymerase (structure, types, function) - the stages of the transcription process, - transcription of structural genes - (DNA → mRNA; code → codon; characteristics), - the iRNA structure of pro- and eukaryotes, - processing of the primary transcript – pre-mRNK, - RNA splicing.	1	2
9	Synthesis and protein modeling	- Translating genetic information (from RNA to protein), genetic code. - Activation of amino acids. Initiation, elongation and termination of translation. - the mRNA, tRNA, rRNA function in the translation process, - characteristic enzymes and protein factors. - Regulation of protein synthesis in pro- and eukaryotes	1	2
10	Mutations	- Molecular biology in medicine and reparation system: Biological variability, types of gene mutations and consequences (examples),	1	2

		mutagenic agents - Mechanisms for reparation: pre- and post-replicative.		
11	Principles of medical genetics	- Hereditary factors and their functioning. - The chromosome inheritance theory (genetic loci, alleles, genotype, phenotype, distribution and gene traits, expressiveness and penetrability of the gene)	1	2
12	Models of inheritance	- Interaction of non-allelic genes - polygenic inheritance (additive and complementary polygenia; epistasis). - Inheritance related to sex chromosomes (complete and incomplete sex related inheritance; sex-limited and sex-conditioned inheritance). - Mitochondrial inheritance. - Free combination of genes, genetic maps.	1	2
13	Cancer	- Developing genes and cancer. Positional effects and developing genes. Genetics of tumors: development and causes of origin. - Proto-oncogenes, oncogenes, tumor suppressor genes. Tumors – cell cycle, apoptosis, role of telomeres in tumors. Molecular biology in the prevention and treatment of cancer. Gene therapy, potentials and application in human genetics	1	2
14	DNA technology and its application	- Principles of genetic engineering. - Cloning forms. - Banks of genes. Vectors. Ethic principles. - Recombined DNA technology. Advantages and disadvantages of using recombinant DNA technology.	1	2
15	Final Theoretical Exam		1	2
Number of Weeks /and Units per Semester			16	32

CXXXI. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming

- Self-independent learning (problem based learning)

CXXXII. Assessment Methods of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CXXXIII. Assignments:

No.	Assignments	Week due	Mark
1	Presentation	2 nd - 15 th	10
Total			10

CXXXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	4 th , 12 th	10	10%
2	Mid-term exam	8 th	30	30%
3	Assignments	2 nd - 15 th	10	10%
4	Final theory	16 th	50	50%
Total			100	100%

CXXXV. Learning Resources:

20- Required Textbook(s) (maximum two)

GP Pal, Niladri Kumar Mahato, 2010, Genetics in Dentistry, 1st edition

5- Essential References

Nicholl, D. S. 2008. An Introduction to Molecular biology, 3rd edition. Cambridge University Press

6- Electronic Materials and Web Sites, etc.

<https://www.ada.org/en/member-center/oral-health-topics/genetics-and-oral-health>

7- Other Learning Materials

Nicholl, D. S. 2008. An Introduction to Molecular biology, 3rd edition. Cambridge University Press

XII. Course Policies:

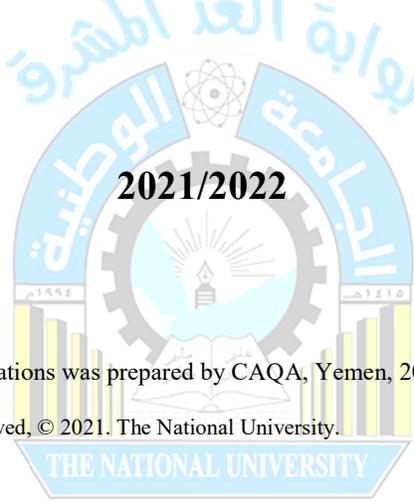
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral Histology (2)

Course No.()



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Prepared by:

Prof..Saeed M. Saeed

Reviewed by:

Dr.

Quality Assurance

Dean:

الجامعة الوطنية
NU

XLIX. Course Identification and General Information:						
1	Course Title:	Oral Histology (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	Oral Histology (1)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof..Saeed M. Saeed				
12	Date of Approval	2020-2021				

L. Course Description:	
<p>Oral histology include the study of surface form of the oral structures and the detailed histological structure and development of hard and soft oral and para-oral structures. Oral Histology includes the study of the development and physiology of the oral structures and their associated structures. Knowledge of oral histology is essential to understanding of the pathological changes in structure or function.</p>	

LI. Outcomes of the Course	
1.	The major goal of this course is to provide you with current, basic knowledge of the development, structure and function of the oral tissues.
2.	This course deals with the histology of.
A.	The structures in and around the mouth. Our objective is to integrate the histology of the oral tissues with their functions.
B.	The material presented in this course is based upon you having a working knowledge of the general histology of cells and tissues as presented in General Histology.
C.	When you have successfully completed this course, you will be able to critically evaluate histologic images of normal tissues, understand the important developmental processes and the structural specialization of the cells and tissues of the oral cavity. This course should prepare you to develop

critical thinking and problem-solving skills, which will apply to other basic science and clinical courses.

LII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Describe the components of enamel organ structurally and functionally and specify the role of IEE (ameloblast) during the presecretory phase, secretory phase and maturative phase of amelogenesis
A2-	A1	a2-	Describe dentinogenesis including time frame and the sequence of development, the cells involved and the general formation of dentin
A3-	A1	a3-	Describe the dental pulp in terms of origin and development, its histological structure (cells, ECM, vascular and neural elements) its functions and the 4 zones that comprise it
A4-	A1	a4-	Describe the development, physical and chemical characteristics of cementum
A5-	A1	a5-	Describe the development, histological structure and functions of the periodontal ligament including its blood and nerve supply and the Physical and chemical characteristics including histological concepts of bone, including cell types (review)
A6-	A2	a6-	Describe the clinical features, classifications and functions and general histologic structure of the different types of oral mucosae and the classification, development, and general structure of salivary glands

Teaching and Assessment Methods for Achieving Learning Outcomes

methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the components of enamel organ structurally and functionally and specify the role of IEE (ameloblast) during the presecretory phase, secretory phase and maturative phase of amelogenesis		
a2-	Describe dentinogenesis including time frame and the sequence of development, the cells involved and the general formation of dentin		
a3-	Describe the dental pulp in terms of origin and development, its histological structure (cells, ECM, vascular and neural elements) its functions and the 4 zones that comprise it	<ul style="list-style-type: none"> ▪ Lectures ▪ Presentation 	<ul style="list-style-type: none"> ▪ Quizzes ▪ Midterm Exam ▪ Final Written Exam
a4-	Describe the development, physical and chemical characteristics of cementum		
a5-	Describe the development, histological structure and functions of the periodontal ligament including its blood and nerve supply and the Physical and chemical characteristics including histological concepts of bone, including cell types (review)		
	Describe the clinical features, classifications and functions and general histologic structure of the different types of oral mucosae and the classification, development, and general structure of salivary glands		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills	CILOs of intellectual skills
After completing this program, students would be able to:	After participating in the course, students would be able to:

B1-	B2	b1-	Differentiate between decalcification and ground sections of hard tissues and their utilities
B2-	B2	b2-	Predict the functional deficit that can arise from certain structural disorders like amelogenesis imperfecta
B3-	B1	b3-	Identify and understand the pathology of tooth structure in subsequent study, based on enough knowledge of their normal structure.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Differentiate between decalcification and ground sections of hard tissues and their utilities	<ul style="list-style-type: none"> ▪ Lectures ▪ Discussion 	<ul style="list-style-type: none"> ▪ Quizzes ▪ Midterm Exam ▪ Final Written Exam
b2-	Predict the functional deficit that can arise from certain structural disorders like amelogenesis imperfecta		
b3-	Identify and understand the pathology of tooth structure in subsequent study, based on enough knowledge of their normal structure.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C2	c1-	Demonstrate proficiency and expertise in the proper use of the light microscope in examining histological specimens on glass slides.

C2-	C1	c2-	Recognize, identify and describe the characteristic structures of teeth at the light microscope histologic level, and for selected tissues, at the electron microscopic ultrastructural level.
C3-	C1	c3-	Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Lab Experiments 	<ul style="list-style-type: none"> ▪ Practical reports ▪ Final Practical Exam
c1-	Demonstrate proficiency and expertise in the proper use of the light microscope in examining histological specimens on glass slides.		
c2-	Recognize, identify and describe the characteristic structures of teeth at the light microscope histologic level, and for selected tissues, at the electron microscopic ultrastructural level.		
c3-	Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D1	d1-	Study independently for continuous self-learning and plan research studies to achieve goals.
D2-	D2	d2-	Utilize the resources of biomedical information including the available electronic facilities to update his/her knowledge

D3-	D6	d3-	Deal with the instruments and equipment in a responsible manner keeping them intact and clean
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Discussion ▪ Self-Learning ▪ Presentation ▪ Seminars 	<ul style="list-style-type: none"> ▪ Research ▪ Homework ▪ Group work
d1-	Study independently for continuous self-learning and plan research studies to achieve goals.		
d2-	Utilize the resources of biomedical information including the available electronic facilities to update his/her knowledge		
d3-	Deal with the instruments and equipment in a responsible manner keeping them intact and clean		

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	ENAMEL	a1,,b1,d1	Physical characteristics, Chemical properties, Structure, Development Clinical considerations	1 st - 2 nd	4
2	DENTIN	2,3,4,b1,2, d1	Physical characteristics, Chemical properties, Structure, Development Clinical considerations	3 rd	2
3	PULP	a3,b1,2, d1	Anatomy Structural Features Functions Regressive Changes (Aging) Development Clinical considerations	4 th	2
4	CEMENTUM	a4,b1,2, d1	Cementogenesis Physical and chemical characteristics Classification of cementum	5 th	2

			Sharpey's fibres Clinical considerations		
5	PERIODONTAL LIGAMENT	a5,b1,d1, 2	Development Structure principal fibres Clinical considerations	6 th	2
6	ALVEOLAR BONE	a5,b1,2, d1,2	Physical and chemical characteristics Histological concepts of bone, including cell types (review) Development of bone in general and alveolar bone in particular Histological features of alveolar bone Clinical considerations Age changes	7 th	2
7	Mid-semester exam	a1,2,3,4,5 ,b1,2, d1,2	-MCQs and essay questions	8 th	2
8	ORAL MUCOSA	a6,b1,d1- 3	Definition and classification Development of oral mucosa Description of keratinized and non-keratinized oral mucosa Lining mucosa Specialized mucosa masticatory mucosa Functions of oral mucosa Age changes Clinical considerations	9 th - 10 th	4
9	SALIVARY GLANDS	a6,b1,d1- 3	Definition and classification Extrinsic (major) salivary glands Intrinsic (minor) salivary glands Age changes Clinical considerations Saliva (composition and function)	11 th - 13 th	6
10	Revision	a1-6 b 1-3 d 1-3	revision of all previous topics	14 th - 15 th	4
11	Final Theoretical Exam	a1-6 b 1-3 d 1-3	-MCQs and essay questions	16 th	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
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1	Enamel (1): Ameloblast, Tomes process, Enamel matrix	c1-c3	1 st	2
2	Enamel (2): Tufts, Spindle, Lamella, DEJ, CEJ	c1-c3	2 nd	2
3	Dentin (1): Odontoblasts, Predentin	c1-c3	3 rd	2
4	Dentin (2): Mantle dentin, Circumpulpal dentin, Interglobular dentin, Tomes granular layer, Dead tracts	c1-c3	4 th	2
5	Pulp: Pulp chamber, Pulp canal, Pulp horns, Pulp zones, apical foramen	c1-c3	5 th	2
6	PDL: Principal fibers, PDL LS, PDL TS	c1-c3	6 th	2
7	Mid practical exam	c1-c3	7 th	2
8	Alveolar bone	c1-c3	8 th	2
9	Oral mucosa(1): Submucosa, Lip	c1-c3	9 th	2
10	Oral mucosa(2): Gingiva, Hard palate	c1-c3	10 th	2
11	Oral mucosa(3): Tongue, Filiform, fungiform, circumvallate papillae	c1-c3	11 th	2
12	Salivary glands(1): Mucous secretory units, serous secretory units, Intralobular ducts	c1-c3	12 th	2
13	Salivary glands(2): Parotid gland, Submandibular gland, Sublingual gland	c1-c3	13 th	2
14	Final Exam	c1-c3	14 th	2
Number of Weeks / Units per Semester			14	28

VI. Teaching strategies of the course

- Lectures using power point presentation.
- Discussion-oriented and interactive teaching (such as brainstorming)
- Seminars
- Self-study modules
- Laboratory demonstrations and practice

LXXXVI. Teaching Strategies of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Final Practical Exam
- Research
- Homework
- Group work
- Oral discussion
- Direct observation

LXXXVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	- Short exams (quizzes), discussions and oral tests. - Laboratory logbooks and reports.	weekly	10	d2
Total			10	

LXXXVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Theoretical midterm exam	8 th	20	20%	a1,2,3,4,5,b1,2, d1,2
2	Final Exam (theoretical)	16 th	40	40%	a1-6,b 1-3,d 1-3
Total			60	60%	
Assessment of Practical Part					
1	Assignments	weekly	10	10%	a1-6,b 1-3,d 1-3
2	Practical midterm exam	7 th	10	10%	c1-c3
3	Final Exam (practical)	14 th	20	20%	c1-c3
Total			40	40%	

LXXXIX. Learning Resources:

	26- SMSaeed (2019): Oral histology and embryology. 4 Ed. 27- G S Kumar; Orban's, 2011, Oral Histology and Embryology. 13 th ed. Elsevier
53- Essential References	
	4. B. K. B. Berkovitz, G. R. Holland and B. J. Moxham, 2009, Oral Anatomy, Histology and Embryology, Fourth Edition, Mosby Elsevier 5. Arthur R. Hand and Marion E. Frank, 2015 Fundamentals of Oral Histology and Physiology, First Edition, Wiley Blackwell
6. Electronic Materials and Web Sites, etc.	
	https://onlinelibrary.wiley.com/journal/16000714 http://edehweisspublications.com/keyword/30/1194/Oral-Mucosa

XC. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:									
Name of Faculty Member:				Office Hours					
Location & Telephone No.:									
E-mail:				SAT	SUN	MON	TUE	WED	THU

2021/2022

CXXXVI. Course Identification and General Information:						
1	Course Title:	Oral Histology (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	Oral Histology (1)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Prof..Saeed M. Saeed				
12	Date of Approval	2020-2021				

CXXXVII. Course Description:

Oral histology include the study of surface form of the oral structures and the detailed histological

the study of the development and physiology of the oral structures and their associated structures. Knowledge of oral histology is essential to understanding of the pathological changes in structure or function.

CXXXVIII. Outcomes of the Course

1. The major goal of this course is to provide you with current, basic knowledge of the development, structure and function of the oral tissues.
2. This course deals with the histology of.
 - A. The structures in and around the mouth. Our objective is to integrate the histology of the oral tissues with their functions.
 - B. The material presented in this course is based upon you having a working knowledge of the general histology of cells and tissues as presented in General Histology.
 - C. When you have successfully completed this course, you will be able to critically evaluate histologic images of normal tissues, understand the important developmental processes and the structural specialization of the cells and tissues of the oral cavity. This course should prepare you to develop critical thinking and problem-solving skills, which will apply to other basic science and clinical courses.

CXXXIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the tooth proper and its supporting structures including their primary functions
a2-	Describe the 3 stages of intrauterine life, namely, pre-embryonic, embryonic, and fetal period.
a3-	Describe the 1st week of development with the 4 main events, namely, fertilization, cleavage, blastocyst formation, and implantation.
a4-	Describe Inner cell mass or embryoblast and the formation of bilaminar germ disc and outer cell mass (trophoblast): and formation of cytotrophoblast, and syncytiotrophoblast which erodes maternal tissues
a5-	Describe Development of face, nose, tongue and thyroid gland , maxilla and mandible including tooth development

(B) Intellectual Skills

b1-	Name the structures appointed to, mentioning its function and relation to cellular regulation.
b2-	Differentiate between decalcification and ground sections of hard tissues and their utilities
b3-	Correlate between histological structure and function of different hard and soft tissue forming cells and pathology.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Demonstrate proficiency and expertise in the proper use of the light microscope in examining histological specimens on glass slides.
c2-	Recognize, identify and describe the characteristic structures of teeth at the light microscope histologic level, and for selected tissues, at the electron microscopic ultrastructural level.
c3-	Draw and label the structures they have seen in electron photomicrographs and under light microscope during practical classes.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Study independently for continuous self-learning and plan research studies to achieve goals.
d2-	Utilize the resources of biomedical information including the available electronic facilities to update his/her knowledge
d3-	Deal with the instruments and equipment in a responsible manner keeping them intact and clean

CXL. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	ENAMEL	Physical characteristics, Chemical properties, Structure, Development Clinical considerations	1 st - 2 nd	4
2	DENTIN	Physical characteristics, Chemical properties, Structure, Development Clinical considerations	3 rd	2
3	PULP	Anatomy Structural Features Functions Regressive Changes (Aging) Development Clinical considerations	4 th	2

4	CEMENTUM	Cementogenesis Physical and chemical characteristics Classification of cementum Histological features of cementum Sharpey's fibres Clinical considerations	5 th	2
5	PERIODONTAL LIGAMENT	Development Structure principal fibres Clinical considerations	6 th	2
6	ALVEOLAR BONE	Physical and chemical characteristics Histological concepts of bone, including cell types (review) Development of bone in general and alveolar bone in particular Histological features of alveolar bone Clinical considerations Age changes	7 th	2
7	Mid-semester exam	-MCQs and essay questions	8 th	2
8	ORAL MUCOSA	Definition and classification Development of oral mucosa Description of keratinized and non-keratinized oral mucosa Lining mucosa Specialized mucosa masticatory mucosa Functions of oral mucosa Age changes Clinical considerations	9 th - 10 th	4
9	SALIVARY GLANDS	Definition and classification Extrinsic (major) salivary glands Intrinsic (minor) salivary glands Age changes Clinical considerations Saliva (composition and function)	11 th - 13 th	6
10	Revision	revision of all previous topics	14 th - 15 th	4
11	Final Theoretical Exam	-MCQs and essay questions	16 th	2
12	formation of hard tissues	principles of formation of hard tissues formation of organic matrix calcification	13 th - 14 th	4
13	Revision	revision of all previous topics	15 th	2
14	Final Theoretical	-MCQs and essay questions	16 th	2

Number of Weeks /and Units per Semester	16	32
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b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Enamel (1): Ameloblast, Tomes process, Enamel matrix	1 st	2
2	Enamel (2): Tufts, Spindle, Lamella, DEJ, CEJ	2 nd	2
3	Dentin (1): Odontoblasts, Predentin	3 rd	2
4	Dentin (2): Mantle dentin, Circumpulpal dentin, Interglobular dentin, Tomes granular layer, Dead tracts	4 th	2
5	Pulp: Pulp chamber, Pulp canal, Pulp horns, Pulp zones, apical foramen	5 th	2
6	PDL: Principal fibers, PDL LS, PDL TS	6 th	2
7	Mid practical exam	7 th	2
8	Alveolar bone	8 th	2
9	Oral mucosa(1): Submucosa, Lip	9 th	2
10	Oral mucosa(2): Gingiva, Hard palate	10 th	2
11	Oral mucosa(3): Tongue, Filiform, fungiform, circumvallate papillae	11 th	2
12	Salivary glands(1): Mucous secretory units, serous secretory units, Intralobular ducts	12 th	2
13	Salivary glands(2): Parotid gland, Submandibular gland, Sublingual gland	13 th	2
14	Final Exam	14 th	2
Number of Weeks / Units per Semester		14	28

CXLI. Teaching strategies of the course

- Lectures using power point presentation.
- Discussion-oriented and interactive teaching (such as brainstorming)
- Seminars
- Self-study modules
- Laboratory demonstrations and practice

CXLII. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Final Practical Exam
- Research
- Homework
- Group work
- Oral discussion
- Direct observation

CXLIII. Assignments:

No.	Assignments	Week due	Mark
1	- Short exams (quizzes), discussions and oral tests. - Laboratory logbooks and reports.	weekly	10
Total			10

CXLIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Theoretical midterm exam	8 th	20	20%
2	Final Exam (theoretical)	16 th	40	40%
Total			60	60%
Assessment of Practical Part				
1	Assignments	weekly	10	10%
2	Practical midterm exam	7 th	10	10%
3	Final Exam (practical)	14 th	20	20%
Total			35	35%

CXLV. Learning Resources:

21- Required Textbook(s) (maximum two)

5. SMSaeed (2019): Oral histology and embryology. 4 Ed.
6. G S Kumar; Orban's, 2011, Oral Histology and Embryology. 13th ed. Elsevier

7. Essential References	
	3- B. K. B. Berkovitz, G. R. Holland and B. J. Moxham;, 2009, Oral Anatomy, Histology and Embryology, Fourth Edition, Mosby Elsevier
	4- Arthur R. Hand and Marion E. Frank, 2015 Fundamentals of Oral Histology and Physiology, First Edition, Wiley Blackwell
8. Electronic Materials and Web Sites, etc.	
	16- https://onlinelibrary.wiley.com/journal/16000714
	17- http://edelweisspublications.com/keyword/30/1194/Oral-Mucosa

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Department of Dentistry

Bachelorof Dental Surgery

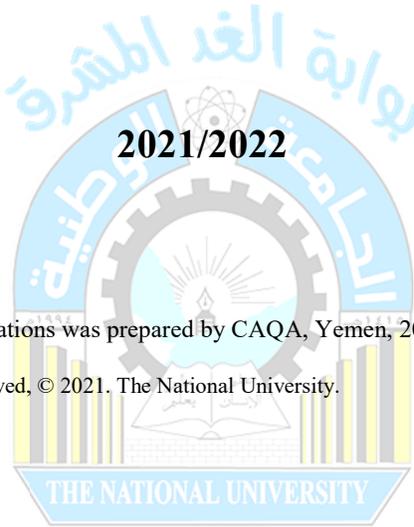
Course Specification of Physiology (2)

Course No.()



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Prepared by:

Dr. SadeqAbdulgagni

Reviewed by:

Dr.

Quality Assurance

Dean:

الجامعة الوطنية
NU

LIV. Course Identification and General Information:

1	Course Title:	Physiology (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2	--		3
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	Physiology (1)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. SadeqAbdulgogni				
12	Date of Approval	2020-2021				

LV. Course Description:

Physiology II provides the students with the essential concepts and mechanisms of human body at its different levels of organization, putting emphasis on their integrated nature in regulating body functions. The course gives an overview on the physiology and functions of cardiovascular, respiratory, endocrine, digestive s and renal systems. It prepare student to understand future disease process and pathophysiology.

LVI. Outcomes of the Course

1. Dental student with knowledge on normal functioning of all the organ systems and their interactions, relative contribution of each organ system towards the maintenance of total body function, physiological principles underlying the pathogenesis of various diseases and oral and para - oral structures.
2. Dental student with basic skill to conduct and interpret experimental and investigative data,

LVII Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Describe the functions of the different organelles in the human cell.
A2-	A3	a2-	Understand the role of kidney in homeostasis.
A3-	A5	a3-	Understand physiology of the cardiovascular system.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the functions of the different organelles in the human cell.	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam.
a2-	Understand the role of kidney in homeostasis.		
a3-	Understand physiology of the cardiovascular system.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Distinguish between physiological and pathological performance of body cells.
B2-	B2	b2-	Integrate physiology with other sciences
B3-	B3	b3-	Distinguish between normal and abnormal functions of renal system.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Distinguish between physiological and pathological performance of body cells.	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion 	<ul style="list-style-type: none"> ▪ Oral exam. ▪ Assignments
b2-	Integrate physiology with other sciences		
b3-	Distinguish between normal and abnormal functions of renal system.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Choose and classify data obtained from physiological experiments.
C2-	C2	c2-	Determine the requirements of homeostasis.
C3-	C3		Reform hematological analysis related to units.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1-	Choose and classify data obtained from physiological experiments.	<ul style="list-style-type: none"> ▪ Demonstration ▪ Exercise ▪ Debate 	<ul style="list-style-type: none"> ▪ Practical exam. ▪ Case based scenario / Problem based learning. ▪ Approved procedures documented in
c2-	Determine the requirements of homeostasis.		
	Reform hematological analysis related		

	to units.		logbook. ▪ Assignments
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(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D1	d1-	Assess the importance of homeostasis in explanation of different abnormality of acid-base balance.
D2-	D2	d2-	Present clearly and effectively scientific topic in a tutorial, a staff meeting or the yearly scientific day.
D3-	D3	d3-	Work separately or in a team to research and prepare a scientific topic.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
d1-	Assess the importance of homeostasis in explanation of different abnormality of acid-base balance.	<ul style="list-style-type: none"> ▪ Lectures ▪ Training ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d2-	Present clearly and effectively scientific topic in a tutorial, a staff meeting or the yearly scientific day.		
d3-	Work separately or in a team to research and prepare a scientific topic.		

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	cardiovascular system	a1, a2, b1,b2, c1, c2	-Physiological anatomy of heart - pulmonary and systemic circulation -Blood pressure and factor Determining and maintaining it.	3week	6
2	Endocrine system	a1, a2, b1,b2, c1, c2, d2	Introduction to endocrine system Mechanism of action of hormones Thyroid gland Endocrine glands and their functions.	2 week	4
3	The kidney	a1,a2, b2,c1, d1	- Functional anatomy of the kidneys. Mechanisms of urine formation. - Regulation of acid-base balance by the kidney	2week	4
4	Mid-Term Theoretical Exam	a1,a2, a3 b1, d2	MCQs and essay questions	1week	2
5	Respiratory system.	a1,a2, a3 b1, d2	- Functions of respiratory system - Mechanism of respiration - hypoxia.	3week	6
6	Digestive system.	a1, a2 b1,b2	Functions of gastrointestinal tract. Gastrointestinal secretions and motility Saliva and mastication Functions of liver	3week	6
7	Review	a1,a2, a3 b1, d2, c3		1	2
8	Final Theoretical Exam	a1,a2, a3 b1, d2, c3	MCQs and essay questions	1week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Measurement of blood pressure	a1, a2 b1,b2,c2, c3	1 st	2
2	Measurement of blood pressure	a1, a2 b1,b2,c2	2 nd	2
3	ECG	a1, a2, b1,c1,c2	3 rd	2
4	ECG	a1, a2, b1,c1,c2	4 th	2
5	Mid-Term Practical Exam	a1, a2, b1, b2	5 th	2
6	Pulse	a1, a2, b1,b2, c1, c2, c3	6 th	2
7	Body temperature	b2, c1,c2	7 th	2
8	Pulmonary functions test.	a1, a2, b1,b2, c1, c2	8 th	2
9	Final practical test	b2,c1,c2,c3 d1,d2,d3	9 th	2
Number of Weeks / Units per Semester			9	18

VI. Teaching strategies of the course

- Lectures
- Discussion
- Self-Learning

- Seminars
- Lab Experiments

XCI. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Final Oral Exam
- Final Practical Exam
- Research
- Homework
- Group work
- Oral discussion

XCII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Assignment 1: -----			
Total				

XCIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes 1 & 2	4 th & 12 th	10	10 %	a1, a2
2	Mid-Term Theoretical Exam	8 th	20	20%	a1,a2, a3 b1, d2
3	Final Theoretical Exam	16 th	40	40%	b2,c1,c2,c3 d1,d2,d3
Total			70	70%	
Assessment of Practical Part					
1	Mid-Term Practical Exam	5 th	5	5%	a1, a2, b1, b2
2	Final Practical Exam	9 th	15	15 %	b2,c1,c2,c3

	Presentation & Evaluation				
3	Final oral Exam	16 th	10	10 %	a1, a2, a3, b1, b2, b3
	Total		30	30%	

XCIV. Learning Resources:

54- Required Textbook(s) (maximum two)

- 28- Guyton and Hall 2010, Text book of medical physiology, 12th Ed, Mississippi Medical Center, Jackson, Mississippi, USA
29- Laurie Kelly 2005, Essentials of Human Physiology for Pharmacy, 1st Ed. CRC Press, Pharmacy Education series

55- Essential References

- 3- Kelly 2018, Essential of Human physiology. 8th edition.
2- Fox Human physiology, 10th edition, 2010.
3- Kaplan Medical step 1 physiology, 6th edition, 2006.
4- Mader, 2004, understanding Human anatomy and physiology, 5th edition.

56- Electronic Materials and Web Sites, etc.

- 30- www.csun.edu/science/biology/anatomy/anatomy.html
31- www.cliffsnotes.com
32- www.innerbody.com
33- www.anatomyandphysiology.com/
34- www.mhhe.com/biosci2/anatomyrevealed

XCIV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating:



	assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Medical Science

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Physiology (2)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CXLVI. Course Identification and General Information:						
1	Course Title:	Physiology (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2	--	--	3

4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester
5	Prerequisites:	Physiology (1)
6	Co-requisite:	None
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Dr. SadeqAbdulmogni
12	Date of Approval	2020-2021

CXLVII. Course Description:

Physiology II provides the students with the essential concepts and mechanisms of human body at its different levels of organization, putting emphasis on their integrated nature in regulating body functions. The course gives an overview on the physiology and functions of cardiovascular, respiratory, endocrine, digestive s and renal systems. It prepare student to understand future disease process and pathophysiology.

CXLVIII. Outcomes of the Course

1. Dental student with knowledge on normal functioning of all the organ systems and their interactions, relative contribution of each organ system towards the maintenance of total body function, physiological principles underlying the pathogenesis of various diseases and oral and para - oral structures.
2. Dental student with basic skill to conduct and interpret experimental and investigative data,

CXLIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Describe the functions of the different organelles in the human cell. |
| a2- | Understand the role of kidney in homeostasis. |
| a3- | Understand physiology of the cardiovascular system. |

(B) Intellectual Skills

After participating in the course, students would be able to:	
b1-	Distinguish between physiological and pathological performance of body cells.
b2-	Integrate physiology with other sciences
b3-	Distinguish between normal and abnormal functions of renal system.

(C) Professional and Practical Skills

After participating in the course, students would be able to:	
c1-	Choose and classify data obtained from physiological experiments.
c2-	Determine the requirements of homeostasis.
c3-	Reform hematological analysis related to units.

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1-	Assess the importance of homeostasis in explanation of different abnormality of acid-base balance.
d2-	Present clearly and effectively scientific topic in a tutorial, a staff meeting or the yearly scientific day.
d3-	Work separately or in a team to research and prepare a scientific topic.

CL. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	cardiovascular system	-Physiological anatomy of heart - pulmonary and systemic circulation -Blood pressure and factor Determining and maintaining it.	3week	6
2	Endocrine system	Introduction to endocrine system Mechanism of action of hormones Thyroid gland Endocrine glands and their functions.	2 week	4

		kidneys. – Mechanisms of urine formation. – Regulation of acid-base balance by the kidney		
4	Mid-Term Theoretical Exam	MCQs and essay questions	1 week	2
5	Respiratory system.	– Functions of respiratory system – Mechanism of respiration – hypoxia.	3 week	6
6	Digestive system.	Functions of gastrointestinal tract. Gastrointestinal secretions and motility Saliva and mastication Functions of liver	3 week	6
7	Review		1	2
8	Final Theoretical Exam	MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Measurement of blood pressure	1 st	2
2	Measurement of blood pressure	2 nd	2
3	ECG	3 rd	2
4	ECG	4 th	2
5	Mid-Term Practical Exam	5 th	2
6	Pulse	6 th	2
7	Body temperature	7 th	2
8	Pulmonary functions test.	8 th	2
9	Final practical test	9 th	2
Number of Weeks / Units per Semester		9	18

- Lectures
- Discussion
- Self-Learning
- Presentation
- Seminars
- Lab Experiments

CLII. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Final Oral Exam
- Final Practical Exam
- Research
- Homework
- Group work
- Oral discussion

CLIII. Assignments:

No.	Assignments	Week due	Mark
1	Assignment 1: -----		
Total			

CLIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes 1 & 2	4 th & 12 th	10	10 %
2	Mid-Term Theoretical Exam	8 th	20	20%
3	Final Theoretical Exam	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Mid-Term Practical Exam	5 th	5	5%

2	Final Practical Exam including Project Presentation & Evaluation	9 th	15	15 %
3	Final oral Exam	16 th	10	10 %
Total			30	30%

CLV. Learning Resources:

22- Required Textbook(s) (maximum two)

- 5- Guyton and Hall 2010, Text book of medical physiology, 12th Ed, Mississippi Medical Center, Jackson, Mississippi, USA
- 6- Laurie Kelly 2005, Essentials of Human Physiology for Pharmacy, 1st Ed. CRC Press, Pharmacy Education series

8- Essential References

- 2- Kelly 2018, Essential of Human physiology. 8th edition.
- 2- Fox Human physiology, 10th edition, 2010.
- 7- Kaplan Medical step 1 physiology, 6th edition, 2006.
- 8- Mader, 2004, understanding Human anatomy and physiology, 5th edition.

4- Electronic Materials and Web Sites, etc.

- 18- www.csun.edu/science/biology/anatomy/anatomy.html
- 19- www.cliffsnotes.com
- 20- www.innerbody.com
- 21- www.anatomyandphysiology.com/
- 22- www.mhhe.com/biosci2/anatomyrevealed

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam. the penalties stipulated for in the Uniform

	Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery
Course Specification of Pre-clinical Removable Prosthodontics (1)

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Abbas M. Al-kebsi

Reviewed by:

Dr.

Quality Assurance

Dean:

NU

LIX. Course Identification and General Information:

1	Course Title:	Pre-clinical Removable Prosthodontics (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	Dental morphology1,2 and Dental material 1				
6	Co –requisite:	and Dental material 2				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr.Abbas M. Al-kebsi				
12	Date of Approval	2020-2021				

LX. Course Description:

This is the student's first preclinical course in the field of prosthodontics. The course is provided to the 2nd year undergraduate dental students. Students will be taught the followings theoretical topics: the necessary anatomical knowledge of the maxillary and mandibular edentulous arches, and different laboratory steps for complete denture construction. This course is accompanied by laboratory exercises with no clinical sessions.

LXI. Outcomes of the Course

- 1.The candidate would possess knowledge about age changes and Prosthodontic Therapy for the aged related to removable Prosthodontics.
- 2.The candidate would be able to demonstrate the clinical competence to restore lost functions of stomatognathic system namely mastication, speech, appearance and psychological comforts by removable prosthesis.

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A2	a1-	knowledge and understanding the basic principles for the theory and practical related to complete dentures.
A2-	A1	a2-	Demonstrate the anatomical land marks of upper and lower arches and their relation to complete dentures fabrication.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> · Lectures · Lab training · Discussion 	<ul style="list-style-type: none"> · Written exam · Practical sessions and exam · Coursework activities
a1-	knowledge and understanding the basic principles for the theory and practical related to complete dentures.		
a2-	Demonstrate the anatomical land marks of upper and lower arches and their relation to complete dentures fabrication.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B5	b1-	Select suitable materials that used in construction of complete denture
B2-	B4	b2-	Construct different preventive strategies to prevent further ridge loss

Teaching and Assessment Methods for Achieving Learning Outcomes

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> · Lectures · Lab training · Discussion 	<ul style="list-style-type: none"> · Written exam · Practical sessions and exam · Coursework activities
b1-	Select suitable materials that used in construction of complete denture		
b2-	Construct different preventive strategies to prevent further ridge loss		

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C5	c1-	Know and apply the different steps for complete denture construction with consideration of infection control protocols
C2-	C2	c2-	Diagnose and analyze the practical problems of the complete denture

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> · Lectures · Lab training · Discussion 	<ul style="list-style-type: none"> · Written exam · Practical sessions and exam · Coursework activities
c1-	Know and apply the different steps for complete denture construction with consideration of infection control protocols		
c2-	Diagnose and analyze the practical problems of the complete denture		

(D) General and Transferable Skills	
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills	

After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D2	d1-	Use the latest technology for presenting and collecting data.
D2-	D6	d2-	Manage time and resources

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> · Lectures · Lab training · Discussion 	<ul style="list-style-type: none"> · Practical sessions and exam · Coursework activities · Assignments
d1-	Use the latest technology for presenting and collecting data.		
d2-	Manage time and resources		

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Removable prosthodontics	a1, b2, c1, d1, d2	<ul style="list-style-type: none"> - Terminology of prosthodontics term - Sequelae of tooth loss - Objectives of complete denture - Steps of complete denture construction 	1 st	2
2	Anatomical landmarks of both arches	a2, c2, d1, d2	<ul style="list-style-type: none"> - Supporting and limiting structures of the upper arch in relation to maxillary complete denture. - Supporting and limiting structures of the lower arch in relation to mandibular complete denture. 	2 nd – 3 rd	2
3			- Definition	4 th -6 th	2

	Impression	b1, c1, d1, d2	- Objective - Different types of impression trays and types of impression. - Preliminary (primary) impression.		
4	Final (secondary) impression and boxing the impression	a1,a2,b1 ,c1,d1,d 2	- Different final Impression techniques. - Definition, advantages and methods for boxing	7 th	2
5	Midterm exam	a1, a2, b1, c1,d1,d2	MCQs	8 th	2
6	Axis for preparing upper and lower master cast			9 th	2
7	Occlusion blocks (Record bases and occlusal rims)	a1,a2,b1 ,c1,d1,d 2	-Trial base or a record base: Requirements and Types of record bases - Occlusion rims: Uses (functions) of occlusion rims	10 th - 12 th	4
8	Mandibular movements and TMJ	a2, d1,d2	-Definition -Anatomy and physiology of the TMJ -Basic mandibular movements and border and intra-border movements - TMJ and Muscle action	13 th - 14 th	4
9	Revision	a1, a2, b1,b2,c1 , c2,d1,d2		15 th	2
10	Final Exam	a1, a2, b1,b2,c1 , c2,d1,d2	MCQs	16 th	2
Number of Weeks /and Units per Semester				16	32

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Pouring upper and lower edentulous rubber molds.	A1, A2, B1, C1, C2	3 rd	2
2	Identifying the anatomical landmarks on the models (upper) Identifying the anatomical landmarks on the models (lower)	A1, A2, B1, C1, C2	4 th	2
3	Draw the outlines on the models Wax spacer + stops	A1, A2, B1, C1, C2	5 th	2
4	Acrylic custom tray fabrication for upper cast Acrylic custom tray fabrication for lower cast Finishing of trays	A1, A2, B1, C1, C2	6 th	2
5	Impression making with special tray for upper cast Impression making with special tray for lower cast	A1, A2, B1, C1, C2	7 th	2
6	Beading and boxing of upper impression Beading and boxing of lower impression Pouring of impressions	A1, A2, B1, C1, C2	8 th	2
7	Record base with acrylic resin and occlusal rim construction on the upper master cast	A1, A2, B1, C1, C2	9 th	2
8	Record base with acrylic resin and occlusal rim construction on the lower master cast	A1, A2, B1, C1, C2	10 th	2
9	Post damming (posterior palatal seal)	A1, A2, B1, C1, C2	11 th	2
10	Mounting the master cast on the articulator	A1, A2, B1, C1, C2	12 th	2
11	Review	A1, A2, B1, C1, C2	13 th	2
12	Final practical exam	A1, A2, B1, C1, C2	14 th	2
Number of Weeks / Units per Semester			12	24

VI. Teaching strategies of the course

- Lectures
- Exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

XCVI. Teaching Strategies of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Oral Exam
- Final Practical Exam
- Research
- Group work

XCVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Practical work	3 rd - 13 th	20	A1, A2, B1, C1, C2
Total			20	

XCVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	4 th - 12 th	10	10%	a1, a2, b1, d2
2	Mid theoretical Exam	8 th	10	10%	a1, a2, b1,c1,d1,d2
3	Final theoretical Exam	16 th	40	40%	a1, a2, b1,b2,c1, c2,d1,d2
Total			60	60%	
Assessment of Practical Part					
1	Assignment	3 rd - 13 th	20	20%	a1, a2, b1, c1,c2
2	Final-Practical Exam	14 th	20	20%	a1, a2, b1, c1,c2

	Total	40	40%	
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XCIX. Learning Resources:	
57- Required Textbook(s) (maximum two)	
	1. Book of the department, 2010, Removable partial dentures technology, 2nd Ed, Egypt, Cairo University press 2. Carr AB, McGivney GP, Brown DT.2005 McCracken's Removable partial Prosthodontic. 11th EdSt. Louis, C V. Mosby
58- Essential References	
	Arthur O. Rahn, John R. Lvanhoe and Kerin D. Plummer. 2009, Text book of Complete Dentures, 6th edition
1. Electronic Materials and Web Sites, etc.	
	1- http://www.quintpub.com/journals/ijp/index.php

C. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Medical Science

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Pre-clinical Removable Prosthodontics (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:									
Name of Faculty Member:				Office Hours					
Location & Telephone No.:									
E-mail:				SAT	SUN	MON	TUE	WED	THU

2021/2022

CLVI. Course Identification and General Information:						
1	Course Title:	Pre-clinical Removable Prosthodontics (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	2 nd Level / 2 nd Semester				
5	Prerequisites:	Dental morphology 1,2 and Dental material 1				
6	Co-requisite:	and Dental material 2				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Abbas M. Al-kebsi				
12	Date of Approval	2020-2021				

CLVII. Course Description:

This is the student's first preclinical course in the field of prosthodontics. The course is provided to

topics: the necessary anatomical knowledge of the maxillary and mandibular edentulous arches, and different laboratory steps for complete denture construction. This course is accompanied by laboratory exercises with no clinical sessions.

CLVIII. Outcomes of the Course

- 1.The candidate would possess knowledge about age changes and Prosthodontic Therapy for the aged related to removable Prosthodontics.
- 2.The candidate would be able to demonstrate the clinical competence to restore lost functions of stomatognathic system namely mastication, speech, appearance and psychological comforts by removable prosthesis.

CLIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | knowledge and understanding the basic principles for the theory and practical related to complete dentures. |
| a2- | Demonstrate the anatomical land marks of upper and lower arches and their relation to complete dentures fabrication. |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | Select suitable materials that used in construction of complete denture |
| b2- | Construct different preventive strategies to prevent further ridge loss |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | Perform the different steps for complete denture construction with consideration of infection control protocols |
| c2- | Diagnose and analyze the practical problems of the complete denture |

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| d1- | Use the latest technology for presenting and collecting data. |
| d2- | Manage time and resources |

CLX. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Removable prosthodontics	<ul style="list-style-type: none"> - Terminology of prosthodontics term - Sequelae of tooth loss - Objectives of complete denture - Steps of complete denture construction 	1st	2
2	Anatomical landmarks of both arches	<ul style="list-style-type: none"> - Supporting and limiting structures of the upper arch in relation to maxillary complete denture. - Supporting and limiting structures of the lower arch in relation to mandibular complete denture. 	2 nd – 3 rd	2
3	Impression	<ul style="list-style-type: none"> - Definition - Objective - Different types of impression trays and types of impression. - Preliminary (primary) impression. 	4 th -6 th	2
4	Final (secondary) impression and boxing the impression	<ul style="list-style-type: none"> - Different final Impression techniques. - Definition, advantages and methods for boxing 	7 th	2
5	Midterm exam	MCQs	8 th	2
6	Axis for preparing upper and lower master cast		9 th	2
7	Occlusion blocks (Record bases and occlusal rims)	<ul style="list-style-type: none"> - Trial base or a record base: Requirements and Types of record bases - Occlusion rims: Uses (functions) of occlusion rims 	10 th - 12 th	4

8	Mandibular movements and TMJ	-Definition -Anatomy and physiology of the TMJ -Basic mandibular movements and border and intra-border movements - TMJ and Muscle action	13 th - 14 th	4
9	Revision		15 th	2
10	Final Exam	MCQs	16 th	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Pouring upper and lower edentulous rubber molds.	3 rd	2
2	Identifying the anatomical landmarks on the models (upper) Identifying the anatomical landmarks on the models (lower)	4 th	2
3	Draw the outlines on the models Wax spacer + stops	5 th	2
4	Acrylic custom tray fabrication for upper cast Acrylic custom tray fabrication for lower cast Finishing of trays	6 th	2
5	Impression making with special tray for upper cast Impression making with special tray for lower cast	7 th	2
6	Beading and boxing of upper impression Beading and boxing of lower impression Pouring of impressions	8 th	2
7	Record base with acrylic resin and occlusal rim construction on the upper master cast	9 th	2
8	Record base with acrylic resin and occlusal rim construction on the lower master cast	10 th	2

9	Post damming (posterior palatal seal)	11 th	2
10	Mounting the master cast on the articulator	12 th	2
11	Review	13 th	2
12	Final practical exam	14 th	2
Number of Weeks / Units per Semester		12	24

CLXI. Teaching strategies of the course

- Lectures
- Exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CLXII. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Oral Exam
- Final Practical Exam
- Research
- Group work

CLXIII. Assignments:

No.	Assignments	Week due	Mark
1	Practical work	3 rd - 13 th	20
Total			20

CLXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	4 th - 12 th	10	10%
2	Mid theoretical Exam	8 th	10	10%

3	Final theoretical Exam	16 th	40	40%
Total			60	60%
Assessment of Practical Part				
1	Assignment	3 rd - 13 th	20	20%
2	Final-Practical Exam	14 th	20	20%
Total			40	40%

CLXV. Learning Resources:

23- Required Textbook(s) (maximum two)

1. Book of the department, 2010, Removable partial dentures technology, 2nd Ed, Egypt, Cairo University press
2. Carr AB, McGivney GP, Brown DT. 2005 McCracken's Removable partial Prosthodontic. 11th Ed. St. Louis, C V. Mosby

9- Essential References

- Arthur O. Rahn, John R. Lvanhoe and Kerin D. Plummer. 2009, Text book of Complete Dentures, 6th edition

10- Electronic Materials and Web Sites, etc.

- 2- <http://www.quintpub.com/journals/ijp/index.php>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



الجامعة الوطنية

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of General Medicine

Course No.()

2021/2022



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Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:



الجامعة الوطنية
NU

LXIII. Course Identification and General Information:						
1	Course Title:	General Medicine				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2			2	
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	General pathology				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

LXIV. Course Description:

The course is aimed at teaching the student the principles of internal medicine as they pertain to provision of dental care. It focuses on the etiology, clinical manifestations and treatment of diseases including cardiovascular diseases, pulmonary diseases, gastro-intestinal diseases and Blood diseases.

LXV. Outcomes of the Course

1. Dental student with sound knowledge on oral manifestations of systemic diseases, medical emergencies in dental practice. special precautions/ contraindication of anesthesia.
2. Dental students with ability to diagnose and manage various common medical problems encountered in general, dental practice and dental emergencies.
3. Dental student with basic skill to prevent and manage complications encountered while carrying out various dental surgical and other procedures.

LXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

in Knowledge and Understanding.			
PIOs in knowledge and understanding		CIOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Identify an increasing awareness of the basics of internal medicine
A2-	A3	a2-	Describe effective communication skills with patients, their relatives and fellow medical practitioners
A3-	A2	a3-	State of familiar with the pathological features and dental relevance of common disorders of the major organ systems

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CIOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Identify an increasing awareness of the basics of internal medicine	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate ▪ Discussion 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam.
a2-	Describe effective communication skills with patients, their relatives and fellow medical practitioners		
a3-	State of familiar with the pathological features and dental relevance of common disorders of the major organ systems		

(B) Intellectual Skills

Alignment of Course CIOs to PIOs in intellectual skills:

PIOs in intellectual skills		CIOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Explore and reflect upon the relationship between internal medicine and the practice of dentistry.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:			
CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> Lecture discussion Explain using models and slides 	<ul style="list-style-type: none"> Oral exam. Assignments
b1-	Explore and reflect upon the relationship between internal medicine and the practice of dentistry.		

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1- Ability to take a proper medical history, especially concerning cardio-respiratory diseases, hemorrhagic disorders, allergy and drug therapy.	
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> Lectures Demonstration Debate 	<ul style="list-style-type: none"> Case based scenario / Problem based learning. Assignments
c1-	Ability to take a proper medical history, especially concerning cardio-respiratory diseases, hemorrhagic disorders, allergy and drug therapy.		

(D) General and Transferable Skills		
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills		
PILOs in general and transferable skills		CILOs in general and transferable skills
After completing this program, students would be able to:		After participating in the course, students would be able to:
D1-	D3, D8	d1- Demonstrate collaborative teamwork and

			maintain professional competency.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d1-	Demonstrate collaborative teamwork and leadership spirit with responsibility to maintain professional competency.		

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction	a1,b1	<ul style="list-style-type: none"> - Introduce the student with the methods of taking an anamnesis and examining the head and neck in internal medicine. - Introduce a student with a way of recognizing pathological signs and features. 	1	2
2	Cardiology	a1-a3,b1	<ul style="list-style-type: none"> - Examination of the cardiac patient and congenital cardiac diseases - Ischemic heart disease, arrhythmias, and arterial hypertension - Myocarditis, pericarditis and cardiac insufficiency 	2	4
3	Pulmonology	a1-a3,b1	<ul style="list-style-type: none"> - Examination of the pulmonary patient - Inflammatory diseases of the pulmonary parenchyma - Asthma and allergic diseases of respiratory organs - Emergency conditions in pulmonology and pulmonary thromboembolism 	1	2
4	Gastroenterology	a1-a3,b1	<ul style="list-style-type: none"> - Diseases of the upper part of digestive tube 	3	6

			<ul style="list-style-type: none"> -Diseases of the lower part of the digestive tube. - Liver diseases - Diseases of the biliary tract and pancreas - Inflammatory bowel diseases - Emergency conditions in gastroenterology 		
5	Midterm Exam	a1-a3,b1		1	2
6	Renal & urinary tract diseases	a1-a3, b1	<ul style="list-style-type: none"> - Pituitary gland and neurohypophysis diseases - Diseases of thyroid and parathyroid glands - Adrenal gland diseases and avitaminosis - Diabetes mellitus 	2	4
7	Renal & urinary tract diseases	a1-a3,b1	<ul style="list-style-type: none"> - Examination of nephrology patients, urinary infections. - Acute and chronic renal insufficiency. Hemodialysis and kidney transplantation. 	1	2
8	Hematology	a1-a3, b1	<ul style="list-style-type: none"> - Clinical characteristics of hematologic patients - Disorders of erythrocyte and granulocyte blood cell line. Myeloproliferative diseases and diseases of the platelets - Coagulation disorders and transfusion medicine - Peripheral circulatory diseases 	2	4
9	Head and neck tumors	a2-a3, b1	<ul style="list-style-type: none"> - Introduce a student with head and neck tumors, principles of diagnostics and therapy. 	1	2
10	Revision	a1-a3,b 1		1	2
11	Final Exam	a1-a3, b1		1	2
Number of Weeks /and Units per Semester				16	32

VI. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CI. Teaching Strategies of the Course:

- Activities (periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Presentation	2 nd - 15 th	10	b1,c1,d1
Total			10	

CIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	4 th , 12 th	10	10%	a1,a2,b1
2	Mid-term exam	8 th	30	30%	a1-a3,b1
3	Assignments	2 nd - 15 th	10	10%	b1,c1,d1
4	Final theory	16 th	50	50%	a1-a3,b1
Total			100	100%	

CIV. Learning Resources:

59- Required Textbook(s) (maximum two)

Kasper D, Fauci A, Hauser S, Longo D, Jameson J, Loscalzo J. 2015. Harrison's Principles of Internal Medicine. 19th edition, The McGraw- Hill

	Crispian Scully, 2014, Medical problems in dentistry, seven edition, Elsevier Ltd. All rights reserved
61- Electronic Materials and Web Sites, etc.	
	https://onlinelibrary.wiley.com/journal/13652796

CV. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of General Medicine

Course No. (----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU



CLXVI. Course Identification and General Information:						
1	Course Title:	General Medicine				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2				2
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	General pathology				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				

CLXVII. Course Description:

The course is aimed at teaching the student the principles of internal medicine as they pertain to provision of dental care. It focuses on the etiology, clinical manifestations and treatment of diseases including cardiovascular diseases, pulmonary diseases, gastro-intestinal diseases and Blood diseases.

CLXVIII. Outcomes of the Course

1. Dental student with sound knowledge on oral manifestations of systemic diseases, medical emergencies in dental practice. special precautions/ contraindication of anesthesia.
2. Dental students with ability to diagnose and manage various common medical problems encountered in general, dental practice and dental emergencies.
3. Dental student with basic skill to prevent and manage complications encountered while carrying out various dental surgical and other procedures.

CLXIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Identify an increasing awareness of the basics of internal medicine |
| a2- | Describe effective communication skills with patients, their relatives and fellow medical practitioners |
| a3- | State of familiar with the pathological features and dental relevance of common disorders of the major organ systems |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Explore and reflect upon the relationship between internal medicine and the practice of dentistry. |
|-----|--|

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | Ability to take a proper medical history, especially concerning cardio-respiratory diseases, hemorrhagic disorders, allergy and drug therapy. |
|-----|---|

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| d1- | Demonstrate collaborative teamwork and leadership spirit with responsibility to maintain |
|-----|--|

CLXX. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction	<ul style="list-style-type: none"> - Introduce the student with the methods of taking an anamnesis and examining the head and neck in internal medicine. - Introduce a student with a way of recognizing pathological signs and features. 	1	2
2	Cardiology	<ul style="list-style-type: none"> - Examination of the cardiac patient and congenital cardiac diseases - Ischemic heart disease, arrhythmias, and arterial hypertension - Myocarditis, pericarditis and cardiac insufficiency 	2	4
3	Pulmonology	<ul style="list-style-type: none"> - Examination of the pulmonary patient - Inflammatory diseases of the pulmonary parenchyma - Asthma and allergic diseases of respiratory organs - Emergency conditions in pulmonology and pulmonary thromboembolism 	1	2
4	Gastroenterology	<ul style="list-style-type: none"> - Diseases of the upper part of digestive tube - Diseases of the lower part of the digestive tube. - Liver diseases - Diseases of the biliary tract and pancreas - Inflammatory bowel diseases - Emergency conditions in gastroenterology 	3	6
5	Midterm Exam		1	2
6	Renal & urinary tract diseases	<ul style="list-style-type: none"> - Pituitary gland and neurohypophysis diseases - Diseases of thyroid and parathyroid glands - Adrenal gland diseases and avitaminosis - Diabetes mellitus 	2	4
7	Renal & urinary tract diseases	<ul style="list-style-type: none"> - Examination of nephrology patients, urinary infections. - Acute and chronic renal insufficiency. Hemodialysis and kidney transplantation. 	1	2

8	Hematology	- Clinical characteristics of hematologic patients - Disorders of erythrocyte and granulocyte blood cell line. Myeloproliferative diseases and diseases of the platelets - Coagulation disorders and transfusion medicine - Peripheral circulatory diseases	2	4
9	Head and neck tumors	- Introduce a student with head and neck tumors, principles of diagnostics and therapy.	1	2
10	Revision		1	2
11	Final Exam		1	2
Number of Weeks /and Units per Semester			16	32

CLXXI. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CLXXII. Assessment Methods of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CLXXIII. Assignments:

No.	Assignments	Week due	Mark
1	Presentation	2 nd - 15 th	10
Total			10

CLXXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	4 th , 12 th	10	10%
2	Mid-term exam	8 th	30	30%
3	Assignments	2 nd - 15 th	10	10%
4	Final theory	16 th	50	50%
Total			100	100%

CLXXV. Learning Resources:

24- Required Textbook(s) (maximum two)

Kasper D, Fauci A, Hauser S, Longo D, Jameson J, Loscalzo J. 2015. Harrison's Principles of Internal Medicine. 19th edition, The McGraw- Hill

25- Essential References

Crispian Scully, 2014, Medical problems in dentistry, seven edition, Elsevier Ltd. All rights reserved

26- Electronic Materials and Web Sites, etc.

<https://onlinelibrary.wiley.com/journal/13652796>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the

	Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Specification of Medically Compromised Patient

Course No.()

2021/2022



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Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:

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VIII. Course Identification and General Information:						
1	Course Title:	Medically Compromised Patient				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		<i>1</i>				<i>1</i>
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	General pathology				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

LXIX. Course Description:

This course is designed to provide basic understanding of general surgery. It prepares the dental student to know how to deal with general problems such as shock, hemorrhage, infections (specific and non-specific), in order to comprehend the oral surgery course later on in his study. Emphasis is being placed on wound healing, hemostasis, and wound infection.

LXX. Outcomes of the Course

- 1.The candidate would possess knowledge about applied basic and systematic medical sciences.
2. The candidate would be able to examine the patients requiring dental therapy, investigate the patient systemically, analyze the investigation results.
- 3.The candidate would diagnose the ailment, plan a treatment, communicate it with the patient and execute it.

LXXI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs)
in Knowledge and Understanding.

PILOs in knowledge and understanding

CILOs in knowledge and understanding

After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A4	a1-	Enumerate and describe the steps undertaken to properly manage medically compromised patients
A2-	A6	a2-	Recognize and describe the management of medical emergencies in the dental office including first aid and basic life support measures
A3-	A5	a3-	Understanding the importance of effective pain and anxiety control and promoting a caring approach to pain control and management of anxious patients

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		
a1- Enumerate and describe the steps undertaken to properly manage medically compromised patients	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate ▪ Discussion 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam.
a2- Recognize and describe the management of medical emergencies in the dental office including first aid and basic life support measures		
a3- Understanding the importance of effective pain and anxiety control and promoting a caring approach to pain control and management of anxious patients		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills	CILOs of intellectual skills
After completing this program, students would be able to:	After participating in the course, students would be able to:
B1- B2, B5	b1- Consider and recommend the appropriate referral of patients for specialist advice or

			treatment
B2-	B1	b2-	Assess the moral and ethical responsibilities involved in the provision of care to individual patients, including those with special needs, and to members of diverse and vulnerable populations

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lecture discussion Explain using models and slides 	<ul style="list-style-type: none"> ▪ Oral exam. ▪ Assignments
b1-	Consider and recommend the appropriate referral of patients for specialist advice or treatment		
b2-	Assess the moral and ethical responsibilities involved in the provision of care to individual patients, including those with special needs, and to members of diverse and vulnerable populations		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C6	c1-	Observe a clinical examination, oral manifestation and assist in relevant surgical procedures

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Demonstration ▪ Debate 	<ul style="list-style-type: none"> ▪ Case based scenario / Problem based learning.
c1-	Observe a clinical examination, oral manifestation and assist in relevant		

	surgical procedures		
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(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3	d1-	Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients and working with a team concept

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
d1-	Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients and working with a team concept	<ul style="list-style-type: none"> ▪ Lectures ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Systemic Disease : Cardiovascular disorders I	a1,b1	Cardiovascular Problems includes: Ischemic heart disease, Cerebrovascular accident (stroke), Dysrhythmias, Congestive heart failure and Cerebrovascular accident (stroke).	1 st -2 nd	2
2	Systemic Disease : Cardiovascular disorders II	a2,b2	– Hypertension, hypotension and dental management of Cardiovascular disorders	3 rd	1
3	Svstemic Disease :	a1, b1,b2	Hematologic Problems includes:	4 th -5 th	2

	Blood disorders		– Hereditary coagulopathies, Therapeutic anticoagulation and dental management		
4	Systemic Disease : Central nervous system	a1, b1,b2	Neurologic Disorders – Seizure disorders, Epileptic disorder and dental management	6 th	1
5	Systemic Disease : Endocrine disorders	a1, a2, b1	– Diabetes mellitus, Adrenal insufficiency, Hyperthyroidism, Hypothyroidism and dental management	7 th	1
6	Mid-Term Theoretical Exam	a1,a2, b1, b2,		8 th	1
7	Systemic Disease : Liver diseases	a1,a2, b1, b2,	– Hepatic Disorders, laboratory investigation and dental managements	9 th -10 th	2
8	Systemic Disease : Kidney diseases	a1,a2, b1	– Renal Problems incldes: Renal failure, Renal transplantation and dental managements.	11 th	1
9	Systemic Disease : Respiratory diseases	a1,a2, b1, b2	– Pulmonary Problems including: Asthma, Chronic obstructive pulmonary disease and dental management	12 th	1
10	Systemic Disease : Allergy and autoimmune disorders	a1,b1, b2	– Hypersensitivity Reactions includes causes and management	13 th	1
11	Systemic Disease : Medical emergencies in dental clinic	a1,a3, b1	Basic Life Support including: – Airway, Breathing, Circulation, Acute Onset Chest Pain and vital sings	14 th - 15 th	2
12	Final Theoretical Exam	a1,a2,a3, b1, b2,		16 th	1
Number of Weeks /and Units per Semester				16	32

VI. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CVI. Teaching Strategies of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Presentation	2 nd - 15 th	10	b1,b2,c1,d1
Total			10	

CVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	4 th , 12 th	10	10%	a1,a2,b1
2	Mid-term exam	8 th	30	30%	a1,a2, b1
3	Assignments	2 nd - 15 th	10	10%	b1,b2,c1,d1
4	Final theory	16 th	50	50%	a1-a3, b1-b2
Total			100	100%	

CIX. Learning Resources:

62- Required Textbook(s) (maximum two)

	OFFICE, 7 th edition, Mosby, an imprint of Elsevier Inc.
63- Essential References	
	Crispian Scully, 2014, scully's Medical Problems in Dentistry, 7th edition, Elsevier Ltd
64- Electronic Materials and Web Sites, etc.	
	www.bjoms.com

CX. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Medical Science

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Medically Compromised Patient

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:										
Name of Faculty Member:					Office Hours					
Location & Telephone No.:										
E-mail:					SAT	SUN	MON	TUE	WED	THU

2021/2022

CLXXVI. Course Identification and General Information:						
1	Course Title:	Medically Compromised Patient				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		1				1
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	General pathology				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

CLXXVII. Course Description:

The aim of this course allow students to gain clinical experience in undertaking, and recording case of medical history, and performing the physical examination of patients requiring minor oral surgery procedures. it covers the introduction of systemic disease, oral manifestation, dental managements. It concentrate to svstemic disorders and safetv patient to administration of local

anesthesia and tooth extraction

CLXXVIII. Outcomes of the Course

1. The candidate would possess knowledge about applied basic and systematic medical sciences.
2. The candidate would be able to examine the patients requiring dental therapy, investigate the patient systemically, analyze the investigation results.
3. The candidate would diagnose the ailment, plan a treatment, communicate it with the patient and execute it.

CLXXIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Enumerate and describe the steps undertaken to properly manage medically compromised patients |
| a2- | Recognize and describe the management of medical emergencies in the dental office including first aid and basic life support measures |
| a3- | Understanding the importance of effective pain and anxiety control and promoting a caring approach to pain control and management of anxious patients |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Consider and recommend the appropriate referral of patients for specialist advice or treatment |
| b2- | Assess the moral and ethical responsibilities involved in the provision of care to individual patients, including those with special needs, and to members of diverse and vulnerable populations |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| c1- | Observe a clinical examination, oral manifestation and assist in relevant surgical procedures. |
|-----|--|

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| d1- | Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients and working with a team concept |
|-----|---|

CLXXX. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Systemic Disease : Cardiovascular disorders I	– Cardiovascular Problems includes: Ischemic heart disease, Cerebrovascular accident (stroke), Dysrhythmias, Congestive heart failure and Cerebrovascular accident (stroke).	1 st - 2 nd	2
2	Systemic Disease : Cardiovascular disorders II	– Hypertension, hypotension and dental management of Cardiovascular disorders	3 rd	1
3	Systemic Disease : Blood disorders	Hematologic Problems includes: – Hereditary coagulopathies, Therapeutic anticoagulation and dental management	4 th - 5 th	2
4	Systemic Disease : Central nervous system	Neurologic Disorders – Seizure disorders, Epileptic disorder and dental management	6 th	1
5	Systemic Disease : Endocrine disorders	– Diabetes mellitus, Adrenal insufficiency, Hyperthyroidism, Hypothyroidism and dental management	7 th	1
6	Mid-Term Theoretical Exam		8 th	1
7	Systemic Disease : Liver diseases	– Hepatic Disorders, laboratory investigation and dental managements	9 th - 10 th	2
8	Systemic Disease : Kidney diseases	– Renal Problems incldes: Renal failure, Renal transplantation and dental managements.	11 th	1
9	Systemic Disease : Respiratory diseases	– Pulmonary Problems including: Asthma, Chronic obstructive pulmonary disease and dental management	12 th	1
10	Systemic Disease : Allergy and autoimmune disorders	– Hypersensitivity Reactions includes causes and management	13 th	1
11	Systemic Disease : Medical emergencies in dental clinic	Basic Life Support including: – Airway, Breathing, Circulation, Acute Onset Chest Pain and vital sings	14 th - 15 th	2
12	Final Theoretical Exam		16 th	1

CLXXXI. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CLXXXII. Assessment Methods of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CLXXXIII. Assignments:

No.	Assignments	Week due	Mark
1	Presentation	2 nd - 15 th	10
Total			10

CLXXXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	4 th , 12 th	10	10%
2	Mid-term exam	8 th	30	30%
3	Assignments	2 nd - 15 th	10	10%
4	Final theory	16 th	50	50%
Total			100	100%

CLXXXV. Learning Resources:

27- Required Textbook(s) (maximum two)

STANLEY MALAMED, DANIEL L, 2015, MEDICAL EMERGENCIES IN THE DENTAL OFFICE, 7th edition, Mosby, an imprint of Elsevier Inc.

28- Essential References

Criscian Scully 2014 scully's Medical Problems in Dentistry 7th edition Elsevier Ltd

29- Electronic Materials and Web Sites, etc.

www.bjoms.com

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral Diagnosis and Radiology (1)

Course No.()

2021/2022



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Prepared by:

Dr. Manal Mohammed Al-Hajri

Reviewed by:

Dr.

Quality Assurance

Dean:



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XIII. Course Identification and General Information:						
1	Course Title:	Oral Diagnosis and Radiology (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2		3	
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	Head and Neck Anatomy				
6	Co –requisite:	Oral pathology (1)				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

XXIV. Course Description:	
<p>This course of dental radiology is mandatory as it offers the way of examining the hidden parts of teeth and their supporting structures. It can be divided conveniently into four main sections: Basic physics and equipment, Radiography techniques, Radiation protection, Radiological interpretation.</p> <p>This course is considered as an introductory course that includes lectures, demonstrations and practical applications on the previously given lectures. It also includes radiographic interpretation of various pathological lesions that aid in diagnosis treatment planning and management of patients. It also includes extraoral radiographic projections and advanced imaging modalities.</p>	

1. Generate graduates that demonstrate the necessary knowledge, skills and attitude in Oral & Maxillofacial Diagnosis, Diagnostic procedures and medical management of such disorders.
2. Create confident and competent Dental professionals who can accomplish and execute clinical deftness in the diagnosis and management of Orofacial disorders

XXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1,2,4,6,b1,4	a1-	Know the basic characteristics of ionizing radiation and production of X-rays, and understand the biological effects of ionizing radiation on the molecular, cellular, tissue and organ levels with concentration on the hazardous effects of ionizing radiation on the oral and para-oral structures
A2-	A1,2,4,6,b1,4	a2-	Understand the principles of image production and characteristics of radiographic images, master the processing of the exposed films in order to produce good quality diagnostic radiographs, understand well the interaction between the film and the processing solutions and identify common causes of faulty or unsatisfactory radiographs.
A3-	A1,2,4,6,b1,4	a3-	Have a thorough knowledge radiopaque and radiolucent normal anatomical landmarks on the intra and extra-oral radiographs.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding	Teaching	Methods of
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After participating in the course, students would be able to:		Lectures	Exam
a1-	Know the basic characteristics of ionizing radiation and production of X-rays, and understand the biological effects of ionizing radiation on the molecular, cellular, tissue and organ levels with concentration on the hazardous effects of ionizing radiation on the oral and para-oral structures	exercise Debate	Homework
a2-	Understand the principles of image production and characteristics of radiographic images, master the processing of the exposed films in order to produce good quality diagnostic radiographs, understand well the interaction between the film and the processing solutions and identify common causes of faulty or unsatisfactory radiographs.		
a3-	Have a thorough knowledge radiopaque and radiolucent normal anatomical landmarks on the intra and extra-oral radiographs.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1	b1,4	b1-	Interpret the procedural, technical and processing errors that might arise during radiographic imaging.
B2	b1,4	b2-	Correlate the clinical and radiographic data to properly diagnose the dental and periodontal problems.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills	Teaching	Methods of
------------------------------	----------	------------

		strategies/methods	assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
b1-	Interpret the procedural, technical and processing errors that might arise during radiographic imaging.		
b2-	Correlate the clinical and radiographic data to properly diagnose the dental and periodontal problems.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C3,4	c1-	Practice adequate measures for radiation protection of the patient, dental staff and people in the immediate environment.
C2-	C2	c2-	Demonstrate the ability to recognize the radiological landmarks on the periapical, occlusal and extraoral radiographs
C3-	b5,c3,4	c3-	Practice accurate and high quality processing procedure of the exposed films in order to produce good quality diagnostic radiographs.
C4-	b5,c3,4	c4-	Apply standardized techniques for acquiring good quality intra oral radiographs, namely periapical, bitewing and occlusal.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
c1-	Practice adequate measures for radiation protection of the patient, dental staff and people in the immediate environment		

c2-	Demonstrate the ability to recognize the radiological landmarks on the periapical, occlusal and extraoral radiographs	Lectures exercise Debate	Exam Homework
c3-	Practice accurate and high quality processing procedure of the exposed films in order to produce good quality diagnostic radiographs.	Lectures exercise Debate	Exam Homework
c4-	Apply standardized techniques for acquiring good quality intra oral radiographs, namely periapical, bitewing and occlusal.	Lectures exercise Debate	Exam Homework

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3,6	d1-	Develop Excellent Communication skills with wide range of individuals.
D2-	D7	d2-	Understanding for radiation safety rules.
D3-	D1,2,3,4	d3-	Represent assignments using radiological terminology

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
d1-	Develop Excellent Communication skills with wide range of individuals.		
d2-	Understanding for radiation safety rules.		
d3-	Represent assignments using radiological terminology	Lectures	Exam

		exercise	
		Debate	

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Radiology Physics	A1,2, b1,c1, 3	<ul style="list-style-type: none"> Physics Review. X-ray tube and Machine. X-ray production. 	1	2
2	Radiobiology	A1,2,b 1,c1,3	<p>Ionization and Ionizing radiation.</p> <p>Radiological effects on different body tissues.</p>	1	2
3	Intraoral radiology techniques	A3,b1, 2,c1,2 ,3,4	<p>Periapical paralleling technique.</p> <p>Periapical Bisecting-angle technique.</p> <p>Bitewing technique.</p> <p>Occlusal.</p>	2	4
	Normal intraoral radiologic landmarks	A3,b1, 2,c1,2 ,3,4	<p>In bisecting angle technique.</p> <p>In bitewing and Occlusal techniques.</p>	1	2
4	Processing technique	A1,2,b 1,c3,4	<p>Processing solutions.</p> <p>Manual vs. automatic processing.</p> <p>Processing errors.</p>	1	2
5	Mid-Term Exam	A1,2, 3		1	2
6	Buccal shift technique	A1,2,b 1,c3,4	Buccal shift technique	1	2
7	Radiography of caries	A3,b1, 2,c1,2 ,3,4	Radiography of caries	1	2

8	Radiography of periodontal diseases	A3,b1, 2,c1,2 ,3,4	Radiography of periodontal diseases	1	2
9	Panoramic radiography	A3,b1, 2,c1,2 ,3,4	Panoramic basics and technique. Panoramic normal landmarks. Panoramic Errors	1	2
10	Extraoral radiography	A3,b1, 2,c1,2 ,3,4	Extraoral radiography	2	4
11	Advanced imagiology	A3,b1, 2,c1,2 ,3,4	Advanced imagiology	1	2
12	Digital vs. conventional radiology	A3,b1, 2,c1,2 ,3,4	Digital vs. conventional radiology	1	2
13	Final Exam	A1, 2,3,4,b1, 2,C1,2, 3,4, 5		1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<p>Demonstration to Identify and label the parts of the dental x-ray machine.</p> <p>Then training entails imaging Adult Full Mouth Series by Bisecting-angle Technique.</p> <ul style="list-style-type: none"> ☐ Upper centrals ☐ Upper canine (R & L) ☐ Upper premolars (R & L) ☐ Upper Molars (R & L) ☐ Lower centrals ☐ Lower canine (R & L) 	A1- A2- A3- A4-b1,2,C1,2,3,4	14	28

	<input type="checkbox"/> Lower premolars (R & L) <input type="checkbox"/> Lower Molars (R & L) <input type="checkbox"/> Bitewing premolar (R & L) <input type="checkbox"/> Bitewing Molar (R & L) <input type="checkbox"/> Occlusal Upper <input type="checkbox"/> Occlusal Lower			
2	Practical exam	A1- A2- A3- A4-b1,2,C1,2,3,4	1	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CXI. Teaching Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CXII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the instructor	10	a1, a2, a, a4, b1,2,d1,2,3 5, , d1, d2
Total			10	

CXIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Mid tem exam	4 th	20	20%	a1a2,a3
2	Final tem exame	14th	40	40%	a1a2a3,b1,2,c1,2,3,4,5
3	Attending and assignment	1st to 14th	10	10	A1,2,3,4,b1,2,d1,2,3
Total			70	70%	
Assessment of Practical Part					
1	Practical exam	14	30	30	A1- A2- A3- A4-b1,2,C1,2,3,4
Total			30	30%	

CXIV. Learning Resources:

65- Required Textbook(s) (maximum two)

1. Essentials of dental Radiography and Radiology

66- Essential References

- 13- • White SC, Pharoah MJ. Oral Radiology: Principles and Interpretation.

67- Electronic Materials and Web Sites, etc.

1. Oral Radiology Journal <http://www.springer.com/medicine/dentistry/journal/11282>
2. Journal of oral and maxillofacial radiology <http://www.joomr.org/>

CXV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform



	Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Medical Science

Department of Dentistry

Bachelor of Dental Surgery

Course Plan of Oral Diagnosis and Radiology (1)

Course No. (----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:	Dr. Manal Mohammed Al-Hajri	Office Hours					
Location & Telephone No.:	00967779212007						
E-mail:	dent.manal@yahoo.com	SAT	SUN	MON	TUE	WED	THU

2021/2022

CLXXXVI. Course Identification and General Information:

1	Course Title:	Oral Diagnosis and Radiology (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				

5	Prerequisites:	Head and Neck Anatomy
6	Co –requisite:	Oral pathology (1)
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Dr. Manal Mohammed Al-Hajri
12	Date of Approval	2020-2021

CLXXXVII. Course Description:

This course of dental radiology is mandatory as it offers the way of examining the hidden parts of teeth and their supporting structures. It can be divided conveniently into four main sections: Basic physics and equipment, Radiography techniques, Radiation protection, Radiological interpretation. This course is considered as an introductory course that includes lectures, demonstrations and practical applications on the previously given lectures. It also includes radiographic interpretation of various pathological lesions that aid in diagnosis treatment planning and management of patients. It also includes extraoral radiographic projections and advanced imaging modalities.

CLXXXVIII. Outcomes of the Course

1. Generate graduates that demonstrate the necessary knowledge, skills and attitude in Oral & Maxillofacial Diagnosis, Diagnostic procedures and medical management of such disorders.
2. Create confident and competent Dental professionals who can accomplish and execute clinical deftness in the diagnosis and management of Orofacial disorders

CLXXXIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|----|---|
| a1 | Know the basic characteristics of ionizing radiation and production of X-rays, and understand the |
|----|---|

	concentration on the hazardous effects of ionizing radiation on the oral and para- oral structures
a2	Understand the principles of image production and characteristics of radiographic images, master the processing of the exposed films in order to produce good quality diagnostic radiographs, understand well the interaction between the film and the processing solutions and identify common causes of faulty or unsatisfactory radiographs.
a3	Have a thorough knowledge radiopaque and radiolucent normal anatomical landmarks on the intra and extra-oral radiographs.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1	Interpret the procedural, technical and processing errors that might arise during radiographic imaging.
b2	Correlate the clinical and radiographic data to properly diagnose the dental and periodontal problems.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1	Practice adequate measures for radiation protection of the patient, dental staff and people in the immediate environment.
c2	Demonstrate the ability to recognize the radiological landmarks on the periapical, occlusal and extraoral radiographs
c3	Practice accurate and high quality processing procedure of the exposed films in order to produce good quality diagnostic radiographs.
c4	Apply standardized techniques for acquiring good quality intra oral radiographs, namely periapical, bitewing and occlusal.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1	Develop Excellent Communication skills with wide range of individuals.
d2	Understanding for radiation safety rules.
d3	Represent assignments using radiological terminology

CXC. Course Content:

1 - Course Topics/Items:

a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Radiology Physics	Physics Review. X-ray tube and Machine. X-ray production.	1	2
2	Radiobiology	Ionization and Ionizing radiation. Radiological effects on different body tissues.	1	2
3	Intraoral radiology techniques	Periapical paralleling technique. Periapical Bisecting-angle technique. Bitewing technique. Occlusal.	2	4
4	Normal intraoral radiologic landmarks	In bisecting angle technique. In bitewing and Occlusal techniques.	1	2
	Processing solutions. Manual vs. automatic processing. Processing errors.	<ul style="list-style-type: none"> Processing solutions. Manual vs. automatic 	1	2
	Midterm exam	<ul style="list-style-type: none"> 	1	2
	Buccal shift technique	Buccal shift technique	1	2
	Radiography of caries	Radiography of caries	1	2
	Radiography of periodontal diseases	Radiography of periodontal diseases	1	2
	Panoramic basics and technique. Panoramic normal landmarks. Panoramic Errors	Panoramic basics and technique. Panoramic normal landmarks. Panoramic Errors	1	2
	Extraoral radiography	Extraoral radiography	2	4

	Advanced imagiology	Advanced imagiology	1	2
	Digital vs. conventional radiology	Digital vs. conventional radiology	1	2
	Practical exam		1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<p>Demonstration to Identify and label the parts of the dental x-ray machine.</p> <p>Then training entails imaging Adult Full Mouth Series by Bisecting-angle Technique.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Upper centrals <input type="checkbox"/> Upper canine (R & L) <input type="checkbox"/> Upper premolars (R & L) <input type="checkbox"/> Upper Molars (R & L) <input type="checkbox"/> Lower centrals <input type="checkbox"/> Lower canine (R & L) <input type="checkbox"/> Lower premolars (R & L) <input type="checkbox"/> Lower Molars (R & L) <input type="checkbox"/> Bitewing premolar (R & L) <input type="checkbox"/> Bitewing Molar (R & L) <input type="checkbox"/> Occlusal Upper <input type="checkbox"/> Occlusal Lower 	14	28
2	Practical exam	1	2
Number of Weeks / Units per Semester		15	30

CXCI. Teaching strategies of the course
<ul style="list-style-type: none"> - Lectures - exercise - Debate

- Dialogue and discussion
- Brainstorming

CXCII. Assessment Methods of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CXCIII. Assignments:

No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

CXCIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exam	14th	40	40%
1	Mid tem exam	4th	20	20%
3	Attending and assignment	1st to 14th	10	10%
Total			70	100%
Assessment of Practical Part				
1	Practical exam	14	30	30%
Total			30	100%

CXCV. Learning Resources:

30- Required Textbook(s) (maximum two)

11- Essentials of dental Radiography and Radiology

12- Essential References

2- White SC, Pharoah MJ. Oral Radiology: Principles and Interpretation.

13- Electronic Materials and Web Sites, etc.

1. Oral Radiology Journal <http://www.springer.com/medicine/dentistry/journal/11282>

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral pathology (1)

Course No.()

2021/2022



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Prepared by:

Dr. Manal Mohammed Al-Hajri

Reviewed by:

Dr.

Quality Assurance

Dean:



الجامعة الوطنية
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VIII. Course Identification and General Information:						
1	Course Title:	Oral pathology (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	3 th Level / 1 st Semester				
5	Prerequisites:	Oral histology & microbiology				
6	Co-requisite:	Oral Diagnosis and Radiology (1)				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

XXIX. Course Description:	
This course will cover broadly oral and maxillofacial lesions on pathological basis that affect soft and hard tissues using lectures and electronic images both clinically and histopathology	

LXXX. Outcomes of the Course	
<ol style="list-style-type: none"> 1. The student should have to understand the pathological processes of oral diseases. 2. The student would have to understand the pathological processes of oral diseases, compare and diagnose based on clinical, radiographical and histopathological findings which involves the oral and paraoral structures. 3. They would have learnt and perform the preparation of ground sections oral smears and histology slides. 	

4. Student would have studied and be able to identify and diagnose the disease based on microscopy.

XXXI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1,2,4	a1-	Define different pathological conditions related to oral cavity and adjoining structures.
A2-	A1,2,4	a2-	Describe the etiology and pathogenesis of various oral diseases affecting either hard or/and soft tissues.
A3-	A1,2,4	a3-	Recognize the clinical features, microscopic picture and laboratory findings of common oral lesions.
A4-	A1,2,4	a4-	Identify predisposing factors that require intervention to promote oral health.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Define different pathological conditions related to oral cavity and adjoining structures.	Lectures exercise Debate	Exam Homework
a2-	Describe the etiology and pathogenesis of various oral diseases affecting either hard or/and soft tissues.		
a3-	Recognize the clinical features, microscopic picture and laboratory findings of common oral lesions.	Lectures exercise Debate	Exam Homework

a4-	Identify predisposing factors that require intervention to promote oral health.	Lectures exercise Debate	Exam Homework
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(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	A2,4,6,b1,3,4	b1-	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.
B2-	A2,4,6,b1,3,4	b2-	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
b1-	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.		
b2-	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	A4,b5,c2	c1-	Use the light microscope properly.

C2-	A2,4,6,b1,3,4	c2-	Demonstrate ability in determining the appropriate investigations required to detect abnormal and pathological oral conditions.
C3-	A2,4,6,b1,3,4	c3-	Evaluate the clinical application of oral pathology as it relates to dental hygiene treatment and management of patients
C4-	A2,4,6,b1,3,4	c4-	Assess the importance of the procedures for submitting specimens for laboratory diagnosis and ability to interpret diagnostic reports

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
c1-	Use the light microscope properly.	exercise Debate	Homework
c2-	Demonstrate ability in determining the appropriate investigations required to detect abnormal and pathological oral conditions.	Lectures exercise Debate	Exam Homework
c3-	Evaluate the clinical application of oral pathology as it relates to dental hygiene treatment and management of patients	Lectures exercise Debate	Exam Homework
c4-	Assess the importance of the procedures for submitting specimens for laboratory diagnosis and ability to interpret diagnostic reports	Lectures exercise Debate	Exam Homework

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills	CILOs in general and transferable skills
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After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3, 5,6	d1-	Display good communication with patients and health professionals
D2-	D3, 5,6	d2-	Refer a patient for specialist advice or treatment
D3-	D3	d3-	Associate in-group activities to develop baseline understanding and implementation of teamwork performance strategies

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
d1-	Display good communication with patients.		
d2-	Refer a patient for specialist advice or treatment		
d3-	Associate in-group activities to develop baseline understanding and implementation of teamwork performance strategies	Lectures exercise Debate	Exam Homework

KII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Developmental anomalies of oral and paraoral structures	A1,2,3 , C1,2, 3,4,	<ul style="list-style-type: none"> • Definitions • Anomalies of lips and palate • Anomalies of oral mucosa • Developmental defects of gingiva • Developmental anomalies of jaws • Developmental anomalies of tongue • Developmental anomalies of face 	2	4
	Abnormalities of teeth.	A1,2,3 , C1,2,	<ul style="list-style-type: none"> • Disturbance in size of teeth • Disturbance in number of teeth • Disturbance of eruption 	2	4

		3,4,	<ul style="list-style-type: none"> Disturbance in shape Disturbance in structure 		
	Dental caries	A1,4, 6,C1, 2, 3,4,	<ul style="list-style-type: none"> Definition Etiology Pathophysiology Contributing factors Clinical aspects of dental caries Histopathological aspect of dental caries 	2	4
2	Mid-Term Exam	a1 a2, a3		1	4
3	Pulpal and periapical Diseases	A1,4,C 1,2, 3,4	<ul style="list-style-type: none"> Etiology of pulpal diseases Classification of the pulpal diseases Diseases of the periapical tissues Space infections. 	2	4
	Cysts of jaws and oral cavity	A1,4,C 1,2, 3,4	<ul style="list-style-type: none"> Definition Classification Pathogenesis Inflammatory Cysts: <ul style="list-style-type: none"> Odontogenic Developmental Developmental Non-Odontogenic Cysts 	3	6
	Benign oral Tumors	A1,4,C 1,2, 3,4	<ul style="list-style-type: none"> Definitions Reactive Lesions Benign Neoplasms of the Epithelial Tissue Origin Benign Neoplasms of Connective Tissues. 	3	6
6	Final Exam	A1,2,3,4 5,b1,2,C 1,2, 3,4, 5	<ul style="list-style-type: none"> 	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect					
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours	
1	<ul style="list-style-type: none"> Histopathological examination of cysts 	A1,2,3, 4,b1,2,C1,2, 3,4	8	16	

	<ul style="list-style-type: none"> • Histopathological examination of benign tumors • Histopathological examination of malignant tumors • Histopathological examination of odontogenic tumors • Histopathological examination of salivary gland diseases and tumors • Histopathological examination of bone pathology 			
	Practical exam	A1,2,3, 4,b1,2,C1,2, 3,4	1	2
Number of Weeks / Units per Semester			9	18

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming



CXVI. Teaching Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CXVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the instructor	10	a1, a2, a3,c1,2,3,4, d1, d2,d3.
Total			10	

CXVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Mid tem exam	4 th	20	30	A1,2,3
2	Final tem exam	14th	40	60	A1,2,3,4
3	Attending and assignment	1st to 14th	10	10	A1,2,3,4,d1,2,3
Total			70	100%	
Assessment of Practical Part					
1	Practical exam	9	30	10	A1,2,3, 4,b1,2,C1,2, 3,4,
Total			30	30%	

CXIX. Learning Resources:

68- Required Textbook(s) (maximum two)

- 10- Purkait, Swapan Kumar. Essentials of Oral Pathology. 3rd ed. Replika: Jaypee Brothers Medical Publishers, 2011.
11- Sapp J. Philip, Eversole Lewis R. and Wysocki George. Contemporary Oral and Maxillofacial Pathology. 2nd ed. China: Mosby, 2004.

69- Essential References

- 14- Neville, Damm, Allen and Bouquot. Oral and Maxillofacial Pathology. 3rd ed. Philadelphia: W Saunders, 2008.
15- Cawson R. A. and Odell E. W. Cawson's Essentials of Oral Pathology and Oral Medicine. 8th Edinburg: Churchill Livingstone, 2008.
16- 5) Regezi J. A., Sciubba J. J., Jordan R. C.K. Oral pathology : clinical pathologic correlations. ed. Saunders, Elsevier, 2012.

70- Electronic Materials and Web Sites, etc.

Websites: Open e-learning

CXX. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.

3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

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Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan of Oral pathology (1)

Course No. (----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:	Dr. Manal Mohammed Al-Hajri	Office Hours					
Location & Telephone No.:	00967779212007						
E-mail:	dent.manal@yahoo.com	SAT	SUN	MON	TUE	WED	THU

2021/2022

CXCVI. Course Identification and General Information:						
1	Course Title:	Oral pathology (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	3 th Level / 1 st Semester				
5	Prerequisites:	Oral histology & microbiology				
6	Co-requisite:	Oral Diagnosis and Radiology (1)				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

CXCVII. Course Description:

This course will cover broadly oral and maxillofacial lesions on pathological basis that affect soft and hard tissues using lectures and electronic images both clinically and histopathology

CXCVIII. Outcomes of the Course

1. The student should have to understand the pathological processes of oral diseases.
2. The student would have to understand the pathological processes of oral diseases, compare and diagnose based on clinical, radiographical and histopathological findings which involves the oral and paraoral structures.
3. They would have learnt and perform the preparation of ground sections oral smears and histology slides.
4. Student would have studied and be able to identify and diagnose the disease based on microscopy.

CXCIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1	Define different pathological conditions related to oral cavity and adjoining structures.
a2	Describe the etiology and pathogenesis of various oral diseases affecting either hard or/and soft tissues.
a3	Recognize the clinical features, microscopic picture and laboratory findings of common oral lesions.
a4	Identify predisposing factors that require intervention to promote oral health.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis
b2	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1	Use the light microscope properly.
c2	Demonstrate ability in determining the appropriate investigations required to detect

	abnormal and pathological oral conditions.
c3	Evaluate the clinical application of oral pathology as it relates to dental hygiene treatment and management of patients
c4	Assess the importance of the procedures for submitting specimens for laboratory diagnosis and ability to interpret diagnostic reports

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1	Display good communication with patients and health professionals
d2	Refer a patient for specialist advice or treatment
d3	Associate in-group activities to develop baseline understanding and implementation of teamwork performance strategies

CC. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Developmental anomalies of oral and paraoral structures	<ul style="list-style-type: none"> • Definitions • Anomalies of lips and palate • Anomalies of oral mucosa • Developmental defects of gingiva • Developmental anomalies of jaws • Developmental anomalies of tongue • Developmental anomalies of face 	2	4
2	Abnormalities of teeth.	<ul style="list-style-type: none"> • Disturbance in size of teeth • Disturbance in number of teeth • Disturbance of eruption • Disturbance in shape • Disturbance in structure 	2	4
3	Dental caries	<ul style="list-style-type: none"> • Definition • Etiology • Pathophysiology • Contributing factors • Clinical aspects of dental caries • Histopathological aspect of dental caries 	2	4
	Midterm exam	•	1	2

	Pulpal and periapical Diseases.	<ul style="list-style-type: none"> Etiology of pulpal diseases Classification of the pulpal diseases Diseases of the periapical tissues Space infections. 	2	4
	Cysts of jaws and oral cavity	<ul style="list-style-type: none"> Definition Classification Pathogenesis Inflammatory Cysts: Odontogenic Developmental Cysts Developmental Non-Odontogenic Cysts 	3	6
	Benign oral Tumors.	<ul style="list-style-type: none"> Definitions Reactive Lesions Benign Neoplasms of the Epithelial Tissue Origin Benign Neoplasms of Connective Tissues 	3	6
	Final exam	<ul style="list-style-type: none"> 	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> Histopathological examination of cysts Histopathological examination of benign tumors Histopathological examination of malignant tumors Histopathological examination of odontogenic tumors Histopathological examination of salivary gland diseases and tumors Histopathological examination of bone pathology 	1 st to 8 th	8
2	Practical exam	9	2
Number of Weeks / Units per Semester		9	18

CCI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CCII. Assessment Methods of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CCIII. Assignments:

No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

CCIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exam	14th	40	50
1	Mid tem exam	4th	20	30
3	Attending and assignment	1st to 14th	10	20
Total			70	100%
Assessment of Practical Part				
1	Practical exam	1st,8 th	30	30%
Total			30	100%

CCV. Learning Resources:

31- Required Textbook(s) (maximum two)

- 14- Purkait, Swapan Kumar. Essentials of Oral Pathology. 3rd ed. Replika: Jaypee Brothers Medical Publishers, 2011.
15- Sapp J. Philip, Eversole Lewis R. and Wysocki George. Contemporary Oral and Maxillofacial Pathology. 2nd ed. China: Mosby, 2004.

16- Essential References

- 3- Neville, Damm, Allen and Bouquot. Oral and Maxillofacial Pathology. 3rd ed. Philadelphia: WB Saunders, 2008.
4- Cawson R. A. and Odell E. W. Cawson's Essentials of Oral Pathology and Oral Medicine. 8th ed. Edinburgh: Churchill Livingstone, 2008.
5- Regezi J. A., Sciubba J. J., Jordan R. C.K. Oral pathology : clinical pathologic correlations. 6th ed

	Saunders, Elsevier, 2012.
17- Electronic Materials and Web Sites, etc.	
	Open e-learning

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Medical Science

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Pharmacology

Course No.()

2021/2022



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Prepared by:

Dr. Mohammed Al-Khawlani

Reviewed by:

Dr. M. Alghorafi

Quality Assurance

Dean:

الجامعة الوطنية
NU

XXIII. Course Identification and General Information:

1	Course Title:	Pharmacology				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		3	--	--	--	3
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	Physiology (2)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Mohammed Al-Khawlane				
12	Date of Approval	2020-2021				

XXIV. Course Description:

This course is designed to provide the student with the necessary basics knowledge and skills in different drugs used in dentistry, the general principles of pharmacology, including pharmacodynamics, and pharmacokinetics, appropriate use, systemic conditions particularly in dental practice, and understand the hazards of drug-drug interaction and drug used during pregnancy and lactation. Students will develop sufficient knowledge to evaluate medication histories using the Dental Hygiene.

XXXV. Outcomes of the Course

- 1- Provide knowledge and understanding of the basic principles of pharmacology (pharmacokinetics and pharmacodynamics).
- 2- Introduce concepts of drug action at cell, tissue and system levels.
- 3- Describe the pathophysiology and clinical manifestations of some related diseases in dental practice
- 4- Provide fundamental pharmacological knowledge of the principles of drug action in dental practice.
- 5- Provide comprehensive coverage of the major drug groups affecting different body system

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1.	Describe the scientific basis of dentistry and the relevant biomedical and behavioral sciences which form the basis for understanding human growth, development and health.	a1-	Identify the basic knowledge of the pharmacokinetics and pharmacodynamics of drugs used in dental therapy of disease and health promotion.
A1.	Describe the scientific basis of dentistry and the relevant biomedical and behavioral sciences which form the basis for understanding human growth, development and health.	a2-	Describe the general concepts, definitions, mechanism of the drug, the biological activity, significant drug-drug and side effect of drugs

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Identify the basic knowledge of the pharmacokinetics and pharmacodynamics of drugs used in dental therapy of disease and health promotion.	Lectures Presentation	-Quizzes -Midterm Exam -Final Written Exam
a2-	Describe the general concepts, definitions, mechanism of the drug, the biological activity, significant drug-drug and side effect of drugs		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1	Incorporate theoretical basic biomedical, behavioral and dental sciences with the clinical	b1-	Recognize the pharmacokinetics and pharmacodynamics of drugs at all systems.

	understanding of disease and its management.		
B3.	Prioritize patient's treatment needs and formulate an appropriate treatment plan	b2-	Discuss the types of classes of drugs used in dental practice

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Recognize the pharmacokinetics and pharmacodynamics of drugs at all systems .	Lectures Presentation	-Quizzes -Midterm Exam -Final Written Exam
b2-	Discuss the types of classes of drugs used in dental practice		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1	.Obtain and record a comprehensive history, perform an appropriate physical examination, and carry out different investigations to reach a correct diagnosis and treatment	c1-	Use the generic and trade names of some of the most commonly prescribed drugs in clinical practice

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1	Use the generic and trade names of some of the most commonly prescribed drugs in clinical practice	Lectures Presentation	-Quizzes -Midterm Exam -Final Written Exam

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D3-	Demonstrate leadership and teamwork skills with colleagues and other oral health team for effective delivery of oral health care.	d1-	Work effectively as a part of a team to perform the required tasks
D2-	Use advanced information and communication technologies to enrich and diversify professional experience.	d2-	Collaborate actively in groups to solve laboratory problems based on professional medical information available.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> Use of communication and information technology Self-learning 	<ul style="list-style-type: none"> Discussion. Group work
d1-	Work effectively as a part of a team to perform the required tasks		
d2-	Collaborate actively in groups to solve laboratory problems based on professional medical information available.		

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to pharmacology	a1,a2, b1,b2	Pharmacokinetics(ADME), Adverse Reactions Mechanisms of Drug Action Drug Metabolism and Excretion	1	3
2	Autonomic Drugs	a1, a2	Adrenergic Drugs	1	3

		b1,b2	Antiadrenergic Drugs Cholinomimetics/cholinesterase antagonists Anticholinergics		
3	Chemotherapeutic agents	a1,a2, b1,b2, c1	Introduction to chemotherapy. Antibacterials. Sulphonamide -Antibiotics B-lactam(classic and non-classic) tetracycline macrolide aminoglycoside lincosomide fluroquinlone	4	12
4	Local Anesthetics General Anesthetics	a1,a2, b1	Antifungal Agent Antiviral Agents	1	3
5	Midterm	a1,a2, b1,b2		1	3
6	Inflammation	a1,a2, b1,b2, c1	Non-steroidal Anti-inflammatory Drugs (NSAIDs) Corticosteroids	1	3
7	Analgesics	a1,a2, b1,b2	Analgesics I - Opioids	1	3
8	Anesthetics	a1,a2, b1		1	3
9	Hypnotics, Anti-anxiety Agents	a1,a2, b1,c1	Benzodiazepines and barbiturates. Nonbenzodiazepinenonbarbiturate sedative-hypnotics	1	3
10	Cardiovascular drugs	a1,a2, b1,b2	Antihypertensive agents	1	3
11	Anti-diabetic Agents	a1, b1,b2	Insulin and Anti-diabetic Agents	1	3
12	Dental Drug Interactions	a1,a2, b1,b2	Adverse Drug Interactions in Dental Practice Examples of Common Dental Drugs	1	3

			Interactions		
13	Final Exam		-	1	3
Number of Weeks /and Units per Semester				16	48

VI. Teaching strategies of the course

- Lectures
- Presentation
- Discussion
- Self-learning
- Use of communication and information technology
- Self-learning

CXXI. Teaching Strategies of the Course:

- Quizzes
- -Midterm Exam
- -Final Written Exam
- -Home work
- Discussion.
- Group work

CXXII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Assignment 1: List the different types of antibiotics drugs	10 th	10	a 1, a2, b1, b2
Total			10	

CXXIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Assignments	10 th	10	10%	a 1, a2, b1, b2
2	Quiz	6 th	10	10%	a 1, a2, b1, b2

3	Midterm Exam (Theory)	8 th	20	20%	a 1, a2, b1, b2
4	Final Exam (Theory)	16 th	60	60%	a 1, a2, b1, b2
Total			100	100%	

CXXIV. Learning Resources:

71- Required Textbook(s) (maximum two)

1. .Karen Whalen, 2018. Lippincott's Illustrated Reviews: Pharmacology, 7th edition.
- 2- Katzung& Trevor, 2019. Pharmacology: Examination & Board review. Katzung& Trevor, 12th edition

72- Essential References

1. TRIPATHI, K. D. 2020. Essentials of pharmacology for dentistry. Jaypee, 4th Edition
2. Brunton, Laurence L., Randa Hilal-Dandan, and Björn C. Knollmann, eds. Goodman & Gilman. 2018. The pharmacological basis of therapeutics. New York: McGraw-Hill Education, 13th Edition ,

73- Electronic Materials and Web Sites, etc.

Websites:

1. <http://accesspharmacy.mhmedical.com/>
- 2- www.uptodate.com
- 17- 3- <http://www.elm.jo>

CXXV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancellation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism:

	assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery
Course Plan (Syllabus) of Pharmacology
Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCVI. Course Identification and General Information:						
1	Course Title:	Pharmacology				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		3	2	--	3	
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	Physiology (2)				
6	Co-requisite:					
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				

12	Date of Approval	2020-2021
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CCVII. Course Description:

This course is designed to provide the student with the necessary basics knowledge and skills in different drugs used in dentistry, the general principles of pharmacology, including, pharmacodynamics, and pharmacokinetics, appropriate use, systemic conditions particularly in dental practice, and understand the hazards of drug-drug interaction and drug used during pregnancy and lactation. Students will develop sufficient knowledge to evaluate medication histories using the Dental Hygiene.

CCVIII. Outcomes of the Course

1. Provide knowledge and understanding of the basic principles of pharmacology (pharmacokinetics and pharmacodynamics).
2. Introduce concepts of drug action at cell, tissue and system levels.
3. Describe the pathophysiology and clinical manifestations of some related diseases in dental practice
4. Provide fundamental pharmacological knowledge of the principles of drug action in dental practice.
5. Provide comprehensive coverage of the major drug groups affecting different body system

CCIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Identify the basic knowledge of the pharmacokinetics and pharmacodynamics of drugs used in dental therapy of disease and health promotion. |
| a2- | Describe the general concepts, definitions, mechanism of the drug, the biological activity, significant drug-drug and side effect of drugs |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Recognize the pharmacokinetics and pharmacodynamics of drugs at all systems. |
| b2- | Discuss the types of classes of drugs used in dental practice |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | Use the generic and trade names of some of the most commonly prescribed drugs in clinical |
|-----|---|

	practice
--	----------

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Work effectively as a part of a team to perform the required tasks
d2-	Collaborate actively in groups to solve laboratory problems based on professional medical information available.

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to pharmacology	Pharmacokinetics(ADME), Adverse Reactions Mechanisms of Drug Action Drug Metabolism and Excretion	1	3
2	Autonomic Drugs	Adrenergic Drugs.. Antiadrenergic Drugs Cholinomimetics/cholinesterase antagonists Anticholinergics	1	3
3	Chemotherapeutic agents	Introduction to chemotherapy. Antibacterials. Sulphonamide -Antibiotics B-lactam(classic and non-classic) tetracycline macrolide aminoglycoside lincosomide fluroquinlone	4	12
4	Local Anesthetics General Anesthetics	Antifungal Agent Antiviral Agents	1	3
5	Midterm		1	3

6	Inflammation	Non-steroidal Anti-inflammatory Drugs (NSAIDs) Corticosteroids	1	3
7	Analgesics	Analgesics I - Opioids	1	3
9	Anesthetics		1	3
10	Hypnotics, Anti-anxiety Agents	- Benzodiazepines and barbiturates. Nonbenzodiazepinenonbarbiturate sedative-hypnotics	1	3
11	Cardiovascular drugs	Antihypertensive agents	1	3
12	Anti-diabetic Agents	Insulin and Anti-diabetic Agents	1	3
13	Dental Drug Interactions	- Adverse Drug Interactions in Dental Practice Examples of Common Dental Drugs Interactions	1	3
14	Final Exam		1	3
Number of Weeks /and Units per Semester			16	48

CCX. Teaching strategies of the course

- Lectures
- Presentation
- Discussion
- Self-learning
- Use of communication and information technology
- Self-learning

CCXI. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Home work
- Discussion.
- Group work

CCXII. Assignments:

No.	Assignments	Week due	Mark
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1	Assignment 1: List the different types of antibiotics drugs	10th	10
Total			

CCXIII. Schedule of Assessment Tasks for Students During the Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Assignments	10 th	10	10%
2	Quiz	6 th	10	10%
3	Midterm Exam (Theory)	8 th	20	20%
4	Final Exam (Theory)	16 th	60	60%
Total			100	100%

X. Learning Resources:	
74- Required Textbook(s) (maximum two)	
	1.Karen Whalen, 2018. Lippincott's Illustrated Reviews: Pharmacology, 7th edition. 2- Katzung& Trevor, 2019. Pharmacology: Examination & Board review. Katzung&Trevor, 12th edition
75- Essential References	
	. 1.TRIPATHI, K. D. Essentials of pharmacology for dentistry. Jaypee, 4th Edition 2020 2.Brunton, Laurence L., RandaHilal-Dandan, and Björn C. Knollmann, eds. Goodman & Gil the pharmacological basis of therapeutics. New York: McGraw-Hill Education, 13th Ed 2018
76- Electronic Materials and Web Sites, etc.	
	Websites: 1.http://accesspharmacy.mhmedical.com/ 2-www.uptodate.com 18- 3-http://www.elm.jo

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.



	No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

THE NATIONAL UNIVERSITY

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Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Pre-clinical Removable Prosthodontics (2)

Course No.()

2021/2022



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Prepared by:

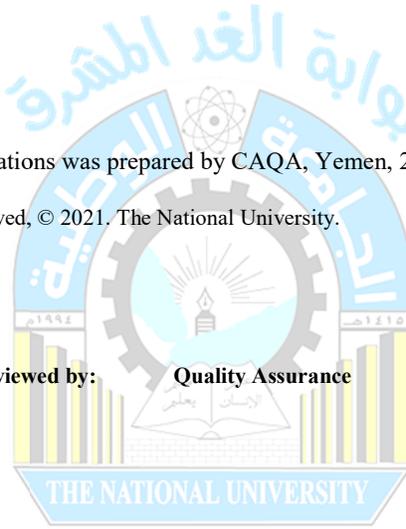
Dr.Abbas M. Al-kebsi

Reviewed by:

Dr.

Quality Assurance

Dean:



الجامعة الوطنية
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XIX. Course Identification and General Information:						
1	Course Title:	Pre-clinical Removable Prosthodontics (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	Pre-clinical Removable Prosthodontics (1)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Abbas M. Al-kebsi				
12	Date of Approval	2020-2021				

XC. Course Description:

The course is provided the undergraduate dental students. Students will be taught the followings theoretical topics: the necessary anatomical knowledge of the maxillary and mandibular edentulous arches, and different laboratory steps for complete denture construction. This course is accompanied by laboratory exercises with no clinical sessions.

XCI. Outcomes of the Course

- 1.The candidate would possess knowledge about age changes and Prosthodontic Therapy for the aged related to removable Prosthodontics.
- 2.The candidate would be able to demonstrate the clinical competence to restore lost functions of stomatognathic system namely mastication, speech, appearance and psychological comforts by removable prosthesis.

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A2	a1-	knowledge and understanding the basic principles for the theory and practical related to complete dentures.
A2-	A1	a2-	Demonstrate the anatomical land marks of upper and lower arches and their relation to complete dentures fabrication.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> · Lectures · Lab training · Discussion 	<ul style="list-style-type: none"> · Written exam · Practical sessions and exam · Coursework activities
a1-	knowledge and understanding the basic principles for the theory and practical related to complete dentures.		
a2-	Demonstrate the anatomical land marks of upper and lower arches and their relation to complete dentures fabrication.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B5	b1-	Select suitable materials that used in construction of complete denture
B2-	B4	b2-	Construct different preventive strategies to prevent further ridge loss

Teaching and Assessment Methods for Achieving Learning Outcomes

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> . Lectures . Lab training . Discussion 	<ul style="list-style-type: none"> . Written exam . Practical sessions and exam . Coursework activities
b1-	Select suitable materials that used in construction of complete denture		
b2-	Construct different preventive strategies to prevent further ridge loss		

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C5	c1-	Know and apply the different steps for complete denture construction with consideration of infection control protocols
C2-	C2	c2-	Diagnose and analyze the practical problems of the complete denture

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> . Lectures . Lab training . Discussion 	<ul style="list-style-type: none"> . Written exam . Practical sessions and exam . Coursework activities
c1-	Know and apply the different steps for complete denture construction with consideration of infection control protocols		
c2-	Diagnose and analyze the practical problems of the complete denture		

(D) General and Transferable Skills
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and

PIOs in general and transferable skills		CIOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D2	d1-	Use the latest technology for presenting and collecting data.
D2-	D6	d2-	Manage time and resources

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CIOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> . Lectures . Lab training . Discussion 	<ul style="list-style-type: none"> . Practical sessions and exam . Coursework activities . Assignments
d1-	Use the latest technology for presenting and collecting data.		
d2-	Manage time and resources		

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CIOs	Sub-topic List	No. of weeks	Contact hours
1	Review	a1, a2, b1, c1,d1,d2		1	2
2	Articulators and face bows	a1, a2, b1, c1,d1,d2	<ul style="list-style-type: none"> - Articulator: <ul style="list-style-type: none"> . Definition . Functions . Advantages . Types of articulators - Face bow: <ul style="list-style-type: none"> . Definition . Types of Face bows 	2	2

3	Jaw relation records and mounting	a1, a2, b1, c1,d1,d2	-Jaw relation: . Definitions . Vertical dimension . Centric relation . Steps of recording centric occluding relation -Mounting of casts on articulator: . Definition . Method . Common errors	1	2
4	Relief and posterior palatal seal	a1, a2, b1,b2 c1,d1,d2	- Definitions - Areas to be relieved - Functions of posterior palatal seal - Methods of Post palatal seal	1	2
5	Selections and arrangement of artificial teeth	a1, a2, b1, c1,d1,d2	- Selection of Artificial teeth (shade, shape, size and materials) - Arrangement of anterior and posterior of both arches	2	2
6	Mid-Term Theoretical Exam	a1, a2, b1, c1,d1,d2	MCQs	1	2
7	Development of occlusion	a1, a2, c1,c2, d1,d2	- Definition, - Angle's classification of occlusion - Differences between natural and artificial occlusion - Laws of Articulation and concepts of Occlusion	2	2
8	Laboratory steps for processing the complete denture	a1,a2,b1 , b2 c1 c2	- Flasking - Wax elimination - Packing, curing	2	2

		, d1,d2	- Deflasking - Finishing and Polishing		
9	Retention, stability and repair of complete denture	a1,a2,b1 , b2,c1,c2 , d1,d2	- Retention and stability . Definition . Factors affecting retention and stability - Repair, relining and rebasing of complete dentures	2	2
10	Revision	a1, a2, b1,b2,c1 , c2,d1,d2	MCQs	1	2
11	Final Exam	a1, a2, b1,b2,c1 , c2,d1,d2	MCQs	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Review	a1, a2, b1, c1, c2	1 st -2 nd	2
2	Setting up of anterior teeth	a1, a2, b1, c1, c2	3 rd	2
3	Setting up of posterior teeth (right).	a1, a2, b1, c1, c2	4 th	2
4	Setting up of posterior teeth (left)	a1, a2, b1, c1, c2	5 th	2
5	Waxing up of trial dentures Flasking Wax elimination and packing	a1, a2, b1, c1, c2	6 th - 7 th	4
6	Curing Finishing and polishing	a1, a2, b1, c1, c2	8 th - 9 th	2

7	Revision	a1, a2, b1, c1, c2	10 th - 11 th	4
8	Final practical exam	a1, a2, b1, c1, c2	12 th	2
9	Post damming (posterior palatal seal)	a1, a2, b1, c1, c2	11 th	2
10	Mounting the master cast on the articulator	a1, a2, b1, c1, c2	12 th	2
11	Review	a1, a2, b1, c1, c2	13 th	2
12	Final practical exam	a1, a2, b1, c1, c2	14 th	2
Number of Weeks / Units per Semester			12	24

VI. Teaching strategies of the course

- Lectures
- Exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CXXVI. Teaching Strategies of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Oral Exam
- Final Practical Exam
- Research
- Group work

CXXVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
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1	Practical work	3 rd - 13 th	20	a1, a2, b1, c1,c2
Total			20	

CXXVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	4 th - 12 th	10	10%	a1, a2, b1, d2
2	Mid theoretical Exam	8 th	10	10%	a1, a2, b1,c1,d1,d2
3	Final theoretical Exam	16 th	40	40%	a1, a2, b1,b2,c1, c2,d1,d2
Total			60	60%	
Assessment of Practical Part					
1	Assignment	3 rd - 13 th	20	20%	a1, a2, b1, c1,c2
2	Final-Practical Exam	14 th	20	20%	a1, a2, b1, c1,c2
Total			40	40%	

CXXIX. Learning Resources:

77- Required Textbook(s) (maximum two)	
1.	Book of the department, 2010, Removable partial dentures technology, 2nd Ed, Egypt, Cairo University press
2.	Carr AB, McGivney GP, Brown DT.2005 McCracken's Removable partial Prosthodontic. 11th EdSt. Louis, C V. Mosby
78- Essential References	
	Arthur O. Rahn, John R. Lvanhoe and Kerin D. Plummer. 2009, Text book of Complete Dentures, 6th edition
2. Electronic Materials and Web Sites, etc.	
3-	http://www.quintpub.com/journals/ijp/index.php

CXXX. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCXIV. Course Identification and General Information:

1	Course Title:	Pre-clinical Removable Prosthodontics (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	Pre-clinical Removable Prosthodontics (1)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Abbas M. Al-kebsi				
12	Date of Approval	2020-2021				

CCXV. Course Description:

The course is provided the undergraduate dental students. Students will be taught the followings theoretical topics: the necessary anatomical knowledge of the maxillary and mandibular edentulous arches, and different laboratory steps for complete denture construction. This course is accompanied by laboratory exercises with no clinical sessions.

CCXVI. Outcomes of the Course

1. The candidate would possess knowledge about age changes and Prosthodontic Therapy for the aged related to removable Prosthodontics.
2. The candidate would be able to demonstrate the clinical competence to restore lost functions of stomatognathic system namely mastication, speech, appearance and psychological comforts by removable prosthesis.

CCXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	knowledge and understanding the basic principles for the theory and practical related to complete dentures.
a2-	Demonstrate the anatomical land marks of upper and lower arches and their relation to complete dentures fabrication.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Select suitable materials that used in construction of complete denture
b2-	Construct different preventive strategies to prevent further ridge loss

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Perform the different steps for complete denture construction with consideration of infection control protocols
c2-	Diagnose and analyze the practical problems of the complete denture

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Use the latest technology for presenting and collecting data.
d2-	Manage time and resources

CCXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Review		1	2
2	Articulators and face bows	- Articulator: . Definition . Functions . Advantages . Types of articulators - Face bow: . Definition . Types of Face bows	2	2
3	Jaw relation records and mounting	-Jaw relation: . Definitions . Vertical dimension . Centric relation . Steps of recording centric occluding relation -Mounting of casts on articulator: . Definition . Method . Common errors	1	2
4	Relief and posterior palatal seal	- Definitions - Areas to be relieved - Functions of posterior palatal seal - Methods of Post palatal seal	1	2
5	Selections and arrangement of artificial teeth	- Selection of Artificial teeth (shade, shape, size and materials) - Arrangement of anterior and posterior of both arches	2	2
		MCOs	1	2

Exam			
7	Development of occlusion	- Definition, - Angle's classification of occlusion - Differences between natural and artificial occlusion - Laws of Articulation and concepts of Occlusion	2 2
8	Laboratory steps for processing the complete denture	- Flasking - Wax elimination - Packing, curing - Deflasking - Finishing and Polishing	2 2
9	Retention, stability and repair of complete denture	- Retention and stability - Definition - Factors affecting retention and stability - Repair, relining and rebasing of complete dentures	2 2
10	Revision		1 2
11	Final Exam	MCQs	1 2
Number of Weeks /and Units per Semester			16 32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Review	1 st -2 nd	2
2	Setting up of anterior teeth	3 rd	2
3	Setting up of posterior teeth (right).	4 th	2
4	Setting up of posterior teeth (left)	5 th	2
5	Waxing up of trial dentures	6 th - 7 th	4

	Flasking Wax elimination and packing		
6	Curing Finishing and polishing	8 th - 9 th	2
7	Revision	10 th - 11 th	4
8	Final practical exam	12 th	2
Number of Weeks / Units per Semester		12	24

CCXIX. Teaching strategies of the course

- Lectures
- Exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CCXX. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Oral Exam
- Final Practical Exam
- Research
- Group work

CCXXI. Assignments:

No.	Assignments	Week due	Mark
1	Practical work	3 rd - 13 th	20
Total			20

CCXXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	4 th - 12 th	10	10%
2	Mid theoretical Exam	8 th	10	10%
3	Final theoretical Exam	16 th	40	40%
Total			60	60%
Assessment of Practical Part				
1	Assignment	3 rd - 13 th	20	20%
2	Final-Practical Exam	14 th	20	20%
Total			40	40%

CCXXIII. Learning Resources:

32- Required Textbook(s) (maximum two)

1. Book of the department, 2010, Removable partial dentures technology, 2nd Ed, Egypt, Cairo University press
2. Carr AB, McGivney GP, Brown DT. 2005 McCracken's Removable partial Prosthodontic. 11th Ed. St. Louis, C V. Mosby

18- Essential References

Arthur O. Rahn, John R. Lvanhoe and Kerin D. Plummer. 2009, Text book of Complete Dentures, 6th edition

19- Electronic Materials and Web Sites, etc.

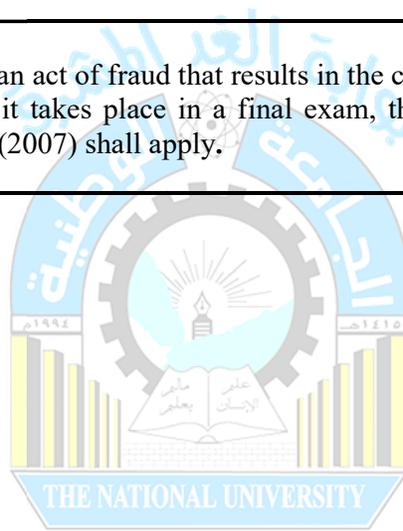
- 4- <http://www.quintpub.com/journals/ijp/index.php>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments



	or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



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NU

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Pre-clinical Endodontics 1

Course No.()

2021/2022



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Prepared by:

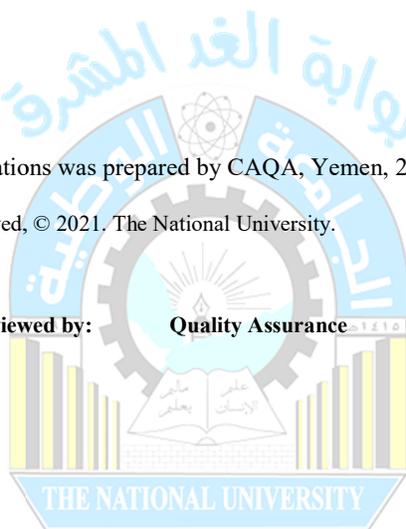
Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance ١٤١٥

Dean:



الجامعة الوطنية
NU

XCIII. Course Identification and General Information:						
1	Course Title:	Pre-clinical Endodontics 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	Pre- Clinical Operative Dentistry 1 Dental morphology 1 and 2 Dental Material 1 and 2				
6	Co –requisite:	Pre- Clinical Operative Dentistry 2 Oral Pathology I Oral Radiology I				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

XCIV. Course Description:	
<p>This course is the first pre-clinical course in endodontic provided for the third year dental students during the first semester, the course aims to provide the students with the basic theoretical and practical principles of endodontics, The scope of the course includes preparing the students to understand and recognize root canal treatment, endodontics instruments, and root canal filling material and procedures. important fundamentals are stressed with emphasis on the correlation between basic clinical and biological principles. The course will have two main components: Classroom lecture series which correlates clinical with biological principles of endodontics, Laboratory exercise to perform endodontic treatment on mounted extracted human teeth.</p>	

XCV. Outcomes of the Course	
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1. Students would be able to describe aetiology, pathophysiology, periapical diagnosis and management of common endodontic situations that will include contemporary management of trauma and pulpal pathoses including endo-periodontal situations.
2. Students would be able to master differential diagnosis and recognize conditions that may require multidisciplinary approach or a clinical situation outside the realm of the specialty, which he or she should be able to recognize and refer to appropriate specialist

XCVI. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A1	a1-	Describe the basic principles, objectives, indications and contraindications for root canal therapy and the steps of root canal preparation
	A2	a2-	Identify the internal root anatomy and different parts and composition of the pulp using radiograph
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the basic principles, objectives, indications and contraindications for root canal therapy and the steps of root canal preparation	Lectures Discussions Practical Sessions Demonstrations	Written Exam Oral Exam Quizzes
a2-	Identify the internal root anatomy and different parts and composition of the pulp using radiograph		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B5	b1-	demonstrate adequate knowledge of the dental materials and instruments used in endodontics
	B1	b2-	Interpret radiographs and predict the appropriate treatment outcome by root canal fillings.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lecture Discussion Problem-solving	Written Exam Oral Exam Quizzes
b1-	demonstrate adequate knowledge of the dental materials and instruments used in endodontics		
b2-	Interpret radiographs and predict the appropriate treatment outcome by root canal fillings.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C7	c1-	practice uncomplicated root canals preparation and obturation using hand instruments, materials and radiograph. for different tooth categories on multiple natural/artificial teeth (anterior and premolars)
	C3	c2-	Perform different mechanical technique in

			materials using different technique in obturation.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lecture Discussion Practical Sessions Demonstrations	Written Exam Oral Exam Practical Exam Assignments
c1	practice uncomplicated root canals preparation and obturation using hand instruments, materials and radiograph. for different tooth categories on multiple natural/artificial teeth (anterior and premolars)		
c1	Perform different mechanical technique in root canal cleaning and disinfected materials using different technique in obturation.		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D1	d1-	self-assess the quality of root canal performed
	D2	d2-	Analyze the latest information in endodontics for continuous education and self-development
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Discussion	Oral Exam Observation
d1-	self-assess the quality of root canal		

d2-	Analyze the latest information in endodontics for continuous education and self-development	Self-Learning	Practical Exam Assignments
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II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to endodontics	a1, d2	<ul style="list-style-type: none"> – Definition – History and overview of endodontic therapy – The objectives of endodontic treatment – Indications and contra indications for root canal therapy 	1 week	2
2	Anatomical considerations of root canal systems	a1, b1, c1, c2, d2	<ul style="list-style-type: none"> – Internal tooth anatomy: – Pulp chamber, pulp horns – Root anatomy – Number of roots – Number of canals – Apical foramen 	1 week	2
3	Histology and physiology of the pulp	a1, a2, b2, d1	<ul style="list-style-type: none"> – Pulp Development and Functions – Histology – Age changes – Pulp response to inflammation – Pulpodental physiology 	2 weeks	4
4	Endodontic instruments	a2, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> – Types. – Hand instruments – Rotary instruments 	1 week	2
5	Endodontics Access cavity preparation	a1, a2, b1, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> – Morphology of anterior, premolar and molar teeth – Basic principles to all access 	2 weeks	4

			<ul style="list-style-type: none"> - Outline form through enamel. - Removal of pulp chamber. - Location of root canal. 		
6	Mid-Term Theoretical Exam	a1, a2, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
7	Endodontic Radiography	a1, a2, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - Importance of radiographs - Vertical and horizontal angulation - Buccal object rule - Endodontic Pathosis 	1 week	2
8	Working length determination	a1, a2, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - Definition - Estimated working length - Corrected working length - Techniques: <ul style="list-style-type: none"> - - Radiograph and apex locators 	1 week	2
9	Cleaning and shaping of root canal system	a1, b1, c1, c2, d1, d2	<ul style="list-style-type: none"> - Objectives of cleaning and shaping - Techniques of shaping - Principles of cleaning by chemical materials. - Methods of cleaning and shaping (step back crown down and conventional methods). - Errors 	2 weeks	4
10	Root canal Irrigants	a1, a2, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - Mode of action - Concentration - Different Techniques 	1 week	2
11	Root Canal Filling Materials and Obturation	a1, a2, b1, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - Importance of obturation - Materiel used for R.C.filling. - Root canal sealers <ul style="list-style-type: none"> • Ideal properties • Classification • Manipulation - Obturation methods using guttapercha(lateral 	2 weeks	4

			condensation technique)		
12	Final Theoretical Exam	a1, a2, b1, b2, d1, d2	MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	- Introduction & Orientation to the course and the Laboratory guide lines	a1, d1	3 rd	3
2	distribute instruments Identify endodontic instruments for RCT	a1, b1, c1, c2, d1	4 th	3
3	- Teeth selection and - Mounting of teeth (extracted teeth) in plaster/acrylic models	a1, c1, d1	5 th	3
4	Access preparation for anterior maxillary and mandibular teeth.	a1, c1, d1, d2	6 th	3
5	Working length Determination and straight line access Endodontic Radiography	a1, b1, c1, c2, d1, d2	7 th	3
6	Cleaning and shaping of root canal system for anterior teeth (Stepback Technique)	a1, b1, c1, c2, d1, d2	8 th	3
7	Access, Working length determination and Instrumentation on 2 nd anterior tooth.	a1, b1, c1, c2, d1, d2	9 th and 10 th	6
8	Access preparation, working length determination on first premolar (2 canals)	a1, a1, b1, c1, c2, d1, d2	11 th	3
9	Instrumentation on first premolar (2 canals)	a1, b1, c1, c2, d1, d2	12 th	3
10	Obturation and temporization of anterior teeth and first premolar	a1, b1, c1, c2, d1, d2	13 th and 14 th	6
11	Final Practical Exam	a1, b1, c1, c2, d1, d2,	15 th	3
Number of Weeks / Units per Semester			13	20

VI. Teaching strategies of the course

- Lectures
- Discussions
- Demonstrations
- Brainstorming
- Practical Sessions
- Problem-solving
- Self-Learning

CXXXI. Assessment Methods of the Course:

- Written Exam
- Oral Exam
- Quizzes
- Practical Exam
- Assignments
- Observation

CXXXII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	- Practical Requirements and laboratory work during the Practical Sessions	2 nd to 14 th	10	a1, a2, b1, c1, c2, d1, d2
Total			10	

CXXXIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes 1 & 2	6 th and 12 th	10	10 %	a1, a2, b1, b2, d1, d2
2	Mid-Term Theoretical Exam	8 th	20	20 %	a1, a2, b2, c1, c2, d1, d2
3	Final Theoretical Exam	16 th	40	40 %	a1, a2, b1, b2, d1, d2

	Total		70	70%	
Assessment of Practical Part					
1	Assignments	2 nd -14 th	10	10 %	a1, a2, b1, c1, c2, d1, d2
2	Final Practical Exam	15 th	20	20 %	a1, b1, c1, c2, d1, d2,
	Total		30	30%	

CXXXIV. Learning Resources:

79- Required Textbook(s) (maximum two)

- 12- NishaGarg, Amit Garg.,2019, Textbook of Endodontics, 4th Edition, Jaypee Brothers Medical Publishers (P) Ltd, India
- 13- B. Suresh Chandra, V. Gopikrishna, 2014 : Grossman's Endodontic Practice, 13th Edition, Wolters Kluwer, India

80- Essential References

- 35- Ilan R; John I I. 2019: Ingles Endodontics, 7th Edition, Raleigh, North Carolina, PMPH USA
- 2- Torabinejad et al., 2016: Endodontics. Principles and practice, 6th Edition. China, Else

81- Electronic Materials and Web Sites, etc.

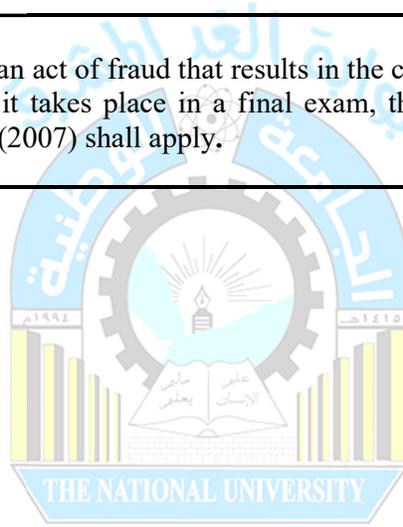
- 19- American Association of endodontists:
www.aae.org
- 20- Journal of Endodontics
<https://www.jendodon.com/>
- 21- International Endodontic Journal
- 22- <https://onlinelibrary.wiley.com/journal/13652591>

CXXXV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments



	or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
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7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



الجامعة الوطنية
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Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCXXIV. Course Identification and General Information:

1	Course Title:	Pre-clinical Endodontics 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	Pre- Clinical Operative Dentistry 1 Dental morphology 1 and 2 Dental Material 1 and 2				
6	Co-requisite:	Pre- Clinical Operative Dentistry 2 Oral Pathology I Oral Radiology I				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CCXXV. Course Description:

students during the first semester, the course aims to provide the students with the basic theoretical and practical principles of endodontics, The scope of the course includes preparing the students to understand and recognize root canal treatment, endodontics instruments, and root canal filling material and procedures. important fundamentals are stressed with emphasis on the correlation between basic clinical and biological principles. The course will have two main components: Classroom lecture series which correlates clinical with biological principles of endodontics, Laboratory exercise to perform endodontic treatment on mounted extracted human teeth.

CCXXVI. Outcomes of the Course

1. Students would be able to describe aetiology, pathophysiology, periapical diagnosis and management of common endodontic situations that will include contemporary management of trauma and pulpal pathoses including endo-periodontal situations.
2. Students would be able to master differential diagnosis and recognize conditions that may require multidisciplinary approach or a clinical situation outside the realm of the specialty, which he or she should be able to recognize and refer to appropriate specialist

CCXXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Describe the basic principles, objectives, indications and contraindications for root canal therapy and the steps of root canal preparation |
| a2- | Identify the internal root anatomy and different parts and composition of the pulp using radiograph |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | demonstrate adequate knowledge of the dental materials and instruments used in endodontics |
| b2- | Interpret radiographs and predict the appropriate treatment outcome by root canal fillings. |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | practice uncomplicated root canals preparation and obturation using hand instruments, materials and radiograph. for different tooth categories on multiple natural/artificial teeth |
|-----|---|

	(anterior and premolars)
c2-	Perform different mechanical technique in root canal cleaning and disinfected materials using different technique in obturation.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	self-assess the quality of root canal performed
d2-	Analyze the latest information in endodontics for continuous education and self-development

CCXXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to endodontics	<ul style="list-style-type: none"> – Definition – History and overview of endodontic therapy – The objectives of endodontic treatment – Indications and contra indications for root canal therapy 	1 week	2
2	Anatomical considerations of root canal systems	<ul style="list-style-type: none"> – Internal tooth anatomy: – Pulp chamber, – pulp horns – Root anatomy – Number of roots – Number of canals – Apical foramen 	1 week	2
3	Histology and physiology of the pulp	<ul style="list-style-type: none"> – Pulp Development and Functions – Histology – Age changes – Pulp response to inflammation – Pulpodental physiology 	2 weeks	4

4	Endodontic instruments	<ul style="list-style-type: none"> - Types. - Hand instruments - Rotary instruments 	1 week	2
5	Endodontics Access cavity preparation	<p>Morphology of anterior, premolar and molar teeth</p> <ul style="list-style-type: none"> - Basic principles to all access openings - Outline form through enamel. - Removal of pulp chamber. - Location of root canal. 	2 weeks	4
6	Mid-Term Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
7	Endodontic Radiography	<ul style="list-style-type: none"> - Importance of radiographs - Vertical and horizontal angulation - Buccal object rule - Endodontic Pathosis 	1 week	2
8	Working length determination	<ul style="list-style-type: none"> - Definition - Estimated working length - Corrected working length - Techniques: <ul style="list-style-type: none"> - Radiograph and apex locators 	1 week	2
9	Cleaning and shaping of root canal system	<ul style="list-style-type: none"> - Objectives of cleaning and shaping - Techniques of shaping - Principles of cleaning by chemical materials. - Methods of cleaning and shaping (step back crown down and conventional methods). - Errors 	2 weeks	4
10	Root canal Irrigants	<ul style="list-style-type: none"> - Mode of action - Concentration - Different Techniques 	1 week	2
11	Root Canal Filling Materials and Obturation	<ul style="list-style-type: none"> - Importance of obturation - Materiel used for R.C.filling. - Root canal sealers <ul style="list-style-type: none"> • Ideal properties • Classification • Manipulation 	2 weeks	4

		guttapercha(lateral condensation technique)		
12	Final Theoretical Exam	MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	- Introduction & Orientation to the course and the Laboratory guide lines	3 rd	3
2	distribute instruments Identify endodontic instruments for RCT	4 th	3
3	- Teeth selection and - Mounting of teeth (extracted teeth) in plaster/acrylic models	5 th	3
4	Access preparation for anterior maxillary and mandibular teeth.	6 th	3
5	Working length Determination and straight line access Endodontic Radiography	7 th	3
6	Cleaning and shaping of root canal system for anterior teeth (Stepback Technique)	8 th	3
7	Access, Working length determination and Instrumentation on 2 nd anterior tooth.	9 th and 10 th	6
8	Access preparation, working length determination on first premolar (2 canals)	11 th	3
9	Instrumentation on first premolar (2 canals)	12 th	3
10	Obturation and temporization of anterior teeth and first premolar	13 th and 14 th	6
11	Final Practical Exam	15 th	3
Number of Weeks / Units per Semester		13	39

- Lectures
- Discussions
- Demonstrations
- Brainstorming
- Practical Sessions
- Problem-solving
- Self-Learning

CCXXX. Assessment Methods of the Course:

- Written Exam
- Oral Exam
- Quizzes
- Practical Exam
- Assignments
- Observation

CCXXXI. Assignments:

No.	Assignments	Week due	Mark
1	- Practical Requirements and laboratory work during the Practical Sessions	2 nd to 14 th	10
Total			10

CCXXXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes 1 & 2	6 th and 12 th	10	10 %
2	Mid-Term Theoretical Exam	8 th	20	20 %
3	Final Theoretical Exam	16 th	40	40 %
Total			70	70%
Assessment of Practical Part				
1	Assignments	2 nd -14 th	10	10 %
2	Final Practical Exam	15 th	20	20 %

	Total	30	30%
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CCXXXIII. Learning Resources:	
33- Required Textbook(s) (maximum two)	
	<ol style="list-style-type: none"> 1. NishaGarg, Amit Garg, 2019, Textbook of Endodontics, 4th Edition, Jaypee Brothers Medical Publishers (P) Ltd, India 2. B. Suresh Chandra, V. Gopikrishna, 2014 : Grossman's Endodontic Practice, 13th Edition, Wolters Kluwer, India
20- Essential References	
	<ol style="list-style-type: none"> 1. Ilan R; John I I. 2019: Ingles Endodontics, 7th Edition, Raleigh, North Carolina, PMPH USA 2. Torabinejad et al., 2016: Endodontics. Principles and practice, 6th Edition. China, Elsevier.
3. Electronic Materials and Web Sites, etc.	
	23- American Association of endodontists: www.aae.org 24- Journal of Endodontics https://www.jendodon.com/ 25- International Endodontic Journal https://onlinelibrary.wiley.com/journal/13652591

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Medical Science
Department of Dentistry
Bachelor of Dental Surgery

Course Specification of Pre-clinical Fixed Prosthodontics 1

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

الجامعة الوطنية

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VIII. Course Identification and General Information:						
1	Course Title:	Pre-clinical fixed prosthodontics 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3		3	
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	Dental material 2 Dental morphology 2				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

XCIX. Course Description:	
<p>This course is provided for Third- year students during the first semester, it is an introductory course to Fixed Prosthodontics. It provides the students with the fundamentals of fixed prosthodontics including terminology, classifications, principles and instruments used in fixed prosthodontics restorations, the course comprises necessary knowledge of the biomechanical and aesthetic considerations of teeth preparation of a single extra coronal tooth preparation for porcelain fused to metal PFM restorations, Impression materials and techniques used for the respective technical purpose. This course prepares the student to implement the ability to carry out the practical and the laboratory steps needed to perform single fixed units, and modify the skills needed to prepare different single units.</p>	

C. Outcomes of the Course

- 1.The candidate would be understand the prevalence and prevention of diseases of craniomandibular system related to fixed prosthetic dentistry.
- 2.The candidate would be willing to adopt new methods and techniques in fixed prosthodontics from time to time based on scientific research, which is in patient's best interest.

CI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1		a1-	Define the terminology related to crown & bridge and classify the different dental techniques, concepts, procedures and materials for fixed prosthesis
A4		a2-	describethe basic principles for the theory and practical of cast metal fixed Prosthodontics.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lecture Demonstrations Supervision Instruction	Written Exams, Oral discussion Quizzes Practical examinations
a1-	Define the terminology related to crown & bridge and classify the different dental techniques, concepts, procedures and materials for fixed prosthesis		
a2-	describethe basic principles for the theory and practical of cast metal fixed Prosthodontics.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills	CILOs of intellectual skills
------------------------------	------------------------------

		to:
	B5	b1- Plan the laboratory technique needed for the construction for single units. And reproduce the principles of tooth preparation for different fixed restorations
	B2	b2- Differentiate correct and, or defective laboratory steps and Identify indications, contraindications, advantages, disadvantages of each tooth preparation

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Plan the laboratory technique needed for the construction for single units. And reproduce the principles of tooth preparation for different fixed restorations	Lectures Demonstrations Case presentation Practical Sessions Self-learning	Written Exam Practical Exams Oral Exams
b2-	Differentiate correct and, or defective laboratory steps and Identify indications, contraindications, advantages, disadvantages of each tooth preparation		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C1	c1-	Perform all preclinical procedures required to design/fabricate a single fixed units& prepare the teeth for final delivery
	C2	c2-	Apply and recognize the basic principles of different impression materials and techniques

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations Supervision Instruction	Direct observation Oral discussion Practical Exams Assignments (Semester work and Practical Requirements)
c1	Perform all preclinical procedures required to design/fabricate a single fixed units & prepare the teeth for final delivery		
c1	Apply and recognize the basic principles of different impression materials and techniques		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D3	d1-	Communicate properly with each other and with colleagues in a team work and display appropriate professional behavior
	D2	d2-	Illustrate E-learning, self-teaching using recent technology and present thoughts and ideas to enhance his/her own learning skills
	D4	d3-	Manage time during lab work
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Supervision Instruction	Assignments (Semester work and Practical Requirements)
d1-	Communicate properly with each other and with colleagues in a team work and display appropriate professional behavior		
d2-	Illustrate E-learning, self-teaching using recent technology and present thoughts and		

	ideas to enhance his/her own learning skills		Observation
d3-	Manage time during lab work		Continuous Assessment

II. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Fixed Prosthodontics	a1, b2, c1, d2	<ul style="list-style-type: none"> - Definition - Terminology - Restoration types - Types and Component of FPD, - Purposes and Indications of Crown Construction. 	2 weeks	4
2	Principles of Tooth Preparation	a1, a2, b1,b2, c1, c2,d2	<ul style="list-style-type: none"> - Definition of Retention and Resistance form - Factors affecting retention and resistance in FPDs - Biological, mechanical and aesthetic considerations of teeth preparation - Preservation of tooth structure <ul style="list-style-type: none"> • Structure durability • Marginal integrity, and the types of Finishing Line - Rotary instruments in prosthetic work 	2 weeks	4
3	Retention and Resistance form	a1, a2, b1,b2, c1, c2,d2	<ul style="list-style-type: none"> - Theoretical and practical attainment: - Taper - Length - Freedom and displacement - Substitution of internal features - Path of insertion 	1 week	2
				1 week	2

	tooth preparation	c1, c2, d2	<ul style="list-style-type: none"> - Indications and contraindications - Advantages and Disadvantages - Tooth preparation procedure for cast restoration. 		
5	Metal ceramic crown preparation (PFM Crowns)	a1, b1, c1, c2, d2	<ul style="list-style-type: none"> - Definition - Indications, - Contraindications - Advantages and Disadvantages of PFM Crowns - preparation steps for Metal ceramic crown 	1 week	2
6	Mid-Term Theoretical Exam	a1, a2, b1,b2,d 2	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
7	All ceramic crown tooth preparation	a1, b1, c1,d2	<ul style="list-style-type: none"> - Overview of Available all-ceramic systems - Classification of all ceramic crowns - Steps for preparing all ceramic crowns 	1 week	2
8	Partial veneer crowns Preparation	a1, b1, c1, c2, d2	<ul style="list-style-type: none"> - Partial metal crowns - Indications and contraindications - Advantages and Disadvantages - Preparation of 3/4 and 4/5 crown for posterior and anterior teeth (partial veneer crowns Preparation) - Preparation modifications: 7/8 Half-crown and reverse 3/4 crown 	2 weeks	4
9	Impression materials and techniques	a2, b2, c1, c2, d2	<ul style="list-style-type: none"> - Definitions, requirements and types of impressions - Classification of impression materials 	2 weeks	4

			<ul style="list-style-type: none"> - Various materials used for different impressions and characteristics - Different theories of impression technique - Impression evaluation - Types of impression trays, - Requirements relating the trays 		
10	Fundamentals of occlusion and Articulators	a1, a2, b1, b2, c1, c2, d2	<ul style="list-style-type: none"> - Introduction - Centric relation - Mandibular movements - Occlusal interferences - Arcon vs. non-arcon - Tooth Transverse Horizontal Axis relationship - Registration of condylar movements. 	1 week	2
11	Fabrication of Working cast and dies	a1, a2, b2, c1, c2, d2, d3	<ul style="list-style-type: none"> - Requirements for a good cast - Definition - Basic systems - Working cast with a separate & removable die - Advantages and disadvantages - Technique - Preparation of a die - Pouring materials and pouring impression 	1 week	2
12	Final Theoretical Exam	a1, a2, b1, b2, d1, d2	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Introduction to the course	a1, b1, c1, c2, d1, d2	3 rd	3

		d3		
2	Demonstration and practice laboratory preparation of lower premolar	a1, b1, c1, c2, d1, d2, d3	4 th , 5 th and 6 th	9
3	Demonstration and practice laboratory preparation of lower molar	a1, b1, c1, c2, d1, d2, d3	7 th , 8 th and 9 th	9
4	Demonstration and practice laboratory preparation of upper premolar	a1, b1, c1, c2, d1, d2, d3	10 th and 11 th	6
5	Demonstration and practice laboratory preparation of upper molar	a1, b1, c1, c2, d1, d2, d3	12 th , 13 th and 14 th	9
6	Final practical Examination	a2, b2, c1, c2, d1, d2, d3	15 th	3
Number of Weeks / Units per Semester			13	39

VI. Teaching strategies of the course

- Lectures
- Demonstrations
- Discussions
- Seminars
- Practical Sessions
- Self-Learning
- Supervision
- Instruction

CXXXVI. Assessment Methods of the Course:

- Final Written Exam
- Midterm Exam
- Oral Assessment
- Quizzes
- Practical Exam
- Semester work and Assignment
- Direct observation

CXXXVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester work: - practical work and Requirements	3 rd to 14 th	10	a2, b2, c1, c2, d1, d2, d3
Total			10	

CXXXVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	6 th and 12 th	10	10%	a1, a2, b1, b2, d2
2	Mid-Term Theoretical Exam	8 th	20	20%	a1, a2, b1, b2, d2
3	Final Theoretical Exam	16 th	40	40%	a1, a2, b1, b2, d2
Total			70	70%	
Assessment of Practical Part					
1	Assignments	3 rd to 14 th	10	10%	a2, b2, c1, c2, d1, d2, d3
2	Final Practical Exam	15 th	20	20%	a2, b2, c1, c2, d1, d2, d3
Total			30	30%	

CXXXIX. Learning Resources:

82- Required Textbook(s) (maximum two)

- 1- Shillingburg, H, T, et al, :Fundamentals of Fixed Prosthodontics, Last Edition. Quintessence.
- 2- Stephen F Rosenstiel, Martin F Land, Junhei Fujimoto, 2006: Contemporary Fixed Prosthodontics, 4th ed., Mosby Inc. ISBN

83- Essential References

- 1 -Shillingburg HT, Jacobi R, Brackett SE, Fundamental of Tooth Preparation for Cast Metal and Porcelain. 2nd edition, Quintessence ISBN 0-86715-157-9 SF
- 2 - Smith et al.: Planning and Making Crown and Bridges Last Edition..

84- Electronic Materials and Web Sites, etc.

- 36- The British Society of Prosthodontics
http://www.bsspd.org/For*patients/fixed*prosthodontics.aspx
- 37- European Prosthodontic Association (EPA)
<http://www.epadental.org/patients/fixed-prosthodontics>

CXL. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Course Plan (Syllabus) of

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCXXXIV. Course Identification and General Information:

1	Course Title:	Pre-clinical fixed prosthodontics 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	Dental material 2 Dental morphology 2				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CCXXXV. Course Description:

This course is provided for Third- year students during the first semester, it is an introductory course to Fixed Prosthodontics. It provides the students with the fundamentals of fixed prosthodontics including terminology, classifications, principles and instruments used in fixed

prosthodontics restorations, the course comprises necessary knowledge of the biomechanical and aesthetic considerations of teeth preparation of a single extra coronal tooth preparation for porcelain fused to metal PFM restorations, Impression materials and techniques used for the respective technical purpose. This course prepares the student to implement the ability to carry out the practical and the laboratory steps needed to perform single fixed units, and modify the skills needed to prepare different single units.

CCXXXVI. Outcomes of the Course

1. The candidate would be understand the prevalence and prevention of diseases of craniomandibular system related to fixed prosthetic dentistry.
2. The candidate would be willing to adopt new methods and techniques in fixed prosthodontics from time to time based on scientific research, which is in patient's best interest.

CCXXXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Define the terminology related to crown & bridge and classify the different dental techniques, concepts, procedures and materials for fixed prosthesis |
| a2- | describe the basic principles for the theory and practical of cast metal fixed Prosthodontics. |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Plan the laboratory technique needed for the construction for single units. And reproduce the principles of tooth preparation for different fixed restorations |
| b2- | Differentiate correct and, or defective laboratory steps and Identify indications, contraindications, advantages, disadvantages of each tooth preparation |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | Perform all preclinical procedures required to design/fabricate a single fixed units & prepare the teeth for final delivery |
| c2- | Apply and recognize the basic principles of different impression materials and techniques |

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| d1- | Communicate properly with each other and with colleagues in a team work and display |
|-----|---|

	appropriate professional behavior
d2-	Illustrate E-learning, self-teaching using recent technology and present thoughts and ideas to enhance his/her own learning skills
d3-	Manage time during lab work

CCXXXVIII. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Fixed Prosthodontics	<ul style="list-style-type: none"> - Definition - Terminology - Restoration types - Types and Component of FPD, - Purposes and Indications of Crown Construction. 	2 weeks	4
2	Principles of Tooth Preparation	<ul style="list-style-type: none"> - Definition of Retention and Resistance form - Factors affecting retention and resistance in FPDs - Biological, mechanical and aesthetic considerations of teeth preparation - Preservation of tooth structure <ul style="list-style-type: none"> • Structure durability • Marginal integrity, and the types of Finishing Line - Rotary instruments in prosthetic work 	2 weeks	4
3	Retention and Resistance form	<ul style="list-style-type: none"> - Theoretical and practical attainment: - Taper - Length - Freedom and displacement - Substitution of internal features - Path of insertion 	1 week	2
4	Complete cast crown tooth preparation	<ul style="list-style-type: none"> - Definition - Indications and contraindications - Advantages and Disadvantages - Tooth preparation procedure for cast 	1 week	2

		restoration.		
5	Metal ceramic crown preparation (PFM Crowns)	<ul style="list-style-type: none"> - Definition - Indications, - Contraindications - Advantages and Disadvantages of PFM Crowns - preparation steps for Metal ceramic crown 	1 week	2
6	Mid-Term Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
7	All ceramic crown tooth preparation	<ul style="list-style-type: none"> - Overview of Available all-ceramic systems - Classification of all ceramic crowns - Steps for preparing all ceramic crowns 	1 week	2
8	Partial veneer crowns Preparation	<ul style="list-style-type: none"> - Partial metal crowns - Indications and contraindications - Advantages and Disadvantages - Preparation of 3/4 and 4/5 crown for posterior and anterior teeth (partial veneer crowns Preparation) - Preparation modifications: 7/8 Half-crown and reverse 3/4 crown 	2 weeks	4
9	Impression materials and techniques	<ul style="list-style-type: none"> - Definitions, requirements and types of impressions - Classification of impression materials - Various materials used for different impressions and characteristics - Different theories of impression technique - Impression evaluation - Types of impression trays, - Requirements relating the trays 	2 weeks	4
10	Fundamentals of occlusion and Articulators	<ul style="list-style-type: none"> - Introduction - Centric relation - Mandibular movements - Occlusal interferences - Arcon vs. non-arcon - Tooth Transverse Horizontal Axis 	1 week	2

		- Registration of condylar movements.		
11	Fabrication of Working cast and dies	- Requirements for a good cast - Definition - Basic systems - Working cast with a separate & removable die - Advantages and disadvantages - Technique - Preparation of a die - Pouring materials and pouring impression	1 week	2
12	Final Theoretical Exam	- MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Introduction to the course	3 rd	3
2	Demonstration and practice laboratory preparation of lower premolar	4 th , 5 th and 6 th	9
3	Demonstration and practice laboratory preparation of lower molar	7 th , 8 th and 9 th	9
4	Demonstration and practice laboratory preparation of upper premolar	10 th and 11 th	6
5	Demonstration and practice laboratory preparation of upper molar	12 th , 13 th and 14 th	9
6	Final practical Examination	15 th	3
Number of Weeks / Units per Semester		13	39

CCXXXIX. Teaching strategies of the course
- Lectures
- Demonstrations
- Discussions
- Seminars

- Practical Sessions
- Self-Learning
- Supervision
- Instruction

CCXL. Assessment Methods of the Course:

- Final Written Exam
- Midterm Exam
- Oral Assessment
- Quizzes
- Practical Exam
- Semester work and Assignment
- Direct observation

CCXLI. Assignments:

No.	Assignments	Week due	Mark
1	Semester work: - practical work and Requirements	3 rd to 14 th	10
Total			10

CCXLII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	6 th and 12 th	10	10%
2	Mid-Term Theoretical Exam	8 th	20	20%
3	Final Theoretical Exam	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Assignments	3 rd to 14 th	10	10%
2	Final Practical Exam	15 th	20	20%
Total			30	30%

CCXLIII. Learning Resources:

34- Required Textbook(s) (maximum two)

- 1- Shillingburg,H,T,etal, :Fundamentals of Fixed Prosthodontics, Last Edition. Quintessence.
- 2- Stephen F Rosenstiel, Martin F Land, Junhei Fujimoto, 2006: Contemporary Fixed Prosthodontics, 4th ed., Mosby Inc. ISBN

21- Essential References

- 1 -Shillingburg HT, Jacobi R, Brackett SE, Fundamental of Tooth Preparation for Cast Metal and Porcelain. 2nd edition, Quintessence ISBN 0-86715-157-9 SF
- 2 - Smith et al.: Planning and Making Crown and Bridges Last Edition..

22- Electronic Materials and Web Sites, etc.

- 1- The British Society of Prosthodontics
http://www.bsspd.org/For*patients/fixed*prosthodontics.aspx
- 2- European Prosthodontic Association (EPA)
<http://www.epadental.org/patients/fixed-prosthodontics>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam,

	Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Specification of Pre-clinical Operative dentistry (2)

Course No.()

Course Identification and General Information:					
1	Course Title: This template of course specifications was prepared by CAQA,	Pre-clinical Operative dentistry (2)			
2	Course Number & Code:	All Rights Reserved, © 2021. The National University.			
3	Credit hours:	Prepared by: Reviewed by: Quality Assu	C.H		Total
			Th.	Pr.	
			2	3	3
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester			
5	Prerequisites:	Introduction to Operative Dentistry Dental material II Dental morphology II			
6	Co -requisite:	None			
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).			
8	Language of teaching the course:	English			
9	Study System:	Semester based System			
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry			
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami			
12	Date of Approval	2020-2021			

2021/2022

CIV. Course Description:

This course is provided for third- year students. the lecture course in operative dentistry 1 is designed to provide students with basic knowledge about cavity preparation and restorative techniques for composite, amalgam, and other direct restorative materials. This course, together with a complementary laboratory course, is directed to prepare the student with knowledge and skills in the diagnosis and treatment of carious lesions, design cavities, manipulate and place light-cured composite restorative resin and amalgam restorative material, apply liners and bases, finish and polish amalgam & composite restorations on artificial teeth.

CV. Outcomes of the Course

1. Student would adopt ethical principles in all aspects of restorative and contemporary Endodontics including non-surgical and surgical Endodontics
2. Students would be able to demonstrate communication skills in particular to explain various options available management and to obtain a true informed consent from the patient

CVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A4		a1-	Identify the cavity preparation and restoration for amalgam and resin composite materials
A5		a2-	Describe the classification, diagnosis, clinical features and sequelae of dental caries.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Practical Sessions Demonstrations	Written Exams, Practical Lab exam Oral discussion
a1-	Identify the cavity preparation and restoration for amalgam and resin composite materials		



a2-	Describe the classification, diagnosis, clinical features and sequelae of dental caries.		Quizzes
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(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B5	b1-	Distinguish between the uses of different dental materials in different clinical situations.
	B1	b2-	Distinguish dental caries and compare between acute and chronic decay.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Demonstrations	Written Exams, Practical Exams Oral discussion Quizzes
b1-	Distinguish between the uses of different dental materials in different clinical situations.		
b2-	Distinguish dental caries and compare between acute and chronic decay.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C7	c1-	Practice different cavity designs for amalgam and composite filling materials with proper finishing and polishing of restorations on artificial teeth

	C4	c2-	Apply cement, base materials in different cavities.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Practical Sessions Demonstrations	Direct observation Oral discussion Practical Exams Semester work
c1	Practice different cavity designs for amalgam and composite filling materials with proper finishing and polishing of restorations on artificial teeth		
c1	Apply cement, base materials in different cavities.		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D3	d1-	Communicate with dental assistants and colleagues easily
	D2, D4	d2-	Utilizes modern sources getting information for self-learning and self-evaluation.
		d3-	Manage time during lab work.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Demonstrations Practical Sessions	Semester work Group
d1-	Communicate with dental assistants and ..		

d2-	Utilizes modern sources getting information for self-learning and self-evaluation.		Discussions
d3-	Manage time during lab work.		

II. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Amalgam cavity preparations for Class II	a3, b1, c1, d3	<ul style="list-style-type: none"> - Sequence of class II preparations - General considerations - Types of class II cavity preparation - The extended class II amalgam 	1 week	2
2	Dental cements materials	a2, b2, c2,	<ul style="list-style-type: none"> - Intermediary base materials - Cavity liners, - Cement, bases - Varnishes - advantages and disadvantages, - Uses and manipulation 	1 week	2
3	Dental Amalgam restorations for class II	a2, b2, c3, d3	<ul style="list-style-type: none"> - General characteristics - Manipulations technique - Matrix band and retainer. - Condensation of the amalgam restoration. - Carving and carving instruments. - Finishing and Polishing 	2 weeks	4
4	Dental Caries	a1, b1	<ul style="list-style-type: none"> - Classification - Sites and Progression of Caries - Diagnosis - Prevention and control 	3 weeks	6
5	Midterm Examination	a1 a2	- MCOs and essay questions	1	2

		a3, b2, d2		weeks	
6	Composite Resin Materials	a2,a3, b2,	<ul style="list-style-type: none"> - History, Composition - Classification - Indication, Contraindication, - Advantages, Disadvantages 	1 weeks	2
7	Acid-etch technique & bonding agents	a2,a3, b2,	<ul style="list-style-type: none"> - Etching, - Bonding, - Bonding to enamel and dentin for the anterior restoration 	2 weeks	2
8	Principles of Tooth preparation for Composite Restoration	a3, b2, c1,	<ul style="list-style-type: none"> - Class III, IV and V - Definition - Tooth preparation - different designs 	2 weeks	4
9	Composite Cavity Restoration	a2, b2,c3,d 3	<ul style="list-style-type: none"> - Manipulation of composite resin and insertion into the cavity - class III, IV, V restorations - Restorative Procedures 	1 week	4
10	Finishing and Polishing of Restorations	a2, b2. c3,d3	<ul style="list-style-type: none"> - Objectives - Instrumentation - Techniques 	1 week	2
11	Final Theoretical Exam	a1, a2. a3, b2, d2	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Introduction to the Course, - Distribution of Instruments - Mounting of Plastic Teeth 	b1, b2, c1, d3	1 st	3

	- Review and Practice: Class I Occlusal and Buccal Pit Amalgam Cavity Preparation			
2	Demonstration and Practice: Class II Amalgam Cavity Preparation on lower and upper molars	b1, c1, d3	2 ^{ed} 3 rd	6
3	Demonstration and Practice: Class II Amalgam Cavity Preparation on lower and upper premolars	b1, c1, d3	4 th 5 th	6
4	Demonstration and Practice: liner and base, Matrix Formation and Placement & Amalgam Restorations	b2, c1, c2, c3, d3	6 th	3
5	Practice: Matrix Placement and Amalgam Restorations on all Class II cavities	b2, c1, c2, c3, d3	7 th	3
6	Demonstration and Practice: Class II (MO-OL) Amalgam Preparation and restoration	b1, c1, d3	8 th	3
7	Demonstration and Practice: Finishing and Polishing of various Amalgam Restorations - Class I and Class II	b2, c1, c2, c3, d3	9 th	3
8	Demonstration and Practice: Cavity Preparation and restorations for Composite Resin on upper and lower centrals and laterals, Class III Lingual Approach,	b2, c1, c2, c3, d3	10 th 11 th	6
9	Demonstration and Practice: Cavity Preparations and restorations for Composite Resin on upper anterior teeth, Class IV (Traumatic)	b2, c1, c2, c3, d3	12 th	3
10	Demonstration and Practice: Preparation and restorations for Composite Resin on anterior and posterior teeth, Class V Facial Cavities	b2, c1, c2, c3, d3	13 th	3
11	Demonstration and Practice: Finishing and Polishing of Composite Resin Restorations	b2, c2, c3, d3	14 th	3
12	Final Practical Exam	b1, b2, c1, c2, c3, d3	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- Demonstrations
- Practical Sessions
- Self-Learning

CXLI. Assessment Methods of the Course:

- Written Exam
- Quizzes
- Practical Exam
- Semester work (practical Requirements)
- Oral discussion
- Direct observation
-

CXLII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester work: - practical laboratorywork and Requirements	Week 2 to week 14	10	b1, b2, c1, c2, c3, d3
Total			10	

CXLIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	Week 6	10	10 %	a1, a2, a3, b1, b2
2	Midterm theory exam	Week 8	20	20 %	a1, a2. a3, b2, d2
3	FinalTheoreticalExam.	Week 16	40	40 %	a1, a2. a3, b2, d2
Total			70	70%	
Assessment of Practical Part					
1	Assignments	Week	10	10%	b1, b2, c1, c2, c3, d3

		2 to week 14			
2	Final Practical Exam.	Week 15	20	20 %	b1, b2, c1, c2, c3, d3
Total			30	30%	

CXLIV. Learning Resources:

85- Required Textbook(s) (maximum two)

14- Theodore M. Roberson, Harald Heymann, Edward J. Swift, 2012, Sturdevant's Art and Science of Operative Dentistry, 6th Edition, Mosby.

2- James B. Summitt, J. William Robbins, Richard S. Schwartz, 2006: Fundamentals of operative dentistry: a contemporary approach. 3rd edition, Quintessence.

86- Essential References

1- Avijit Banerjee, Timothy F. Watson, 2011, Pickard's Manual of Operative Dentistry, 9th edition, Oxford, England

2- Nisha Garg, 2015: Textbook of Operative Dentistry, 3rd Edition, JP Medical Ltd, India..

87- Electronic Materials and Web Sites, etc.

1- Journal of dentistry
<https://www.journals.elsevier.com/journal-of-dentistry>

2- Operative Dentistry Journal

<https://jopdent.com/>

3- Ebscohost, journal of operative dentistry

<https://www.ebscohost.com/titleLists/ddh-coverage.htm>

4- Dental Materials Journal

<https://www.researchgate.net>

CXLV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.

4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Plan (Syllabus) of Pre-clinical Operative dentistry (2)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCXLIV. Course Identification and General Information:						
1	Course Title:	Pre-clinical Operative dentistry (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3

4	Study level/ semester at which this course is offered:	3 rd Level / 1 nd Semester
5	Prerequisites:	Introduction to Operative Dentistry Dental material II Dental morphology II
6	Co –requisite:	None
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami
12	Date of Approval	2020-2021

CCXLV. Course Description:

This course is provided for third- year students. the lecture course in operative dentistry 1 is designed to provide students with basic knowledge about cavity preparation and restorative techniques for composite, amalgam, and other direct restorative materials. This course, together with a complementary laboratory course, is directed to prepare the student with knowledge and skills in the diagnosis and treatment of carious lesions, design cavities, manipulate and place light-cured composite restorative resin and amalgam restorative material, apply liners and bases, finish and polish amalgam & composite restorations on artificial teeth.

CCXLVI. Outcomes of the Course

1. Student would adopt ethical principles in all aspects of restorative and contemporary Endodontics including non-surgical and surgical Endodontics
2. Students would be able to demonstrate communication skills in particular to explain various options available management and to obtain a true informed consent from the patient

CCXLVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Identify the cavity preparation and restoration for amalgam and resin composite materials |
| a2- | Describe the classification, diagnosis, clinical features and sequelae of dental caries. |

(B) Intellectual Skills

After participating in the course, students would be able to:	
b1-	Distinguish between the uses of different dental materials in different clinical situations.
b2-	Distinguish dental caries and compare between acute and chronic decay.

(C) Professional and Practical Skills

After participating in the course, students would be able to:	
c1-	Practice different cavity designs for amalgam and composite filling materials with proper finishing and polishing of restorations on artificial teeth
c2-	Apply cement, base materials in different cavities.

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1-	Communicate with dental assistants and colleagues easily
d2-	Utilizes modern sources getting information for self-learning and self-evaluation.
d3-	Manage time during lab work.

CCXLVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Amalgam cavity preparations for Class II	<ul style="list-style-type: none"> - Sequence of class II preparations - General considerations - Types of class II cavity preparation - The extended class II amalgam 	1 week	2
2	Dental cements materials	<ul style="list-style-type: none"> - Intermediary base materials - Cavity liners, - Cement, bases - Varnishes - advantages and disadvantages, - Uses and manipulation 	1 week	2
3	Dental Amalgam restorations for class II	<ul style="list-style-type: none"> - General characteristics - Manipulations technique - Matrix band and retainer. 	2 weeks	4

		<ul style="list-style-type: none"> - Condensation of the amalgam restoration. - Carving and carving instruments. - Finishing and Polishing 		
4	Dental Caries	<ul style="list-style-type: none"> - Classification - Sites and Progression of Caries - Diagnosis - Prevention and control 	3 week s	6
5	Midterm Examination	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week s	2
6	Composite Resin Materials	<ul style="list-style-type: none"> - History, Composition - Classification - Indication, Contraindication, - Advantages, Disadvantages 	1 week s	2
7	Acid-etch technique & bonding agents	<ul style="list-style-type: none"> - Etching, - Bonding, - Bonding to enamel and dentin for the anterior restoration 	2 week s	2
8	Principles of Tooth preparation for Composite Restoration	<ul style="list-style-type: none"> - Class III, IV and V - Definition - Tooth preparation - different designs 	2 week s	4
9	Composite Cavity Restoration	<ul style="list-style-type: none"> - Manipulation of composite resin and insertion into the cavity - class III, IV, V restorations - Restorative Procedures 	1 week	4
10	Finishing and Polishing of Restorations	<ul style="list-style-type: none"> - Objectives - Instrumentation - Techniques 	1 week	2
11	Final Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	- Introduction to the Course, - Distribution of Instruments - Mounting of Plastic Teeth - Review and Practice: Class I Occlusal and Buccal Pit Amalgam Cavity Preparation	1 st	3
2	Demonstration and Practice: Class II Amalgam Cavity Preparation on lower and upper molars	2 ^{ed} 3 rd	6
3	Demonstration and Practice: Class II Amalgam Cavity Preparation on lower and upper premolars	4 th 5 th	6
4	Demonstration and Practice: liner and base, Matrix Formation and Placement & Amalgam Restorations	6 th	3
5	Practice: Matrix Placement and Amalgam Restorations on all Class II cavities	7 th	3
6	Demonstration and Practice: Class II (MO-OL) Amalgam Preparation and restoration	8 th	3
7	Demonstration and Practice: Finishing and Polishing of various Amalgam Restorations - Class I and Class II	9 th	3
8	Demonstration and Practice: Cavity Preparation and restorations for Composite Resin on upper and lower centrals and laterals, Class III Lingual Approach,	10 th 11 th	6
9	Demonstration and Practice: Cavity Preparations and restorations for Composite Resin on upper anterior teeth, Class IV (Traumatic)	12 th	3
10	Demonstration and Practice: Preparation and restorations for Composite Resin on anterior and posterior teeth, Class V Facial Cavities	13 th	3
11	Demonstration and Practice: Finishing and Polishing of Composite Resin Restorations	14 th	3

12	Final Practical Exam	15 th	3
Number of Weeks / Units per Semester		15	45

CCXLIX. Teaching strategies of the course
<ul style="list-style-type: none"> - Lectures - Demonstrations - Practical Sessions - Self-Learning
CCL. Assessment Methods of the Course:
<ul style="list-style-type: none"> - Written Exam - Quizzes - Practical Exam - Semester work (practical Requirements) - Oral discussion - Direct observation -

CCLI. Assignments:			
No.	Assignments	Week due	Mark
1	Semester work: - practical laboratory work and Requirements	Week 2 to week 14	10
Total			10

CCLII. Schedule of Assessment Tasks for Students During the Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	Week 6	10	10 %
2	Midterm theory exam	Week 8	20	20 %
3	Final Theoretical Exam.	Week 16	40	40 %
Total			70	70%
Assessment of Practical Part				
1	Assignments	Week 2 to 14	10	10%

2	Final Practical Exam.	Week 15	20	20 %
Total			30	30%

CCLIII. Learning Resources:

35- Required Textbook(s) (maximum two)

- 1- Theodore M. Roberson, Harald Heymann, Edward J. Swift, 2012, Sturdevant's Art and Science of Operative Dentistry, 6th Edition, Mosby.
- 2- James B. Summitt, J. William Robbins, Richard S. Schwartz, 2006: Fundamentals of operative dentistry: a contemporary approach. 3rd edition, Quintessence.

23- Essential References

- 1- Avijit Banerjee, Timothy F. Watson, 2011, Pickard's Manual of Operative Dentistry, 9th edition, Oxford, England
- 2- Nisha Garg, 2015: Textbook of Operative Dentistry, 3rd Edition, JP Medical Ltd, India..

24- Electronic Materials and Web Sites, etc.

- 1- Journal of dentistry
<https://www.journals.elsevier.com/journal-of-dentistry>
- 2- Operative Dentistry Journal
<https://jopdent.com/>
- 3- Ebscohost, journal of operative dentistry
<https://www.ebscohost.com/titleLists/ddh-coverage.htm>
- 4- Dental Materials Journal
<https://www.researchgate.net>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments

	or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Specification of Pre-clinical Endodontics 1

Course No.()

2021/2022



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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

VIII. Course Identification and General Information:						
1	Course Title:	Pre-clinical Endodontics 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester				
5	Prerequisites:	Pre- Clinical Operative Dentistry 1 Dental morphology 1 and 2 Dental Material 1 and 2				
6	Co –requisite:	Pre- Clinical Operative Dentistry 2 Oral Pathology I Oral Radiology I				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CIX. Course Description:

This course is the first pre-clinical course in endodontic provided for the third year dental students during the first semester, the course aims to provide the students with the basic theoretical and practical principles of endodontics, The scope of the course includes preparing the students to understand and recognize root canal treatment, endodontics instruments, and root canal filling material and procedures. important fundamentals are stressed with emphasis on the correlation between basic clinical and biological principles. The course will have two main components: Classroom lecture series which correlates clinical with biological principles of endodontics, Laboratory exercise to perform endodontic treatment on mounted extracted human teeth.

CX. Outcomes of the Course

1. Students would be able to describe aetiology, pathophysiology, periapical diagnosis and management of common endodontic situations that will include contemporary management of trauma and pulpal pathoses including endo-periodontal situations.
2. Students would be able to master differential diagnosis and recognize conditions that may require multidisciplinary approach or a clinical situation outside the realm of the specialty, which he or she should be able to recognize and refer to appropriate specialist

CXI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1		a1-	Describe the basic principles, objectives, indications and contraindications for root canal therapy and the steps of root canal preparation
A2		a2-	Identify the internal root anatomy and different parts and composition of the pulp using radiograph

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the basic principles, objectives, indications and contraindications for root canal therapy and the steps of root canal preparation	Lectures Discussions Practical Sessions Demonstrations	Written Exam Oral Exam Quizzes
a2-	Identify the internal root anatomy and different parts and composition of the pulp using radiograph		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B5	b1-	demonstrate adequate knowledge of the dental materials and instruments used in endodontics
	B1	b2-	Interpret radiographs and predict the appropriate treatment outcome by root canal fillings.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lecture Discussion Problem-solving	Written Exam Oral Exam Quizzes
b1-	demonstrate adequate knowledge of the dental materials and instruments used in endodontics		
b2-	Interpret radiographs and predict the appropriate treatment outcome by root canal fillings.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C7	c1-	practice uncomplicated root canals preparation and obturation using hand instruments, materials and radiograph. for different tooth categories on multiple natural/artificial teeth (anterior and premolars)
	C3	c2-	Perform different mechanical technique in

			root canal cleaning and disinfected materials using different technique in obturation.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		 Lecture Discussion Practical Sessions Demonstrations	 Written Exam Oral Exam Practical Exam Assignments
c1	practice uncomplicated root canals preparation and obturation using hand instruments, materials and radiograph. for different tooth categories on multiple natural/artificial teeth (anterior and premolars)		
c1	Perform different mechanical technique in root canal cleaning and disinfected materials using different technique in obturation.		



(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D1	d1-	self-assess the quality of root canal performed
	D2	d2-	Analyze the latest information in endodontics for continuous education and self-development
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions	Oral Exam

	performed	Discussion Self-Learning	Observation Practical Exam Assignments
d2-	Analyze the latest information in endodontics for continuous education and self-development		

II. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to endodontics	a1, d2	<ul style="list-style-type: none"> – Definition – History and overview of endodontic therapy – The objectives of endodontic treatment – Indications and contra indications for root canal therapy 	1 week	2
2	Anatomical considerations of root canal systems	a1, b1, c1, c2, d2	<ul style="list-style-type: none"> – Internal tooth anatomy: – Pulp chamber, – pulp horns – Root anatomy – Number of roots – Number of canals – Apical foramen 	1 week	2
3	Histology and physiology of the pulp	a1, a2, b2, d1	<ul style="list-style-type: none"> – Pulp Development and Functions – Histology – Age changes – Pulp response to inflammation – Pulpodental physiology 	2 weeks	4
4	Endodontic instruments	a2, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> – Types. – Hand instruments – Rotary instruments 	1 week	2
5	Endodontics Access cavity preparation	a1, a2, b1, b2,	Morphology of anterior, premolar and molar teeth	2 weeks	4

		c1, c2, d1, d2	<ul style="list-style-type: none"> - Basic principles to all access openings - Outline form through enamel. - Removal of pulp chamber. - Location of root canal. 		
6	Mid-Term Theoretical Exam	a1, a2, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
7	Endodontic Radiography	a1, a2, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - Importance of radiographs - Vertical and horizontal angulation - Buccal object rule - Endodontic Pathosis 	1 week	2
8	Working length determination	a1, a2, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - Definition - Estimated working length - Corrected working length - Techniques: <ul style="list-style-type: none"> - - Radiograph and apex locators 	1 week	2
9	Cleaning and shaping of root canal system	a1, b1, c1, c2, d1, d2	<ul style="list-style-type: none"> - Objectives of cleaning and shaping - Techniques of shaping - Principles of cleaning by chemical materials. - Methods of cleaning and shaping (step back crown down and conventional methods). - Errors 	2 weeks	4
10	Root canal Irrigants	a1, a2, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - Mode of action - Concentration - Different Techniques 	1 week	2
11	Root Canal Filling Materials and Obturation	a1, a2, b1, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - Importance of obturation - Materiel used for R.C.filling. - Root canal sealers <ul style="list-style-type: none"> • Ideal properties • Classification • Manipulation 	2 weeks	4

			- Obturation methods using guttapercha (lateral condensation technique)		
12	Final Theoretical Exam	a1, a2, b1, b2, d1, d2	MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	- Introduction & Orientation to the course and the Laboratory guide lines	a1, d1	3 rd	3
2	distribute instruments Identify endodontic instruments for RCT	a1, b1, c1, c2, d1	4 th	3
3	- Teeth selection and - Mounting of teeth (extracted teeth) in plaster/acrylic models	a1, c1, d1	5 th	3
4	Access preparation for anterior maxillary and mandibular teeth.	a1, c1, d1, d2	6 th	3
5	Working length Determination and straight line access Endodontic Radiography	a1, b1, c1, c2, d1, d2	7 th	3
6	Cleaning and shaping of root canal system for anterior teeth (Stepback Technique)	a1, b1, c1, c2, d1, d2	8 th	3
7	Access, Working length determination and Instrumentation on 2 nd anterior tooth.	a1, b1, c1, c2, d1, d2	9 th and 10 th	6
8	Access preparation, working length determination on first premolar (2 canals)	a1, a1, b1, c1, c2, d1, d2	11 th	3
9	Instrumentation on first premolar (2 canals)	a1, b1, c1, c2, d1, d2	12 th	3
10	Obturation and temporization of anterior teeth and first premolar	a1, b1, c1, c2, d1, d2	13 th and 14 th	6
11	Final Practical Exam	a1. b1. c1.	15 th	3

		c2, d1, d2,		
Number of Weeks / Units per Semester			13	39

VI. Teaching strategies of the course

- Lectures
- Discussions
- Demonstrations
- Brainstorming
- Practical Sessions
- Problem-solving
- Self-Learning

CXLVI. Assessment Methods of the Course:

- Written Exam
- Oral Exam
- Quizzes
- Practical Exam
- Assignments
- Observation

CXLVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	- Practical Requirements and laboratory work during the Practical Sessions	2 nd to 14 th	10	a1, a2, b1, c1, c2, d1, d2
Total			10	

CXLVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes 1 & 2	6 th and 12 th	10	10 %	a1, a2, b1, b2, d1, d2
2	Mid-Term Theoretical Exam	8 th	20	20 %	a1, a2, b2,

					c1, c2, d1, d2
3	Final Theoretical Exam	16 th	40	40 %	a1, a2, b1, b2, d1, d2
	Total		70	70%	
Assessment of Practical Part					
1	Assignments	2 nd -14 th	10	10 %	a1, a2, b1, c1, c2, d1, d2
2	Final Practical Exam	15 th	20	20 %	a1, b1, c1, c2, d1, d2,
	Total		30	30%	

CXLIX. Learning Resources:

88- Required Textbook(s) (maximum two)

- 15- NishaGarg, Amit Garg.,2019, Textbook of Endodontics, 4th Edition, Jaypee Brothers Medical Publishers (P) Ltd, India
16- B. Suresh Chandra, V. Gopikrishna, 2014 : Grossman's Endodontic Practice, 13th Edition, Wolters Kluwer, India

89- Essential References

- 38- Ilan R; John I I. 2019: Ingles Endodontics, 7th Edition, Raleigh, North Carolina, PMPH USA
2- Torabinejad et al., 2016: Endodontics. Principles and practice, 6th Edition. China, Else

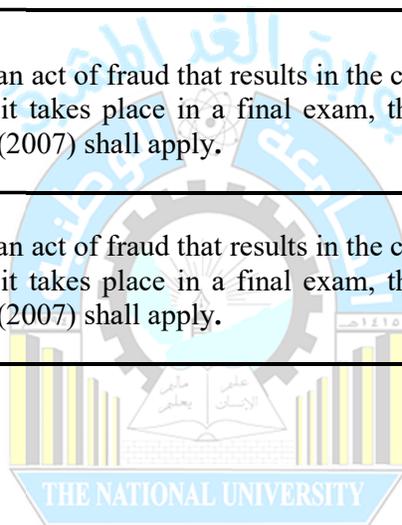
90- Electronic Materials and Web Sites, etc.

- 23- American Association of endodontists:
www.aae.org
24- Journal of Endodontics
<https://www.jendodon.com/>
25- International Endodontic Journal
26- <https://onlinelibrary.wiley.com/journal/13652591>

CL. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality:

	No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



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Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

CCLIV. Course Identification and General Information:					
1	Course Title:	Pre-clinical Endodontics 1			
2	Course Number & Code:				
3	Credit hours:	C.H			Total
		Th.	Pr.	Tr.	
		2	3		3
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester			
5	Prerequisites:	Pre- Clinical Operative Dentistry 1 Dental morphology 1 and 2 Dental Material 1 and 2			
6	Co –requisite:	Pre- Clinical Operative Dentistry 2 Oral Pathology I Oral Radiology I			
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)			
8	Language of teaching the course:	English			
9	Study System:	Semester based System			
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry			
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami			
12	Date of Approval	2020-2021			

CCLV. Course Description:	
<p>This course is the first pre-clinical course in endodontic provided for the third year dental students during the first semester, the course aims to provide the students with the basic theoretical and practical principles of endodontics, The scope of the course includes preparing the students to understand and recognize root canal treatment, endodontics instruments, and root canal filling material and procedures. important fundamentals are stressed with emphasis on the correlation between basic clinical and biological principles. The course will have two main components: Classroom lecture series which correlates clinical with biological principles of endodontics, Laboratory exercise to perform endodontic treatment on mounted extracted human teeth.</p>	

CCLVI. Outcomes of the Course

1. Students would be able to describe aetiology, pathophysiology, periapical diagnosis and management of common endodontic situations that will include contemporary management of trauma and pulpal pathoses including endo-periodontal situations.
2. Students would be able to master differential diagnosis and recognize conditions that may require multidisciplinary approach or a clinical situation outside the realm of the specialty, which he or she should be able to recognize and refer to appropriate specialist

CCLVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Describe the basic principles, objectives, indications and contraindications for root canal therapy and the steps of root canal preparation |
| a2- | Identify the internal root anatomy and different parts and composition of the pulp using radiograph |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | demonstrate adequate knowledge of the dental materials and instruments used in endodontics |
| b2- | Interpret radiographs and predict the appropriate treatment outcome by root canal fillings. |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| c1- | practice uncomplicated root canals preparation and obturation using hand instruments, materials and radiograph. for different tooth categories on multiple natural/artificial teeth (anterior and premolars) |
| c2- | Perform different mechanical technique in root canal cleaning and disinfected materials using different technique in obturation. |

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| d1- | self-assess the quality of root canal performed |
|-----|---|

d2-	Analyze the latest information in endodontics for continuous education and self-development
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CCLVIII. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to endodontics	<ul style="list-style-type: none"> – Definition – History and overview of endodontic therapy – The objectives of endodontic treatment – Indications and contra indications for root canal therapy 	1 week	2
2	Anatomical considerations of root canal systems	<ul style="list-style-type: none"> – Internal tooth anatomy: <ul style="list-style-type: none"> – Pulp chamber, pulp horns – Root anatomy <ul style="list-style-type: none"> – Number of roots – Number of canals – Apical foramen 	1 week	2
3	Histology and physiology of the pulp	<ul style="list-style-type: none"> – Pulp Development and Functions – Histology – Age changes – Pulp response to inflammation – Pulpodental physiology 	2 weeks	4
4	Endodontic instruments	<ul style="list-style-type: none"> – Types. – Hand instruments – Rotary instruments 	1 week	2
5	Endodontics Access cavity preparation	<ul style="list-style-type: none"> – Morphology of anterior, premolar and molar teeth – Basic principles to all access openings – Outline form through enamel. – Removal of pulp chamber. – Location of root canal. 	2 weeks	4

6	Mid-Term Theoretical Exam	– MCQs and essay questions	1 week	2
7	Endodontic Radiography	– Importance of radiographs – Vertical and horizontal angulation – Buccal object rule – Endodontic Pathosis	1 week	2
8	Working length determination	– Definition – Estimated working length – Corrected working length – Techniques: – - Radiograph and apex locators	1 week	2
9	Cleaning and shaping of root canal system	– Objectives of cleaning and shaping – Techniques of shaping – Principles of cleaning by chemical materials. – Methods of cleaning and shaping (step back crown down and conventional methods). – Errors	2 weeks	4
10	Root canal Irrigants	– Mode of action – Concentration – Different Techniques	1 week	2
11	Root Canal Filling Materials and Obturation	– Importance of obturation – Material used for R.C.filling. – Root canal sealers • Ideal properties • Classification • Manipulation – Obturation methods using guttapercha (lateral condensation technique)	2 weeks	4
12	Final Theoretical Exam	MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	- Introduction & Orientation to the course and the Laboratory guide lines	3 rd	3
2	distribute instruments Identify endodontic instruments for RCT	4 th	3
3	- Teeth selection and - Mounting of teeth (extracted teeth) in plaster/acrylic models	5 th	3
4	Access preparation for anterior maxillary and mandibular teeth.	6 th	3
5	Working length Determination and straight line access Endodontic Radiography	7 th	3
6	Cleaning and shaping of root canal system for anterior teeth (Stepback Technique)	8 th	3
7	Access, Working length determination and Instrumentation on 2 nd anterior tooth.	9 th and 10 th	6
8	Access preparation, working length determination on first premolar (2 canals)	11 th	3
9	Instrumentation on first premolar (2 canals)	12 th	3
10	Obturation and temporization of anterior teeth and first premolar	13 th and 14 th	6
11	Final Practical Exam	15 th	3
Number of Weeks / Units per Semester		13	39

CCLIX. Teaching strategies of the course

- Lectures
- Discussions
- Demonstrations
- Brainstorming
- Practical Sessions
- Problem-solving

- Self-Learning

CCLX. Assessment Methods of the Course:

- Written Exam
- Oral Exam
- Quizzes
- Practical Exam
- Assignments
- Observation

CCLXI. Assignments:

No.	Assignments	Week due	Mark
1	- Practical Requirements and laboratory work during the Practical Sessions	2 nd to 14 th	10
Total			10

CCLXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes 1 & 2	6 th and 12 th	10	10 %
2	Mid-Term Theoretical Exam	8 th	20	20 %
3	Final Theoretical Exam	16 th	40	40 %
Total			70	70%
Assessment of Practical Part				
1	Assignments	2 nd -14 th	10	10 %
2	Final Practical Exam	15 th	20	20 %
Total			30	30%

CCLXIII. Learning Resources:

36- Required Textbook(s) (maximum two)

	<p>3. NishaGarg, Amit Garg.,2019, Textbook of Endodontics, 4th Edition, Jaypee Brothers Medical Publishers (P) Ltd, India</p> <p>4. B. Suresh Chandra, V. Gopikrishna, 2014 : Grossman's Endodontic Practice, 13th Edition, Wolters Kluwer, India</p>
25- Essential References	
	<p>4. Ilan R; John I I. 2019: Ingles Endodontics, 7th Edition, Raleigh, North Carolina, PMPH USA</p> <p>5. Torabinejad et al., 2016: Endodontics. Principles and practice, 6th Edition. China, Elsevier.</p>
6. Electronic Materials and Web Sites, etc.	
	<p>26- American Association of endodontists: www.aae.org</p> <p>27- Journal of Endodontics https://www.jendodon.com/</p> <p>28- International Endodontic Journal https://onlinelibrary.wiley.com/journal/13652591</p>

XII. Course Policies:	
1	<p>Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.</p>
2	<p>Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.</p>
3	<p>Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.</p>
4	<p>Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.</p>
5	<p>Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>
6	<p>Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>

7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
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Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Dental Anesthesia and exodontia

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:

CXIII. Course Identification and General Information:						
1	Course Title:	Dental Anesthesia and exodontia				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2			2	
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Anatomy of head and neck				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

CXIV. Course Description:

Aim of this course is introduces the students to the concept of pain control and widens their knowledge in the neuro-physiology of the oral cavity and pharmacokinetics of local anesthesia drugs. It covers patient assessment and suitability for local anesthesia and addresses the potential local and systemic complications of LA and how to manage, as well as local anesthetic for exodontia techniques, armentarium, and pain control

CXV. Outcomes of the Course

1. Dental student with knowledge on indications, contraindications; interactions, allergies and adverse reactions of commonly used local anesthesia agent, use of appropriate vasoconstriction drugs in disease with consideration to its efficacy, safety for individual and mass therapy needs.
2. Dental student with an ability to learn different technic of injection local anesthesia and knowledge how to control complication.

CXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

in Knowledge and Understanding.			
PIOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A2	a1-	Describe the osteology and physiologic mechanism of pain modulation and pain control
A2-	A1	a2-	Identify the mechanism of action of local anesthetics, Recognize the different local anesthetic solutions and vasoconstrictors, Describe & identify the armamentarium used for administering local anesthesia and sedation
A3-	A2	a3-	Describe the different local anesthetic techniques & its anatomical considerations
A4-	A5	a4-	Describe the local and systemic complications of local anesthesia and Sedation

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the osteology and physiologic mechanism of pain modulation and pain control	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate ▪ Discussion 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam.
a2-	Identify the mechanism of action of local anesthetics, Recognize the different local anesthetic solutions and vasoconstrictors, Describe & identify the armamentarium used for administering local anesthesia and sedation		
a3-	Describe the different local anesthetic techniques & its anatomical considerations		
a4-	Describe the local and systemic		

complications of local anesthesia and Sedation		
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(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B2	b1-	Apply critical thinking when selecting and providing local anesthesia.
	B5	b2-	Select and list the armamentarium needed for minor oral surgery procedures.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Apply critical thinking when selecting and providing local anesthesia.	<ul style="list-style-type: none"> Lecture discussion Explain using models and slides 	<ul style="list-style-type: none"> Oral exam. Assignments
b2-	Select and list the armamentarium needed for minor oral surgery procedures.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Properly prepare the armamentarium and the treatment environment for local anesthesia & minor oral surgery procedures
C2-	C3	c2-	Properly perform local anesthesia for maxilla and mandible

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Demonstration ▪ Debate 	<ul style="list-style-type: none"> ▪ Case based scenario / Problem based learning. ▪ Assignments
c1-	Properly prepare the armamentarium and the treatment environment for local anesthesia & minor oral surgery procedures		
c2-	Properly perform local anesthesia for maxilla and mandible		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D6	d1-	Show an appropriate attitude while performing the requested tasks by his instructors
D2-	D4	d2-	Manage time and work to prescribed time limits

Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d1-	Show an appropriate attitude while performing the requested tasks by his instructors		
d2-	Manage time and work to prescribed time limits		

II. Course Content:

I – Course Topics/Items:

a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction	a1	– History of Anesthesia, Osteology, and anatomy of Maxilla and Mandible and branches of trigeminal nerves	1	2
2	Neurophysiology	a1, a2	– Structure and classification of nerve, Electrophysiology & Electrochemistry of Nerve Conduction	1	2
3	Pharmacology of Local Anesthetics	a2, a4, b1	– Pharmacokinetics of Local Anesthetics, Ester Local Anesthetics, Amide Local Anesthetics, Excretion, Systemic Actions of Local Anesthetics.	2	4
4	Pharmacology of Vasoconstrictors	a2, a3	– Pharmacology of Specific Agents, Mechanism of Action local and Systemic effects, Maximum Doses	2	4
5	Armamentarium	a2, b2,	– The Syringe (Types of Syringes, Nondisposable Syringes, Self-aspirating syringe), The Needle (Types, Anatomy of Needle, Local Gauge, Problems With Needles) & the Cartridge	1	2
6	Mid-Term Theoretical Exam	a1- a3, b1, b2		1	2
7	Basic Techniques of Local Anesthesia	a1, a3	– Surface or Topical Anesthesia, Infiltration Anesthesia or Local Infiltration, Types of Infiltration Anesthesia, Submucosal Injection, Subperiosteal Injection, Supplementary Injections, Intraligament (Periodontal or Peridental) Injection, Intrapulpal Anesthesia, Intraosseous Injection Technique, Intraseptal Anesthesia, Local Infiltration of the Palate, Field Block & Nerve block	1	2
8	Local Anesthesia	a1, a3		2	4

	techniques for mandible	b2,	& Indirect Technique, Long Buccal Nerve Block, Mental Nerve Block and Incisive Nerve Block, Gow-Gates' Mandibular Nerve Block, Akinosi (Closed Mouth) Mandibular Nerve Block, Extra oral Techniques for Anesthesia & Aesthetic Technique for Mandibular Nerve		
9	Local Anesthesia techniques for Maxilla	a1, a3, b2,	– NERVE BLOCKS, Intraoral Nerve Blocks, Infraorbital Nerve Block, Posterior Superior Alveolar Nerve Block, Nasopalatine Nerve Block, Greater Palatine Nerve Block, Nerve Blocks for Maxillary Nerve, Extra oral Nerve Blocks, Infraorbital Nerve Block & Maxillary Nerve Block	2	4
10	Local & systemic Complications of LA	a1, a3, b2	– Complications arising from the drugs or chemicals used for local anesthesia & Complications arising from injection techniques: Needle-stick injuries, Failure to obtain local anesthesia, Complications arising from both, Bizarre neurological symptoms, Vasodepressor syncope, Adverse drug reactions, Allergic reactions, Toxic reactions, Vasoconstrictor (epinephrine) overdose, Idiosyncratic reactions, Emergency drugs, Equipment used for treatment of complications	1	2
11	Sedation and general anesthesia	a4, b1, b2	– Introduction, Preanesthetic evaluation, Problems of General anaesthesia in a Dental chair, Conscious Sedation, Deep Sedation and Sedation Techniques	1	2
12	Final Theoretical Exam	a1-a4, b1-b2		1	2
Number of Weeks /and Units per Semester				16	32

VI. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CLI. Teaching Strategies of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CLII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Presentation	2 nd - 15 th	10	b1,c1,c2,d1,d2
Total			10	

CLIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	4 th , 12 th	10	10%	a1,a2,b1
2	Mid-term exam	8 th	30	30%	a1- a3, b1,b2
3	Assignments	2 nd - 15 th	10	10%	b1,c1,c2,d1,d2
4	Final theory	16 th	50	50%	a1-a4, b1-b2
Total			100	100%	

CLIV. Learning Resources:

91- Required Textbook(s) (maximum two)

	39- James Hupp, Edward Ellis and Myron Tucker. (2013) Contemporary Oral and Maxillofacial Surgery, 6th edition . Elsevier
92- Essential References	
	40- Stanley Malamed, 2013, Handbook of Local Anesthesia, 6th edition . elsevier
93- Electronic Materials and Web Sites, etc.	
	2- https://bjoms.com

CLV. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Dental Anesthesia and exodontia

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCLXIV. Course Identification and General Information:						
1	Course Title:	Dental Anesthesia and exodontia				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2			2	
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Anatomy of head and neck				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

CCLXV. Course Description:

Aim of this course is introduces the students to the concept of pain control and widens their knowledge in the neuro-physiology of the oral cavity and pharmacokinetics of local anesthesia drugs. It covers patient assessment and suitability for local anesthesia and addresses the potential local and systemic complications of LA and how to manage, as well as local anesthetic for exodontia techniques, armamentarium, and pain control

CCLXVI. Outcomes of the Course

1. Dental student with knowledge on indications, contraindications; interactions, allergies and adverse reactions of commonly used local anesthesia agent, use of appropriate vasoconstriction drugs in disease with consideration to its efficacy, safety for individual and mass therapy needs.
2. Dental student with an ability to learn different technic of injection local anesthesia and knowledge how to control complication.

CCLXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the osteology and physiologic mechanism of pain modulation and pain control
a2-	Identify the mechanism of action of local anesthetics, Recognize the different local anesthetic solutions and vasoconstrictors, Describe & identify the armamentarium used for administering local anesthesia and sedation
a3-	Describe the different local anesthetic techniques & its anatomical considerations
a4-	Describe the local and systemic complications of local anesthesia and Sedation

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Apply critical thinking when selecting and providing local anesthesia.
b2-	Select and list the armamentarium needed for minor oral surgery procedures.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Properly prepare the armamentarium and the treatment environment for local anesthesia & minor oral surgery procedures
c2-	Properly perform local anesthesia for maxilla and mandible

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Show an appropriate attitude while performing the requested tasks by his instructors
d2-	Manage time and work to prescribed time limits

CCLXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction	– History of Anesthesia, Osteology, and anatomy of Maxilla and Mandible and branches of trigeminal nerves	1	2
2	Neurophysiology	– Structure and classification of nerve, Electrophysiology & Electrochemistry of Nerve Conduction	1	2
3	Pharmacology of Local Anesthetics	– Pharmacokinetics of Local Anesthetics, Ester Local Anesthetics, Amide Local Anesthetics, Excretion, Systemic Actions of Local Anesthetics.	2	4
4	Pharmacology of Vasoconstrictors	– Pharmacology of Specific Agents, Mechanism of Action local and Systemic effects, Maximum Doses	2	4
5	Armamentarium	– The Syringe (Types of Syringes, Nondisposable Syringes, Self-aspirating syringe), The Needle (Types, Anatomy of Needle, Local Gauge, Problems With Needles) & the Cartridge	1	2
6	Mid-Term Theoretical Exam		1	2
7	Basic Techniques of Local Anesthesia	– Surface or Topical Anesthesia, Infiltration Anesthesia or Local Infiltration, Types of Infiltration Anesthesia, Submucosal Injection, Subperiosteal Injection, Supplementary Injections, Intraligament (Periodontal or Peridental) Injection,	1	2

		Intrapulpal Anesthesia, Intraosseous Injection Technique, Intraseptal Anesthesia, Local Infiltration of the Palate, Field Block & Nerve block		
8	Local Anesthesia techniques for mandible	<ul style="list-style-type: none"> IA Nerve Blocks: Direct Technique & Indirect Technique, Long Buccal Nerve Block, Mental Nerve Block and Incisive Nerve Block, Gow-Gates' Mandibular Nerve Block, Akinosi (Closed Mouth) Mandibular Nerve Block, Extra oral Techniques for Anesthesia & Aesthetic Technique for Mandibular Nerve 	2	4
9	Local Anesthesia techniques for Maxilla	<ul style="list-style-type: none"> NERVE BLOCKS, Intraoral Nerve Blocks, Infraorbital Nerve Block, Posterior Superior Alveolar Nerve Block, Nasopalatine Nerve Block, Greater Palatine Nerve Block, Nerve Blocks for Maxillary Nerve, Extra oral Nerve Blocks, Infraorbital Nerve Block & Maxillary Nerve Block 	2	4
10	Local & systemic Complications of LA	<ul style="list-style-type: none"> Complications arising from the drugs or chemicals used for local anesthesia & Complications arising from injection techniques: Needle-stick injuries, Failure to obtain local anesthesia, Complications arising from both, Bizarre neurological symptoms, Vasodepressor syncope, Adverse drug reactions, Allergic reactions, Toxic reactions, Vasoconstrictor (epinephrine) overdose, Idiosyncratic reactions, Emergency drugs, Equipment used for treatment of complications 	1	2
11	Sedation and general anesthesia	<ul style="list-style-type: none"> Introduction, Preanesthetic evaluation, Problems of General anaesthesia in a Dental chair, Conscious Sedation, Deep Sedation and Sedation Techniques 	1	2
12	Final Theoretical Exam		1	2
Number of Weeks /and Units per Semester			16	32

CCLXIX. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CCLXX. Assessment Methods of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CCLXXI. Assignments:

No.	Assignments	Week due	Mark
1	Presentation	2 nd - 15 th	10
Total			10

CCLXXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	4 th , 12 th	10	10%
2	Mid-term exam	8 th	30	30%
3	Assignments	2 nd - 15 th	10	10%
4	Final theory	16 th	50	50%
Total			100	100%

CCLXXIII. Learning Resources:

37- Required Textbook(s) (maximum two)

James Hupp, Edward Ellis and Myron Tucker. (2013) Contemporary Oral and Maxillofacial Surgery, 6th edition . Elsevier

38- Essential References

	Stanley Malamed, 2013, Handbook of Local Anesthesia, 6th edition . elsevier
39- Electronic Materials and Web Sites, etc.	
	https://bjoms.com

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Dental Anesthesia and exodontia

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:

VIII. Course Identification and General Information:						
1	Course Title:	Dental Anesthesia and exodontia				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2			2	
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Anatomy of head and neck				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

CXIX. Course Description:

Aim of this course is introduces the students to the concept of pain control and widens their knowledge in the neuro-physiology of the oral cavity and pharmacokinetics of local anesthesia drugs. It covers patient assessment and suitability for local anesthesia and addresses the potential local and systemic complications of LA and how to manage, as well as local anesthetic for exodontia techniques, armentarium, and pain control

CXX. Outcomes of the Course

1. Dental student with knowledge on indications, contraindications; interactions, allergies and adverse reactions of commonly used local anesthesia agent, use of appropriate vasoconstriction drugs in disease with consideration to its efficacy, safety for individual and mass therapy needs.
2. Dental student with an ability to learn different technic of injection local anesthesia and knowledge how to control complication.

CXXI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A2	a1-	Describe the osteology and physiologic mechanism of pain modulation and pain control
A2-	A1	a2-	Identify the mechanism of action of local anesthetics, Recognize the different local anesthetic solutions and vasoconstrictors, Describe & identify the armamentarium used for administering local anesthesia and sedation
A3-	A2	a3-	Describe the different local anesthetic techniques & its anatomical considerations
A4-	A5	a4-	Describe the local and systemic complications of local anesthesia and Sedation

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the osteology and physiologic mechanism of pain modulation and pain control	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate ▪ Discussion 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam.
a2-	Identify the mechanism of action of local anesthetics, Recognize the different local anesthetic solutions and vasoconstrictors, Describe & identify the armamentarium used for administering local anesthesia and sedation		
a3-	Describe the different local anesthetic techniques & its anatomical considerations		
a4-	Describe the local and systemic		

complications of local anesthesia and Sedation		
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(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B2	b1-	Apply critical thinking when selecting and providing local anesthesia.
	B5	b2-	Select and list the armamentarium needed for minor oral surgery procedures.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Apply critical thinking when selecting and providing local anesthesia.	<ul style="list-style-type: none"> Lecture discussion Explain using models and slides 	<ul style="list-style-type: none"> Oral exam. Assignments
b2-	Select and list the armamentarium needed for minor oral surgery procedures.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Properly prepare the armamentarium and the treatment environment for local anesthesia & minor oral surgery procedures
C2-	C3	c2-	Properly perform local anesthesia for maxilla and mandible

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Demonstration ▪ Debate 	<ul style="list-style-type: none"> ▪ Case based scenario / Problem based learning. ▪ Assignments
c1-	Properly prepare the armamentarium and the treatment environment for local anesthesia & minor oral surgery procedures		
c2-	Properly perform local anesthesia for maxilla and mandible		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D6	d1-	Show an appropriate attitude while performing the requested tasks by his instructors
D2-	D4	d2-	Manage time and work to prescribed time limits

Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d1-	Show an appropriate attitude while performing the requested tasks by his instructors		
d2-	Manage time and work to prescribed time limits		

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction	a1	– History of Anesthesia, Osteology, and anatomy of Maxilla and Mandible and branches of trigeminal nerves	1	2
2	Neurophysiology	a1, a2	– Structure and classification of nerve, Electrophysiology & Electrochemistry of Nerve Conduction	1	2
3	Pharmacology of Local Anesthetics	a2, a4, b1	– Pharmacokinetics of Local Anesthetics, Ester Local Anesthetics, Amide Local Anesthetics, Excretion, Systemic Actions of Local Anesthetics.	2	4
4	Pharmacology of Vasoconstrictors	a2, a3	– Pharmacology of Specific Agents, Mechanism of Action local and Systemic effects, Maximum Doses	2	4
5	Armamentarium	a2, b2,	– The Syringe (Types of Syringes, Nondisposable Syringes, Self-aspirating syringe), The Needle (Types, Anatomy of Needle, Local Gauge, Problems With Needles) & the Cartridge	1	2
6	Mid-Term Theoretical Exam	a1- a3, b1, b2		1	2
7	Basic Techniques of Local Anesthesia	a1, a3	– Surface or Topical Anesthesia, Infiltration Anesthesia or Local Infiltration, Types of Infiltration Anesthesia, Submucosal Injection, Subperiosteal Injection, Supplementary Injections, Intraligament (Periodontal or Peridental) Injection, Intrapulpal Anesthesia, Intraosseous Injection Technique, Intraseptal Anesthesia, Local Infiltration of the Palate, Field Block & Nerve block	1	2
8	Local Anesthesia	a1, a3		2	4

	techniques for mandible	b2,	& Indirect Technique, Long Buccal Nerve Block, Mental Nerve Block and Incisive Nerve Block, Gow-Gates' Mandibular Nerve Block, Akinosi (Closed Mouth) Mandibular Nerve Block, Extra oral Techniques for Anesthesia & Aesthetic Technique for Mandibular Nerve		
9	Local Anesthesia techniques for Maxilla	a1, a3, b2,	– NERVE BLOCKS, Intraoral Nerve Blocks, Infraorbital Nerve Block, Posterior Superior Alveolar Nerve Block, Nasopalatine Nerve Block, Greater Palatine Nerve Block, Nerve Blocks for Maxillary Nerve, Extra oral Nerve Blocks, Infraorbital Nerve Block & Maxillary Nerve Block	2	4
10	Local & systemic Complications of LA	a1, a3, b2	– Complications arising from the drugs or chemicals used for local anesthesia & Complications arising from injection techniques: Needle-stick injuries, Failure to obtain local anesthesia, Complications arising from both, Bizarre neurological symptoms, Vasodepressor syncope, Adverse drug reactions, Allergic reactions, Toxic reactions, Vasoconstrictor (epinephrine) overdose, Idiosyncratic reactions, Emergency drugs, Equipment used for treatment of complications	1	2
11	Sedation and general anesthesia	a4, b1, b2	– Introduction, Preanesthetic evaluation, Problems of General anaesthesia in a Dental chair, Conscious Sedation, Deep Sedation and Sedation Techniques	1	2
12	Final Theoretical Exam	a1-a4, b1-b2		1	2
Number of Weeks /and Units per Semester				16	32

VI. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CLVI. Teaching Strategies of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CLVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Presentation	2 nd - 15 th	10	b1,c1,c2,d1,d2
Total			10	

CLVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	4 th , 12 th	10	10%	a1,a2,b1
2	Mid-term exam	8 th	30	30%	a1- a3, b1,b2
3	Assignments	2 nd - 15 th	10	10%	b1,c1,c2,d1,d2
4	Final theory	16 th	50	50%	a1-a4, b1-b2
Total			100	100%	

CLIX. Learning Resources:

94. Required Textbook(s) (maximum two)

	41- James Hupp, Edward Ellis and Myron Tucker. (2013) Contemporary Oral and Maxillofacial Surgery, 6th edition . Elsevier
95- Essential References	
	42- Stanley Malamed, 2013, Handbook of Local Anesthesia, 6th edition . elsevier
96- Electronic Materials and Web Sites, etc.	
	3- https://bjoms.com

CLX. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Plan (Syllabus) of Dental Anesthesia and exodontia

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCLXXIV. Course Identification and General Information:						
1	Course Title:	Dental Anesthesia and exodontia				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2				
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Anatomy of head and neck				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

CCLXXV. Course Description:

Aim of this course is introduces the students to the concept of pain control and widens their knowledge in the neuro-physiology of the oral cavity and pharmacokinetics of local anesthesia drugs. It covers patient assessment and suitability for local anesthesia and addresses the potential local and systemic complications of LA and how to manage, as well as local anesthetic for exodontia techniques, armamentarium, and pain control

CCLXXVI. Outcomes of the Course

1. Dental student with knowledge on indications, contraindications; interactions, allergies and adverse reactions of commonly used local anesthesia agent, use of appropriate vasoconstriction drugs in disease with consideration to its efficacy, safety for individual and mass therapy needs.
2. Dental student with an ability to learn different technic of injection local anesthesia and knowledge how to control complication.

CCLXXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the osteology and physiologic mechanism of pain modulation and pain control
a2-	Identify the mechanism of action of local anesthetics, Recognize the different local anesthetic solutions and vasoconstrictors, Describe & identify the armamentarium used for administering local anesthesia and sedation
a3-	Describe the different local anesthetic techniques & its anatomical considerations
a4-	Describe the local and systemic complications of local anesthesia and Sedation

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Apply critical thinking when selecting and providing local anesthesia.
b2-	Select and list the armamentarium needed for minor oral surgery procedures.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Properly prepare the armamentarium and the treatment environment for local anesthesia & minor oral surgery procedures
c2-	Properly perform local anesthesia for maxilla and mandible

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Show an appropriate attitude while performing the requested tasks by his instructors
d2-	Manage time and work to prescribed time limits

CCLXXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction	– History of Anesthesia, Osteology, and anatomy of Maxilla and Mandible and branches of trigeminal nerves	1	2
2	Neurophysiology	– Structure and classification of nerve, Electrophysiology & Electrochemistry of Nerve Conduction	1	2
3	Pharmacology of Local Anesthetics	– Pharmacokinetics of Local Anesthetics, Ester Local Anesthetics, Amide Local Anesthetics, Excretion, Systemic Actions of Local Anesthetics.	2	4
4	Pharmacology of Vasoconstrictors	– Pharmacology of Specific Agents, Mechanism of Action local and Systemic effects, Maximum Doses	2	4
5	Armamentarium	– The Syringe (Types of Syringes, Nondisposable Syringes, Self-aspirating syringe), The Needle (Types, Anatomy of Needle, Local Gauge, Problems With Needles) & the Cartridge	1	2
6	Mid-Term Theoretical Exam		1	2
7	Basic Techniques of Local Anesthesia	– Surface or Topical Anesthesia, Infiltration Anesthesia or Local Infiltration, Types of Infiltration Anesthesia, Submucosal Injection, Subperiosteal Injection, Supplementary Injections, Intraligament (Periodontal or Peridental) Injection,	1	2

		Intrapulpal Anesthesia, Intraosseous Injection Technique, Intraseptal Anesthesia, Local Infiltration of the Palate, Field Block & Nerve block		
8	Local Anesthesia techniques for mandible	– IA Nerve Blocks: Direct Technique & Indirect Technique, Long Buccal Nerve Block, Mental Nerve Block and Incisive Nerve Block, Gow-Gates' Mandibular Nerve Block, Akinosi (Closed Mouth) Mandibular Nerve Block, Extra oral Techniques for Anesthesia & Aesthetic Technique for Mandibular Nerve	2	4
9	Local Anesthesia techniques for Maxilla	– NERVE BLOCKS, Intraoral Nerve Blocks, Infraorbital Nerve Block, Posterior Superior Alveolar Nerve Block, Nasopalatine Nerve Block, Greater Palatine Nerve Block, Nerve Blocks for Maxillary Nerve, Extra oral Nerve Blocks, Infraorbital Nerve Block & Maxillary Nerve Block	2	4
10	Local & systemic Complications of LA	– Complications arising from the drugs or chemicals used for local anesthesia & Complications arising from injection techniques: Needle-stick injuries, Failure to obtain local anesthesia, Complications arising from both, Bizarre neurological symptoms, Vasodepressor syncope, Adverse drug reactions, Allergic reactions, Toxic reactions, Vasoconstrictor (epinephrine) overdose, Idiosyncratic reactions, Emergency drugs, Equipment used for treatment of complications	1	2
11	Sedation and general anesthesia	– Introduction, Preanesthetic evaluation, Problems of General anaesthesia in a Dental chair, Conscious Sedation, Deep Sedation and Sedation Techniques	1	2
12	Final Theoretical Exam		1	2
Number of Weeks /and Units per Semester			16	32

CCLXXIX. Teaching strategies of the course

- Lectures
- Debate

- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CCLXXX. Assessment Methods of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CCLXXXI. Assignments:

No.	Assignments	Week due	Mark
1	Presentation	2 nd - 15 th	10
Total			10

CCLXXXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	4 th , 12 th	10	10%
2	Mid-term exam	8 th	30	30%
3	Assignments	2 nd - 15 th	10	10%
4	Final theory	16 th	50	50%
Total			100	100%

CCLXXXIII. Learning Resources:

40- Required Textbook(s) (maximum two)

James Hupp, Edward Ellis and Myron Tucker. (2013) Contemporary Oral and Maxillofacial Surgery, 6th edition . Elsevier

41- Essential References

Stanley Malamed, 2013, Handbook of Local Anesthesia, 6th edition . elsevier

42- Electronic Materials and Web Sites, etc.

<https://bjoms.com>

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of General Surgery

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

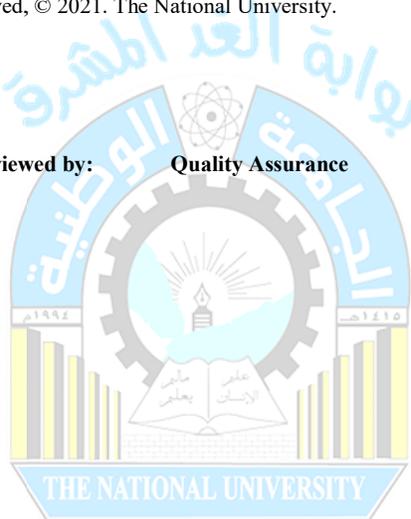
Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:



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XXIII. Course Identification and General Information:

1	Course Title:	General Surgery				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2				2
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	General pathology & General Medicine				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

XXIV. Course Description:

This course is designed to provide basic understanding of general surgery. It prepares the dental student to know how to deal with general problems such as shock, hemorrhage, infections (specific and non-specific), in order to comprehend the oral surgery course later on in his study. Emphasis is being placed on wound healing, hemostasis, and wound infection.

CXXV. Outcomes of the Course

1. Dental student with sound surgical knowledge on anomalies, lesions and diseases of the teeth, mouth and jaws.
2. Dental student with an ability to diagnose and manage various common surgical problems encountered in general, dental practice and dental emergencies.

XXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs)
 in Knowledge and Understanding.

After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A4	a1-	Understanding of principles of surgical intervention.
A2-	A2	a2-	Recognize and evaluate the basis of occurrence of diseases that need to be referred to a specialist.
A3-	A1	a3-	Ability to observe and interpret physical signs in his clothed patients

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CIOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Debate ▪ Discussion 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam.
a1-	Understanding of principles of surgical intervention.		
a2-	Recognize and evaluate the basis of occurrence of diseases that need to be referred to a specialist.		
a3-	Ability to observe and interpret physical signs in his clothed patients		

(B) Intellectual Skills

Alignment of Course CIOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B2	b1-	Understanding the competent at carrying out resuscitation techniques and immediate management of cardiac arrest, anaphylactic reaction, upper respiratory obstruction, vasovagal attack, hemorrhage, inhalation or ingestion of foreign bodies, and diabetic coma.
B2-	B3	b2-	Evaluate the surgical emergencies to outline

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Understanding the competent at carrying out resuscitation techniques and immediate management of cardiac arrest, anaphylactic reaction, upper respiratory obstruction, vasovagal attack, hemorrhage, inhalation or ingestion of foreign bodies, and diabetic coma.	<ul style="list-style-type: none"> ▪ Lecture discussion Explain using models and slides 	<ul style="list-style-type: none"> ▪ Oral exam. ▪ Assignments
b2-	Evaluate the surgical emergencies to outline their clinical management.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Ability to manage simple wounds and management simple surgical problems in the dental setting.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1-	Ability to manage simple wounds and management simple surgical problems in the dental setting.	<ul style="list-style-type: none"> ▪ Lectures ▪ Demonstration ▪ Debate 	<ul style="list-style-type: none"> ▪ Case based scenario / Problem based learning. ▪ Assignments

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3	d1-	Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients and working with a team concept
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d1-	Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients and working with a team concept		

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to surgery	a1	– History of surgery, Surgery in war and peace, Modern directions and perspectives of surgery	1	2
2	General surgery 1	a1,b1	– Asepsis and antisepsis, infections in surgery, wounds and its surgical treatment, antibiotics in surgery.	1	2
3	General surgery 2	a1,a3	– Burns, shock, bleeding, transfusion, crush and blast syndrome, bandages and immobilization, the basics of surgical immunology and transplantation.	1	2
4	Cardiac surgery	a2,b1	– Congenital cardiac anomalies, mitral and tricuspid stenosis and	2	4

			insufficiency, thoracic aortic aneurysms, pulmonary insufficiency, ischemic heart disease, coronary revascularization, cardiac arrhythmias, pericardial tamponade.		
5	Vascular surgery	a2,b1	– Arteries and veins injuries, embolism, acute arterial thrombosis, chronic occlusive disease of the lower extremities, infectious arteritis, thromboangiitisobliterans-Bürger, thoracic outlet syndrome, gangrene, renovascular hypertension, aneurysm of arteries of the extremity and abdominal aorta, deep vein thrombosis, superficial thrombophlebitis, varicose veins, chronic venous insufficiency, lymphedema.	1	2
6	Neurosurgery	a2,b1	– Craniocerebral and spinal injuries, degenerative disc disease, cerebrovascular ischemic disease, spontaneous intracranial hemorrhage, intracranial aneurysms, vascular malformations of the brain.	1	2
7	Midterm-Exam	a1,a2, b1		1	2
8	Plastic reconstructive surgery	a1,a2, b2	– Free skin transplants, local graft, free skin graft, free muscle graft, hand surgery, esthetic surgery, malignant melanoma, malignant epithelial tumors of the skin.	2	4
9	Orthopedics with traumatology	a1,a3,b2	– Congenital deformities of the feet and hips, locomotor system tumors, morbusPerthes, inflammations of the junction bones, general characteristics of bone fracture and its healing, conservative treatment of fracture, osteosynthesis, clavicle fractures	2	4

			and wrenches, fracture of the shoulder bones, elbow wrenchings, fractures of the forearm bones, injuries of the hand, pelvis fractures, hip wrenching, femoral fractures, knee joint injuries, lower leg fractures, foot injuries.		
10	Pediatric surgery	a1,a3, b2	– gastrointestinal tract atresia and stenosis, ileus in childhood, congenital defects of the abdominal wall, congenital malformation of the urinary tract, anorectal malformation, Hirschsprung's disease, achalasia, tumors. Meckel's diverticulum, children's hernias.	1	2
11	Anesthesiology and reanimation	a3,b2	– General anesthesia, local and regional anesthesia, pain therapy, basics of intensive care unit monitoring, cardiopulmonary resuscitation, perioperative approach to the surgical patient, specificity of metabolism and nutrition of the surgical patient.	1	2
12	Revision	a1-a3, b1-b2	–	1	2
13	Final Exam	a1-a3, b1-b2		1	2
Number of Weeks /and Units per Semester				16	32

VI. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CLXI. Teaching Strategies of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CLXII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Presentation	2 nd - 15 th	10	b1,b2,c1,d1
Total			10	

CLXIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	4 th , 12 th	10	10%	a1,a2,b1
2	Mid-term exam	8 th	30	30%	a1,a2, b1
3	Assignments	2 nd - 15 th	10	10%	b1,b2,c1,d1
4	Final theory	16 th	50	50%	a1-a3, b1-b2
Total			100	100%	

CLXIV. Learning Resources:

97- Required Textbook(s) (maximum two)

1- Peter F. Lawrence, Richard M. Bell, Merrill T. Dayton and James C. 2012, Essentials of General Surgery, 5th edition, Hebert, Lippincott Williams & Wilkins

98- Essential References

Sanjay Marwah, PtBhagwatDayal Sharma, 2018, Textbook of Surgery for Dental Students, 2nd edition, Medical Ltd India

99- Electronic Materials and Web Sites, etc.

<https://www.journals.elsevier.com/international-journal-of-surgery>
<https://bjssjournals.onlinelibrary.wiley.com/journal/13652168>
<https://www.americanjournalofsurgery.com/>

CLXV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Plan (Syllabus) of General Surgery

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCLXXXIV. Course Identification and General Information:						
1	Course Title:	General Surgery				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2				2
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	General pathology & General Medicine				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				

CCLXXXV. Course Description:

This course is designed to provide basic understanding of general surgery. It prepares the dental student to know how to deal with general problems such as shock, hemorrhage, infections (specific and non-specific), in order to comprehend the oral surgery course later on in his study. Emphasis is being placed on wound healing, hemostasis, and wound infection.

CCLXXXVI. Outcomes of the Course

1. Dental student with sound surgical knowledge on anomalies, lesions and diseases of the teeth, mouth and jaws.
2. Dental student with an ability to diagnose and manage various common surgical problems encountered in general, dental practice and dental emergencies.

CCLXXXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Understanding of principles of surgical intervention. |
| a2- | Recognize and evaluate the basis of occurrence of diseases that need to be referred to a specialist. |
| a3- | Ability to observe and interpret physical signs in his clothed patients |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Understanding the competent at carrying out resuscitation techniques and immediate management of cardiac arrest, anaphylactic reaction, upper respiratory obstruction, vasovagal attack, hemorrhage, inhalation or ingestion of foreign bodies, and diabetic coma. |
| b2- | Evaluate the surgical emergencies to outline their clinical management. |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| c1- | Ability to manage simple wounds and management simple surgical problems in the dental setting. |
|-----|--|

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| d1- | Communicate and assess clinical problems and treatment plans with other specialties involved in |
|-----|---|

the treatment of patients and working with a team concept

CCLXXXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to surgery	– History of surgery, Surgery in war and peace, Modern directions and perspectives of surgery	1	2
2	General surgery 1	– Asepsis and antisepsis, infections in surgery, wounds and its surgical treatment, antibiotics in surgery.	1	2
3	General surgery 2	– Burns, shock, bleeding, transfusion, crush and blast syndrome, bandages and immobilization, the basics of surgical immunology and transplantation.	1	2
4	Cardiac surgery	– Congenital cardiac anomalies, mitral and tricuspid stenosis and insufficiency, thoracic aortic aneurysms, pulmonary insufficiency, ischemic heart disease, coronary revascularization, cardiac arrhythmias, pericardial tamponade.	2	4
5	Vascular surgery	– Arteries and veins injuries, embolism, acute arterial thrombosis, chronic occlusive disease of the lower extremities, infectious arteritis, thromboangiitisobliterans-Bürger, thoracic outlet syndrome, gangrene, renovascular hypertension, aneurysm of arteries of the extremity and abdominal aorta, deep vein thrombosis, superficial thrombophlebitis, varicose veins, chronic venous insufficiency, lymphedema.	1	2
6	Neurosurgery	– Craniocerebral and spinal injuries, degenerative disc disease, cerebrovascular ischemic disease, spontaneous intracranial hemorrhage, intracranial aneurysms, vascular malformations of the brain.	1	2

7	Midterm-Exam		1	2
8	Plastic reconstructive surgery	– Free skin transplants, local graft, free skin graft, free muscle graft, hand surgery, esthetic surgery, malignant melanoma, malignant epithelial tumors of the skin.	2	4
9	Orthopedics with traumatology	– Congenital deformities of the feet and hips, locomotor system tumors, morbusPerthes, inflammations of the junction bones, general characteristics of bone fracture and its healing, conservative treatment of fracture, osteosynthesis, clavicle fractures and wrenches, fracture of the shoulder bones, elbow wrenchings, fractures of the forearm bones, injuries of the hand, pelvis fractures, hip wrenching, femoral fractures, knee joint injuries, lower leg fractures, foot injuries.	2	4
10	Pediatric surgery	– gastrointestinal tract atresia and stenosis, ileus in childhood, congenital defects of the abdominal wall, congenital malformation of the urinary tract, anorectal malformation, Hirschsprung's disease, achalasia, tumors. Meckel's diverticulum, children's hernias.	1	2
11	Anesthesiology and reanimation	– General anesthesia, local and regional anesthesia, pain therapy, basics of intensive care unit monitoring, cardiopulmonary resuscitation, perioperative approach to the surgical patient, specificity of metabolism and nutrition of the surgical patient.	1	2
12	Revision	–	1	2
13	Final Theoretical Exam		1	2
Number of Weeks /and Units per Semester			16	32

CCLXXXIX. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Brainstorming

- Self-independent learning (problem based learning)

CCXC. Assessment Methods of the Course:

- Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- Submission of requirements
- Final written exam (mcq questions, complete, short essay, enumerate, and define)

CCXCI. Assignments:

No.	Assignments	Week due	Mark
1	Presentation	2 nd - 15 th	10
Total			10

CCXCII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	4 th , 12 th	10	10%
2	Mid-term exam	8 th	30	30%
3	Assignments	2 nd - 15 th	10	10%
4	Final theory	16 th	50	50%
Total			100	100%

CCXCIII. Learning Resources:

43- Required Textbook(s) (maximum two)

1- Peter F. Lawrence, Richard M. Bell, Merrill T. Dayton and James C. 2012, Essentials of General Surgery, 5th edition, Hebert, Lippincott Williams & Wilkins

44- Essential References

1 Sanjay Marwah, PtRhaowatDaval Sharma. 2018. Textbook of Surgery for Dental Students. 2nd

	edition, Medical Ltd India
45- Electronic Materials and Web Sites, etc.	
	https://www.journals.elsevier.com/international-journal-of-surgery https://bjssjournals.onlinelibrary.wiley.com/journal/13652168 https://www.americanjournalofsurgery.com/

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral Diagnosis and Radiology (2)

Course No.()



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Prepared by:

Reviewed by:

Quality Assurance

Dean:

Dr. Manal Mohammed Al-Hajri

Dr.

CXXVIII. Course Identification and General Information:					
1	Course Title:	Oral Diagnosis and Radiology (2)			
2	Course Number & Code:				
3	Credit hours:	C.H			Total
		Th.	Pr.	Tr.	
		2	2		3
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester			
5	Prerequisites:	Oral Diagnosis and Radiology (1)			
6	Co -requisite:				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery			
8	Language of teaching the course:	English			
9	Study System:	Semester based System			
10	Location of teaching the course:	Faculty of Medical Science			
		Department of Dentistry			
11	Prepared by:	Dr. Manal Mohammed Al-Hajri			
12	Date of Approval	2020-2021			

CXXIX. Course Description:
<p>This course of dental radiology is mandatory as it offers the way of examining the hidden parts of teeth and their supporting structures. It also includes radiographic interpretation of various pathological lesions that aid in diagnosis treatment planning and management of patients. It also includes extraoral radiographic projections and advanced imaging modalities..</p>

CXXX. Outcomes of the Course
<p>1. Generate graduates that demonstrate the necessary knowledge, skills and attitude in Oral & Maxillofacial Diagnosis, Diagnostic procedures and medical management of such disorders.</p> <p>2. Create confident and competent Dental professionals who can accomplish and execute clinical deftness in the diagnosis and management of Orofacial disorders</p>

XXXI. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1,2,4,6,b1,4	a1	Know the basic characteristics of ionizing radiation and production of X-rays, and understand the biological effects of ionizing radiation on the molecular, cellular, tissue and organ levels with concentration on the hazardous effects of ionizing radiation on the oral and para- oral structures
A2-	A1,2,4,6,b1,4	a2	Understand the principles of image production and characteristics of radiographic images, master the processing of the exposed films in order to produce good quality diagnostic radiographs, understand well the interaction between the film and the processing solutions and identify common causes of faulty or unsatisfactory radiographs.
A3-	A1,2,4,6,b1,4	a3	Have a thorough knowledge radiopaque and radiolucent normal anatomical landmarks on the intra and extra-oral radiographs.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
a1-	Know the basic characteristics of ionizing radiation and production of X-rays, and understand the biological effects of ionizing radiation on the molecular, cellular, tissue and organ levels with concentration on the hazardous effects of ionizing radiation on the oral and para- oral structures	exercise Debate	Homework
a2-	Understand the principles of image production		

	and characteristics of radiographic images, master the processing of the exposed films in order to produce good quality diagnostic radiographs, understand well the interaction between the film and the processing solutions and identify common causes of faulty or unsatisfactory radiographs.		
a3-	Have a thorough knowledge radiopaque and radiolucent normal anatomical landmarks on the intra and extra-oral radiographs.	Lectures exercise Debate	Exam Homework

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1	b1,4	b1-	Interpret the procedural, technical and processing errors that might arise during radiographic imaging.
B2	b1,4	b2-	Correlate the clinical and radiographic data to properly diagnose the dental and periodontal problems.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
b1-	Interpret the procedural, technical and processing errors that might arise during radiographic imaging.	exercise	Homework
b2-	Correlate the clinical and radiographic data to properly diagnose the dental and periodontal problems.	Debate	

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C3,4	c1-	Practice adequate measures for radiation protection of the patient, dental staff and people in the immediate environment.
C2-	C2	c2-	Demonstrate the ability to recognize the radiological landmarks on the periapical, occlusal and extraoral radiographs
C3-	b5,c3,4	c3-	Practice accurate and high quality processing procedure of the exposed films in order to produce good quality diagnostic radiographs.
C4-	b5,c3,4	c4-	Apply standardized techniques for acquiring good quality intra oral radiographs, namely periapical, bitewing and occlusal.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1-	Practice adequate measures for radiation protection of the patient, dental staff and people in the immediate environment	Lectures exercise Debate	Exam Homework
c2-	Demonstrate the ability to recognize the radiological landmarks on the periapical, occlusal and extraoral radiographs	Lectures exercise Debate	Exam Homework
c3-	Practice accurate and high quality processing procedure of the exposed films in order to produce good quality diagnostic radiographs.	Lectures exercise Debate	Exam Homework
c4-	Apply standardized techniques for acquiring good quality intra oral radiographs, namely periapical, bitewing and occlusal.	Lectures exercise Debate	Exam Homework

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3,6	d1-	Develop Excellent Communication skills with wide range of individuals.
D2-	D7	d2-	Understanding for radiation safety rules.
D3-	D1,2,3,4	d3-	Represent assignments using radiological terminology

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
d1-	Develop Excellent Communication skills with wide range of individuals.	Lectures exercise	Exam Homework
d2-	Understanding for radiation safety rules.	Debate	
d3-	Represent assignments using radiological terminology	Lectures exercise Debate	Exam Homework

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Advanced imagiology	A1,2,3,b1,2,c1,2,3,4	•	3	6
2	Digital radiology	A1,2,3,b1,2,c1,2,3,4		3	6

3	Principles of radiographic interpretation	A2,3,b1,2,c,2,3,4		2	4
4	Dental anomalies	A1,2,3,b1,2,c1,2,3,4		2	4
5	Inflammatory lesions of the jaw	A2,3,b1,2,c,2,3,4		1	2
6	Mid-Term Exam	A 1,2,3		1	2
7	Cysts	A2,3,b1,2,c,2,3,4		1	2
8	Benign tumors	A2,3,b1,2,c,2,3,4		1	2
9	Malignant tumors	A2,3,b1,2,c,2,3,4		1	2
10	Final Exam	A1, 2,3,4,b1,2,C1,2,3,4, 5	•	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<p>Demonstration to Identify and label the parts of the dental x-ray machine.</p> <p>Then training entails imaging Adult Full Mouth Series by Bisecting-angle Technique.</p> <ul style="list-style-type: none"> ☐ Upper centrals ☐ Upper canine (R & L) ☐ Upper premolars (R & L) ☐ Upper Molars (R & L) ☐ Lower centrals ☐ Lower canine (R & L) ☐ Lower premolars (R & L) ☐ Lower Molars (R & L) ☐ Bitewing premolar (R & L) 	A1- A2- A3- A4-b1,2,C1,2,3,4	14	28

	☐ Bitewing Molar (R & L)			
	☐ Occlusal Upper			
	☐ Occlusal Lower			
2	Practical exam		1	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CLXVI. Teaching Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment



CLXVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the instructor	10	a1, a2, a, a4, b1,2,d1,2,3 5, , d1, d2
Total			10	

CLXVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
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1	Mid tem exam	4 th	20	20%	a1a2,a3
2	Final tem exam	14th	40	40%	a1a2a3,b1,2,c1,2,3,4,5
3	Attending and assignment	1st to 14th	10	10%	A1,2,3,4,b1,2,d1,2,3
Total			70	70%	
Assessment of Practical Part					
1	Practical exam	14	30	30%	A1- A2- A3- A4-b1,2,C1,2,3,4
Total			30	30%	

CLXIX. Learning Resources:

100- Required Textbook(s) (maximum two)

- Essentials of dental Radiography and Radiology

101- Essential References

- White SC, Pharoah MJ. Oral Radiology: Principles and Interpretation.

102- Electronic Materials and Web Sites, etc.

- Oral Radiology Journal <http://www.springer.com/medicine/dentistry/journal/11282>
- Journal of oral and maxillofacial radiology <http://www.joomr.org/>

CLXX. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

	Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan of Oral Diagnosis and Radiology (2)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:	Dr.Manal Mohammed Al-Hajri	Office Hours					
Location & Telephone No.:	00967779212007						
E-mail:	dent.manal@yahoo.com	SAT	SUN	MON	TUE	WED	THU

2021/2022

CCXCIV. Course Identification and General Information:						
1	Course Title:	Oral Diagnosis and Radiology (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Oral Diagnosis and Radiology (1)				
6	Co-requisite:					

7	Program (s) in which the course is offered:	Bachelor of Dental Surgery
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Dr. Manal Mohammed Al-Hajri
12	Date of Approval	2020-2021

CCXCV. Course Description:

This course of dental radiology is mandatory as it offers the way of examining the hidden parts of teeth and their supporting structures. It also includes radiographic interpretation of various pathological lesions that aid in diagnosis treatment planning and management of patients. It also includes extraoral radiographic projections and advanced imaging modalities.

CCXCVI. Outcomes of the Course

1. Generate graduates that demonstrate the necessary knowledge, skills and attitude in Oral & Maxillofacial Diagnosis, Diagnostic procedures and medical management of such disorders.
2. Create confident and competent Dental professionals who can accomplish and execute clinical deftness in the diagnosis and management of Orofacial disorders

CCXCVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1	Know the basic characteristics of ionizing radiation and production of X-rays, and understand the biological effects of ionizing radiation on the molecular, cellular, tissue and organ levels with concentration on the hazardous effects of ionizing radiation on the oral and para-oral structures
a2	Understand the principles of image production and characteristics of radiographic images, master the processing of the exposed films in order to produce good quality diagnostic radiographs, understand well the interaction between the film and the processing solutions and identify common causes of faulty or unsatisfactory radiographs.

a3	Have a thorough knowledge radiopaque and radiolucent normal anatomical landmarks on the intra and extra-oral radiographs.
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(B) Intellectual Skills

After participating in the course, students would be able to:

b1	Interpret the procedural, technical and processing errors that might arise during radiographic imaging.
b2	Correlate the clinical and radiographic data to properly diagnose the dental and periodontal problems.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1	Practice adequate measures for radiation protection of the patient, dental staff and people in the immediate environment.
c2	Demonstrate the ability to recognize the radiological landmarks on the periapical, occlusal and extraoral radiographs
c3	Practice accurate and high quality processing procedure of the exposed films in order to produce good quality diagnostic radiographs.
c4	Apply standardized techniques for acquiring good quality intra oral radiographs, namely periapical, bitewing and occlusal.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1	Develop Excellent Communication skills with wide range of individuals.
d2	Understanding for radiation safety rules.
d3	Represent assignments using radiological terminology

CCXCVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
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1	Advanced imagiology		3	6
2	Digital radiology		3	6
3	Principles of radiographic interpretation		2	4
4	Dental anomalies		2	4
5	Inflammatory lesions of the jaw	•	1	2
6	Midterm exam		1	2
7	Cysts		1	2
8	Benign tumors		1	2
9	Malignant tumors		1	2
10	Final exam		1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<p>Demonstration to Identify and label the parts of the dental x-ray machine.</p> <p>Then training entails imaging Adult Full Mouth Series by Bisecting-angle Technique.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Upper centrals <input type="checkbox"/> Upper canine (R & L) <input type="checkbox"/> Upper premolars (R & L) <input type="checkbox"/> Upper Molars (R & L) <input type="checkbox"/> Lower centrals <input type="checkbox"/> Lower canine (R & L) <input type="checkbox"/> Lower premolars (R & L) <input type="checkbox"/> Lower Molars (R & L) <input type="checkbox"/> Bitewing premolar (R & L) 	14	28

	<input type="checkbox"/> Bitewing Molar (R & L) <input type="checkbox"/> Occlusal Upper <input type="checkbox"/> Occlusal Lower		
2	Practical exam	1	2
Number of Weeks / Units per Semester		15	30

CCXCIX. Teaching strategies of the course	
<ul style="list-style-type: none"> - Lectures - exercise - Debate - Training - Dialogue and discussion - Brainstorming 	
CCC. Assessment Methods of the Course:	
<ul style="list-style-type: none"> • Mid tem exam • Final tem exam • Practical exam • Attending and assignment 	

CCCI. Assignments:			
No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

CCCII. Schedule of Assessment Tasks for Students During the Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exam	14th	40	40%
1	Mid tem exam	4th	20	20%
3	Attending and assignment	1st to 14th	10	10%
Total			70	70%

1	Practical exam	14	30	30%
Total		30	30%	

CCCIII. Learning Resources:	
46- Required Textbook(s) (maximum two)	
	26- Essentials of dental Radiography and Radiology
27- Essential References	
	6- White SC, Pharoah MJ. Oral Radiology: Principles and Interpretation.
28- Electronic Materials and Web Sites, etc.	
	1. Oral Radiology Journal http:// www.springer.com/medicine/dentistry/journal/11282 2. Journal of oral and maxillofacial radiology http:// www.joomr.org/

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral pathology (2)

Course No.()

2021/2022



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Prepared by:

Dr. Manal Mohammed Al-Hajri

Reviewed by:

Dr.

Quality Assurance

Dean:

XIII. Course Identification and General Information:						
1	Course Title:	Oral pathology (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	3 th Level / 2 nd Semester				
5	Prerequisites:	Oral Pathology 1				
6	Co –requisite:	Oral Diagnosis and Radiology (2)				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

XXIV. Course Description:	
This course will cover broadly oral and maxillofacial lesions on pathological basis that affect soft and hard tissues using lectures and electronic images both clinically and histopathology	

XXXV. Outcomes of the Course	
<ol style="list-style-type: none"> 1. The student should have to understand the pathological processes of oral diseases. 2. The student would have to understand the pathological processes of oral diseases, compare and diagnose based on clinical, radiographical and histopathological findings which involves the oral and paraoral structures. 	

3. They would have learnt and perform the preparation of ground sections oral smears and histology slides.
4. Student would have studied and be able to identify and diagnose the disease based on microscopy.

XXVI. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1,2,4	a1-	Define different pathological conditions related to oral cavity and adjoining structures.
A2-	A1,2,4	a2-	Describe the etiology and pathogenesis of various oral diseases affecting either hard or/and soft tissues.
A3-	A1,2,4	a3-	Recognize the clinical features, microscopic picture and laboratory findings of common oral lesions.
A4-	A1,2,4	a4-	Identify predisposing factors that require intervention to promote oral health.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam
a1-	Define different pathological conditions related to oral cavity and adjoining structures.		Homework
a2-	Describe the etiology and pathogenesis of various oral diseases affecting either hard or/and soft tissues.	Lectures exercise	Exam
a3-	Recognize the clinical features, microscopic picture and laboratory findings of common oral lesions.		Homework

		Debate	
a4-	Identify predisposing factors that require intervention to promote oral health.	Lectures exercise Debate	Exam Homework

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1	A2,4,6,b1,3,4	b1-	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.
B2	A2,4,6,b1,3,4	b2-	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
b1-	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.		
b2-	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1		c1-	Use the light microscope properly.

C2	A2,4,6,b1,3,4	c2-	Demonstrate ability in determining the appropriate investigations required to detect abnormal and pathological oral conditions.
C3	A2,4,6,b1,3,4	c3-	Evaluate the clinical application of oral pathology as it relates to dental hygiene treatment and management of patients
C4	A2,4,6,b1,3,4	c4-	Assess the importance of the procedures for submitting specimens for laboratory diagnosis and ability to interpret diagnostic reports

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1-	Use the light microscope properly.	Lectures exercise Debate	Exam Homework
c2-	Demonstrate ability in determining the appropriate investigations required to detect abnormal and pathological oral conditions.	Lectures exercise Debate	Exam Homework
c3-	Evaluate the clinical application of oral pathology as it relates to dental hygiene treatment and management of patients	Lectures exercise Debate	Exam Homework
c4-	Assess the importance of the procedures for submitting specimens for laboratory diagnosis and ability to interpret diagnostic reports	Lectures exercise Debate	Exam Homework

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills	CILOs in general and transferable skills

		to:	
D1-	D3, 5,6	d1-	Display good communication with patients and health professionals
D2-	D3, 5,6	d2-	Refer a patient for specialist advice or treatment
D3-	D3	d3-	Associate in-group activities to develop baseline understanding and implementation of teamwork performance strategies

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CIOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
d1-	Display good communication with patients.		
d2-	Refer a patient for specialist advice or treatment	Lectures exercise Debate	Exam Homework
d3-	Associate in-group activities to develop baseline understanding and implementation of teamwork performance strategies		

الجامعة الوطنية

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CIOs	Sub-topic List	No. of weeks	Contact hours
1	Potentially Malignant Diseases of Oral Cavity	A1,2,3 , C1,2, 3,4,	<ul style="list-style-type: none"> Definitions Epithelial dysplasia Etiology of potentially malignant diseases Possible Classification of Oral Potentially Malignant Disorders High risk PMLs 	2	4
	Oral Malignant Neoplasms	A1,2,3 , C1,2, 3,4,	<ul style="list-style-type: none"> Malignant Epithelial Neoplasms Malignant connective tissue neoplasms 	2	4

	Odontogenic Tumors	A1,2,3, C1,2,3,4,	<ul style="list-style-type: none"> • Definition • Classification of Odontogenic Tumors • Epithelial Odontogenic Tumors • Connective Tissue Odontogenic Tumors • Mixed Odontogenic Tumors 	2	4
2	Mid-Term Exam	a1 a2, a3		1	2
3	Salivary Gland Pathology	A1,2,3, C1,2,3,4,	<ul style="list-style-type: none"> • Introduction • Developmental Anomalies • Functional Disturbance • Reactive Lesions • Infections • Immune-Mediated Diseases • Salivary Gland Tumors 	2	4
	Bone Pathology	A1,2,3, C1,2,3,4,	<ul style="list-style-type: none"> • Infections of jaws • Fibro - Osseous Lesions • Metabolic Conditions • Giant Cell Lesions • Neoplasms 	3	6
	Infections of the Oral Cavity	A1,2,3, C1,2,3,4,	<ul style="list-style-type: none"> • Specific Bacterial Infections • Viral Infections • Fungal infections. 	3	6
6	Final Exam	A1,2,3, C1,2,3,4,		1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> • Histopathological examination of cysts • Histopathological examination of benign tumors • Histopathological examination of malignant tumors • Histopathological examination of odontogenic tumors 	A1,2,3, 4,b1,2,C1,2, 3,4	8	8

	gland diseases and tumors • Histopathological examination of bone pathology			
2	Practical exam	A1,2,3, 4,b1,2,C1,2, 3,4	1	2
Number of Weeks / Units per Semester			9	18

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CLXXI. Teaching Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment



CLXXII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the instructor	10	a1, a2, a3,c1,2,3,4, d1, d2,d3.
Total			10	

CLXXIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs

1	Mid tem exam	4 th	20	20	A1,2,3
2	Final tem exam	14th	40	40	A1,2,3,4
3	Attending and assignment	1st to 14th	10	10	A1,2,3,4,d1,2,3
Total			70	100%	
Assessment of Practical Part					
1	Practical exam	9	30	30	A1,2,3, 4,b1,2,C1,2, 3,4,
Total			30	100%	

CLXXIV. Learning Resources:

103- Required Textbook(s) (maximum two)

- 17- Purkait, Swapan Kumar. Essentials of Oral Pathology. 3rd ed. Replika: Jaypee Brothers Medical Publishers, 2011.
 18- Sapp J. Philip, Eversole Lewis R. and Wysocki George. Contemporary Oral and Maxillofacial Pathology. 2nd ed. China: Mosby, 2004.

104- Essential References

- 18- Neville, Damm, Allen and Bouquot. Oral and Maxillofacial Pathology. 3rd ed. Philadelphia: W Saunders, 2008.
 19- Cawson R. A. and Odell E. W. Cawson's Essentials of Oral Pathology and Oral Medicine. 8th Edinburgh: Churchill Livingstone, 2008.
 20- 5) Regezi J. A., Sciubba J. J., Jordan R. C.K. Oral pathology : clinical pathologic correlations. ed. Saunders, Elsevier, 2012.

105- Electronic Materials and Web Sites, etc.

Websites: Open e-learning

CLXXV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects:

	or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Plan of Oral pathology (2)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:	Dr.Manal Mohammed Al-Hajri	Office Hours					
Location & Telephone No.:	00967779212007						
E-mail:	dent.manal@yahoo.com	SAT	SUN	MON	TUE	WED	THU

2021/2022

CCCIV. Course Identification and General Information:	
1	Course Title: Oral pathology (2)
2	Course Number & Code:

3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	3 th Level / 2 nd Semester				
5	Prerequisites:	Oral Pathology 1				
6	Co –requisite:	Oral Diagnosis and Radiology (2)				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

CCCV. Course Description:

This course will cover broadly oral and maxillofacial lesions on pathological basis that affect soft and hard tissues using lectures and electronic images both clinically and histopathology

CCCVI. Outcomes of the Course

1. The student should have to understand the pathological processes of oral diseases.
2. The student would have to understand the pathological processes of oral diseases, compare and diagnose based on clinical, radiographical and histopathological findings which involves the oral and paraoral structures.
3. They would have learnt and perform the preparation of ground sections oral smears and histology slides.
4. Student would have studied and be able to identify and diagnose the disease based on microscopy.

CCCVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1	Define different pathological conditions related to oral cavity and adjoining structures.
a2	Describe the etiology and pathogenesis of various oral diseases affecting either hard or/and soft tissues.
a3	Recognize the clinical features, microscopic picture and laboratory findings of common oral lesions.
a4	Identify predisposing factors that require intervention to promote oral health.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis
b2	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1	Use the light microscope properly.
c2	Demonstrate ability in determining the appropriate investigations required to detect abnormal and pathological oral conditions.
c3	Evaluate the clinical application of oral pathology as it relates to dental hygiene treatment and management of patients
c4	Assess the importance of the procedures for submitting specimens for laboratory diagnosis and ability to interpret diagnostic reports

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1	Display good communication with patients and health professionals
d2	Refer a patient for specialist advice or treatment

d3	Associate in-group activities to develop baseline understanding and implementation of teamwork performance strategies
----	---

CCCVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Potentially Malignant Diseases of Oral Cavity	<ul style="list-style-type: none"> • Definitions • Epithelial dysplasia • Etiology of potentially malignant diseases • Possible Classification of Oral Potentially Malignant Disorders • High risk PMLs 	2	4
2	Oral Malignant Neoplasms	<ul style="list-style-type: none"> • Malignant Epithelial Neoplasms • Malignant connective tissue neoplasms 	2	4
3	Odontogenic Tumors	<ul style="list-style-type: none"> • Definition • Classification of Odontogenic Tumors • Epithelial Odontogenic Tumors • Connective Tissue Odontogenic Tumors • Mixed Odontogenic Tumors 	2	4
4	Midterm exam	•	1	2
5	Salivary Gland Pathology	<ul style="list-style-type: none"> • Introduction • Developmental Anomalies • Functional Disturbance • Reactive Lesions • Infections • Immune-Mediated Diseases • Salivary Gland Tumors 	2	4
6	Bone Pathology	<ul style="list-style-type: none"> • Infections of jaws • Fibro - Osseous Lesions • Metabolic Conditions • Giant Cell Lesions • Neoplasms 	3	6
7	Infections of the Oral Cavity	<ul style="list-style-type: none"> • Specific Bacterial Infections • Viral Infections • Fungal infections 	3	6
8	Final exam	•	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> • Histopathological examination of cysts • Histopathological examination of benign tumors • Histopathological examination of malignant tumors • Histopathological examination of odontogenic tumors • Histopathological examination of salivary gland diseases and tumors • Histopathological examination of bone pathology 	1 st to 8 th	8
	Practical exam	9	2
Number of Weeks / Units per Semester		9	18

CCCIX. Teaching strategies of the course	
<ul style="list-style-type: none"> - Lectures - exercise - Debate - Training - Dialogue and discussion - Brainstorming 	
CCCX. Assessment Methods of the Course:	
<ul style="list-style-type: none"> • Mid tem exam • Final tem exam • Practical exam • Attending and assignment 	

CCCXI. Assignments:			
No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

CCCXII. Schedule of Assessment Tasks for Students During the Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exam	14th	40	40%
1	Mid tem exam	4th	20	20%
3	Attending and assignment	1st to 14th	10	10%
Total			70	100%
Assessment of Practical Part				
1	Practical exam	1st,8 th	30	30%
Total			30	30%

CCCXIII. Learning Resources:	
47- Required Textbook(s) (maximum two)	
	29- Purkait, Swapan Kumar. Essentials of Oral Pathology. 3rd ed. Replika: Jaypee Brothers Medical Publishers, 2011. 30- Sapp J. Philip, Eversole Lewis R. and Wysocki George. Contemporary Oral and Maxillofacial Pathology. 2nd ed. China: Mosby, 2004.
31- Essential References	
	7- Neville, Damm, Allen and Bouquot. Oral and Maxillofacial Pathology. 3rd ed. Philadelphia: WB Saunders, 2008. 8- Cawson R. A. and Odell E. W. Cawson's Essentials of Oral Pathology and Oral Medicine. 8th ed. Edinburgh: Churchill Livingstone, 2008. 9- Regezi J. A., Sciubba J. J., Jordan R. C.K. Oral pathology : clinical pathologic correlations. 6th ed. Saunders, Elsevier, 2012.
32- Electronic Materials and Web Sites, etc.	
	Open e-learning

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.

	No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Specification of Pre-clinical Removable Prosthodontics (3)

Course No.()

2021/2022



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Prepared by:

Dr. Abbas M. Al-kebsi

Reviewed by:

Dr.

Quality Assurance

Dean:

VIII. Course Identification and General Information:						
1	Course Title:	Pre-clinical Removable Prosthodontics (3)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Pre-clinical Removable Prosthodontics (2)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr.Abbas M. Al-kebsi				
12	Date of Approval	2020-2021				

XXIX. Course Description:	
<p>This course is designed to acquire the student with component of removable partial denture and sequence of technical procedure involved in fabrication different designs of removable partial dentures. This helps the students to submit a proper written work authorization to dental technician. The student should attend a one lecture followed by a laboratory session.</p>	

CXL. Outcomes of the Course

1. Dental student with sound knowledge on landmarks in edentulous patients would be able to do all lab procedures to make a conventional complete denture.
2. The candidate would be able to adopt ethical principles in Prosthodontic practice. Professional honesty and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient.

Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A2	a1-	Show the knowledge and understanding of the basic principles for the theory and practical related to partial dentures.
A2-	A1	a2-	Demonstrate the anatomical land marks of upper and lower arches and choice of materials used and their relation to partial dentures fabrication.
A3-	A4	a3-	Show the knowledge of the imaging techniques of relevance available to the prosthodontist.
A4-	A4	a4-	Demonstrate the choice of materials used in the production of different prosthesis, along with knowledge of laboratory procedures

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		

to:		. Lab training	· Practical sessions and exam
a1-	Show the knowledge and understanding of the basic principles for the theory and practical related to partial dentures.	· Discussion	· Coursework activities
a2-	Demonstrate the anatomical land marks of upper and lower arches and choice of materials used and their relation to partial dentures fabrication.		
a3-	Show the knowledge of the imaging techniques of relevance available to the prosthodontist.		
a4-	Demonstrate the choice of materials used in the production of different prosthesis, along with knowledge of laboratory procedures		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Collect and integrate information from number of resources to gain a coherent understanding of theory and practice.
B2-	B2	b2-	Know and apply the different steps for partial denture construction for maxillary and mandibular edentulous arches on appropriate the casts.
B3-	B1	b3-	Assimilate information derived from the history, examination and special investigations to produce a diagnosis then accordingly formulate the treatment plan.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills	Teaching strategies/methods	Methods of assessment

b1-	Collect and integrate information from number of resources to gain a coherent understanding of theory and practice.	<ul style="list-style-type: none"> · Lab training · Discussion 	<ul style="list-style-type: none"> · Practical sessions and exam · Coursework activities
b2-	Know and apply the different steps for partial denture construction for maxillary and mandibular edentulous arches on appropriate the casts.		
b3-	Assimilate information derived from the history, examination and special investigations to produce a diagnosis then accordingly formulate the treatment plan.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Diagnose and analyze the practical problems of the partial denture
C2-	C2	c2-	Apply information available in partial denture construction according to international standard.
C3-	C3	c3-	Apply infection control and radiation protection according to international standard.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> · Lectures · Lab training · Discussion 	<ul style="list-style-type: none"> · Written exam · Practical sessions and exam · Coursework activities
c1-	Diagnose and analyze the practical problems of the partial denture		
c2-	Apply information available in partial denture construction according to international standard.		

c3-	Apply infection control and radiation protection according to international standard.		
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(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D7	d1-	Establish communication skills that allow the effective delivery of dental treatment and to identify patient expectations, desires and attitudes.
D2-	D3	d2-	Establish a team work treatment.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> . Lectures . Lab training . Discussion 	<ul style="list-style-type: none"> . Practical sessions and exam . Coursework activities . Assignments
d1-	Establish communication skills that allow the effective delivery of dental treatment and to identify patient expectations, desires and attitudes.		
d2-	Establish a team work treatment.		

LI. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction	a1, b1, b2,	Definitions, Objectives, Indications and contraindications for removable partial dentures	1	2
2	Classification of RPDs	a1, b1,	Rules of Applegate	2	2

		b2,			
3	Steps of partial denture construction	a1, a2, b1,	The removable partial denture equation and Outline of Clinical and Laboratory Procedure for Construction of Partial Dentures	3	2
4	Surveying	a1, a2, b1,	Definition, Objectives of surveying, Surveyor Parts, Principles of surveying, Path of insertion (Path of placement), Factors determining the path of insertion and removal and Selection of the path of insertion.	4	2
5	Components of removable partial dentures	a1, a2, b1,	Maxillary Major Connector	5	2
6	Components of removable partial dentures	a1, a2, b1,	Mandibular Major Connectors and minor connectors	6	2
7	Components of removable partial dentures	a1, a2, b1	Rest and rest seat	7	2
8	Mid-Term Theoretical Exam	a1, a2, b1, b2		8	2
9	Components of removable partial dentures	a1,-a4, b1- b3	Direct retainers [Definition, Means of retention, Types of direct retainers, Types of extra-coronal direct retainers (Suprabulge clasp)]	9	2
10	Components of removable partial dentures	a1,-a4, b1- b3	Direct retainers (Infrabulge clasp)	10	2
11	Components of removable partial dentures	a1,-a4, b1- b3	Indirect retainers (Definition, Forces acting on the denture produce rotational movements, Factors influencing the effectiveness of indirect retainers and Types of indirect retainers)	11	2
12	Components of removable partial dentures	a1,-a4, b1- b3	-Denture base (Definition, Functions of a denture base, Different types of Denture base and finish lines).	12	2

			- Artificial teeth (tooth materials and types)		
13	Designs of RPD	a1,-a4, b1- b3	Basic principles of design	13	2
14	Laboratory procedures for casting of removable partial denture	a1,-a4, b1- b3	Outline of clinical and laboratory procedure for construction of partial dentures (surveying the master cast, preparation of the master cast for duplication, types of blockout and wax pattern)	14	2
15	Revision	a1,-a4, b1- b3		15	2
16	Final Exam	a1,-a4, b1- b3	MCQs	16	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Pouring molds Classification of partially edentulous casts Construction of custom tray with spacer on diagnostic cast	c1-c3, d1, d2	1 st	2
2	-Surveying of study cast -Preparation of guide planes on different types of teeth and re-contouring of abutment teeth Preparation of rest seats	c1-c3, d1, d2	2 nd	2
3	Surveying the master cast to draw the survey line on abutment teeth and to determine the path of placement of the partial denture	c1-c3, d1, d2	3 rd	2
4	Drawing the design of the partial denture and beading of the upper master cast	c1-c3, d1, d2	4 th	2
5	Preparation of the master cast for duplication (modified master cast), blockout (blocking undesirable teeth and tissue undercuts, shaped block out on B and L surfaces) and Relief	c1-c3, d1, d2	5 th	2

6	Duplication of the master cast into a refractory cast (investment cast) Drying the refractory cast then immersion in softened wax (wax dip)	c1-c3, d1, d2	6 th	2
7	Design drawing and Waxing up the different designs of RPD	c1-c3, d1, d2	7 th	2
8	Spruing	c1-c3, d1, d2	8 th	2
9	Investing Wax elimination (burn out) and casting in metal Finishing and polishing	c1-c3, d1, d2	9 th	2
10	(Temporary Removable partial denture) Block out of undesirable undercut in the casts Working of clasps	c1-c3, d1, d2	10 th	2
11	Record base Bite rims Mounting	c1-c3, d1, d2	11 th	2
12	Setting up of teeth Waxing up	c1-c3, d1, d2	12 th	2
13	Flasking Wax elimination and packing Curing	c1-c3, d1, d2	13 th	2
14	Finishing and polishing	c1-c3, d1, d2	14 th	2
15	Final practical exam	c1-c3, d1, d2	15 th	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course

- Lectures
- Exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CLXXVI. Teaching Strategies of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Oral Exam
- Final Practical Exam
- Research
- Group work

CLXXVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Practical work	3 rd - 13 th	20	a1, a2, b1, c1, c2, c3, d2
Total			20	

CLXXVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	4 th - 12 th	10	10%	a1, a2, b1, d2
2	Mid theoretical Exam	8 th	10	10%	a1, a2, b1, b2
3	Final theoretical Exam	16 th	40	40%	a1, a4, b1 - b3
Total			60	60%	
Assessment of Practical Part					
1	Assignment	3 rd - 13 th	20	20%	a1, a2, b1, c1, c2, c3, d2
-	Final-Practical Exam	14 th	20	20%	a1 a2 b1 c1 c2 c3 d2

	Total	40	40%	
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CLXXIX. Learning Resources:	
106-	Required Textbook(s) (maximum two)
	1. Book of the department, 2010, Removable partial dentures technology, 2nd Ed, Egypt, Cairo University press 2. Carr AB, McGivney GP, Brown DT.2005 McCracken's Removable partial Prosthodontic. 11th EdSt. Louis, C V. Mosby
107-	Essential References
	Arthur O. Rahn, John R. Lvanhoe and Kerin D. Plummer. 2009, Text book of Complete Dentures, 6th edition
3.	Electronic Materials and Web Sites, etc.
	5- http://www.quintpub.com/journals/ijp/index.php

CLXXX. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam,

Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Plan (Syllabus) of Pre-clinical Removable Prosthodontics (3)

Course No. (----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU



2021/2022

CCCXIV. Course Identification and General Information:						
1	Course Title:	Pre-clinical Removable Prosthodontics (3)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2		3	
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Pre-clinical Removable Prosthodontics (2)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				

		Department of Dentistry
11	Prepared by:	Dr.Abbas M. Al-kebsi
12	Date of Approval	2020-2021

CCCXV. Course Description:

This course is designed to acquire the student with component of removable partial denture and sequence of technical procedure involved in fabrication different designs of removable partial dentures. This helps the students to submit a proper written work authorization to dental technician. The student should attend a one lecture followed by a laboratory session.

CCCXVI. Outcomes of the Course

1. Dental student with sound knowledge on landmarks in edentulous patients would be able to do all lab procedures to make a conventional complete denture.
2. The candidate would be able to adopt ethical principles in Prosthodontic practice. Professional honesty and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient.

CCCXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Show the knowledge and understanding of the basic principles for the theory and practical related to partial dentures.
a2-	Demonstrate the anatomical land marks of upper and lower arches and choice of materials used and their relation to partial dentures fabrication.
a3-	Show the knowledge of the imaging techniques of relevance available to the prosthodontist.
a4-	Demonstrate the choice of materials used in the production of different prosthesis, along with knowledge of laboratory procedures

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Collect and integrate information from number of resources to gain a coherent understanding of theory and practice.
b2-	Know and apply the different steps for partial denture construction for maxillary and mandibular edentulous arches on appropriate the casts.
b3-	Assimilate information derived from the history examination and special investigations

	to produce a diagnosis then accordingly formulate the treatment plan.
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(C) Professional and Practical Skills	
After participating in the course, students would be able to:	
c1-	Diagnose and analyze the practical problems of the partial denture
c2-	Apply information available in partial denture construction according to international standard.
c3-	Apply infection control and radiation protection according to international standard.

(D) General and Transferable Skills	
After participating in the course, students would be able to:	
d1-	Establish communication skills that allow the effective delivery of dental treatment and to identify patient expectations, desires and attitudes.
d2-	Establish a team work treatment.

CCCXVIII. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction	Definitions, Objectives, Indications and contraindications for removable partial dentures	1	2
2	Classification of RPDs	Rules of Applegate	2	2
3	Steps of partial denture construction	The removable partial denture equation and Outline of Clinical and Laboratory Procedure for Construction of Partial Dentures	3	2
4	Surveying	Definition, Objectives of surveying, Surveyor Parts, Principles of surveying, Path of insertion (Path of placement), Factors determining the path of insertion and removal and Selection of the path of insertion.	4	2
5	Components of removable partial dentures	Maxillary Major Connector	5	2
6	Components of removable	Mandibular Major Connectors and minor	6	2

	partial dentures	connectors		
7	Components of removable partial dentures	Rest and rest seat	7	2
8	Mid-Term Theoretical Exam		8	2
9	Components of removable partial dentures	Direct retainers [Definition, Means of retention, Types of direct retainers, Types of extra-coronal direct retainers (Suprabulge clasp)]	9	2
10	Components of removable partial dentures	Direct retainers (Infrabulge clasp)	10	2
11	Components of removable partial dentures	Indirect retainers (Definition, Forces acting on the denture produce rotational movements, Factors influencing the effectiveness of indirect retainers and Types of indirect retainers)	11	2
12	Components of removable partial dentures	-Denture base (Definition, Functions of a denture base, Different types of Denture base and finish lines). - Artificial teeth (tooth materials and types)	12	2
13	Designs of RPD	Basic principles of design	13	2
14	Laboratory procedures for casting of removable partial denture	Outline of clinical and laboratory procedure for construction of partial dentures (surveying the master cast, preparation of the master cast for duplication, types of blockout and wax pattern)	14	2
15	Revision		15	2
16	Final Exam	MCQs	16	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Pouring molds Classification of partially edentulous casts Construction of custom tray with spacer on diagnostic cast	1 st	2

2	-Surveying of study cast -Preparation of guide planes on different types of teeth and re-contouring of abutment teeth Preparation of rest seats	2 nd	2
3	Surveying the master cast to draw the survey line on abutment teeth and to determine the path of placement of the partial denture	3 rd	2
4	Drawing the design of the partial denture and beading of the upper master cast	4 th	2
5	Preparation of the master cast for duplication (modified master cast), blockout (blocking undesirable teeth and tissue undercuts, shaped block out on B and L surfaces) and Relief	5 th	2
6	Duplication of the master cast into a refractory cast (investment cast) Drying the refractory cast then immersion in softened wax (wax dip)	6 th	2
7	Design drawing and Waxing up the different designs of RPD	7 th	2
8	Spruing	8 th	2
9	Investing Wax elimination (burn out) and casting in metal Finishing and polishing	9 th	2
10	(Temporary Removable partial denture) Block out of undesirable undercut in the casts Working of clasps	10 th	2
11	Record base Bite rims Mounting	11 th	2
12	Setting up of teeth Waxing up	12 th	2
13	Flasking Wax elimination and packing Curing	13 th	2
	Finishing and polishing	14 th	2

15	Final practical exam	15 th	2
Number of Weeks / Units per Semester		15	30

CCCXIX. Teaching strategies of the course

- Lectures
- Exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CCCXX. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Oral Exam
- Final Practical Exam
- Research
- Group work



CCCXXI. Assignments:

No.	Assignments	Week due	Mark
1	Practical work	3 rd - 13 th	20
Total			20

CCCXXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	4 th - 12 th	10	10%
2	Mid theoretical Exam	8 th	10	10%
3	Final theoretical Exam	16 th	40	40%
Total			60	60%

1	Assignment	3 rd - 13 th	20	20%
2	Final-Practical Exam	14 th	20	20%
Total			40	40%

CCCXXIII. Learning Resources:

48- Required Textbook(s) (maximum two)

1. Book of the department, 2010, Removable partial dentures technology, 2nd Ed, Egypt, Cairo University press
2. Carr AB, McGivney GP, Brown DT. 2005 McCracken's Removable partial Prosthodontic. 11th Ed. St. Louis, C V. Mosby

33- Essential References

- Arthur O. Rahn, John R. Lvanhoe and Kerin D. Plummer. 2009, Text book of Complete Dentures, 6th edition

34- Electronic Materials and Web Sites, etc.

- 6- <http://www.quintpub.com/journals/ijp/index.php>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the



	Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery



Course Specification of Pre-clinical Endodontics 2

الجامعة الوطنية

Course No.()

2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

XLII. Course Identification and General Information:						
1	Course Title:	Pre-clinical Endodontics 2				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3		3	
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Pre-clinical Endodontics 1				
6	Co-requisite:	Pre-clinical Operative dentistry 2				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

XLIII. Course Description:	
<p>The second pre-clinical endodontic course covers the physiology and pathology of the human tooth and in particular the dental pulp, root and peri-radicular tissues. Emphasis is placed on the biology of the normal pulp, crown root and peri-radicular tissues and the aetiology, prevention, diagnosis and treatment of diseases that affect these tissues, the laboratory part focused on the Endodontic treatment and procedures preparing, and filling the root canals system on natural molar teeth in phantom lab.</p>	

XLIV. Outcomes of the Course

1. Students would be able to master differential diagnosis and recognize conditions that may require multidisciplinary approach or a clinical situation outside the realm of the specialty, which he or she should be able to recognize and refer to appropriate specialist
2. Students would undertake complete patient monitoring including preoperative as well as post-operative care of the patient.

CXLV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1		a1-	Describe the vital pulp therapy for reversible pulpitis
A4		a2-	Recognize the basic concepts of non-surgical endodontics treatment and their applications.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Discussions Practical Sessions Demonstrations	Written Exam Oral Exam Quizzes
a1-	Describe the vital pulp therapy for reversible pulpitis		
a2-	Recognize the basic concepts of non-surgical endodontics treatment and their applications.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
R1		b1-	Describe the proper use of instruments to

			prevent breakage within the canal.
	B5	b2-	Describe the different producers and materials used for endodontics treatments

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Describe the proper use of instruments to prevent breakage within the canal.	Lecture Discussion Problem-solving	Written Exam Oral Exam Quizzes
b2-	Describe the different producers and materials used for endodontics treatments		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C1	c1-	Perform endodontic treatment on multiple natural upper and lower molar teeth, both handheld and mounted in blocks and dentiform
	C6	c2-	Define a basic set of instruments appropriate for procedures: diagnosis, emergency treatment, canal preparation, and obturation.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1	Perform endodontic treatment on multiple natural upper and lower molar teeth, both handheld and mounted in	Practical Sessions Demonstrations Problem-solving	Oral Exam Observation Practical Exam

	blocks and dentoform	Brainstorming	Assignments
c2	Define a basic set of instruments appropriate for procedures: diagnosis, emergency treatment, canal preparation, and obturation.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D3		d1-	Select appropriate sterilization methods for each instrument type to maintain a safe practice with proper infection control measures
D4		d2-	Learn how to use the latest technology for endodontics treatment

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Discussion Self-Learning	Oral Exam Observation Practical Exam Assignments
d1-	Select appropriate sterilization methods for each instrument type to maintain a safe practice with proper infection control measures		
d2-	Learn how to use the latest technology for endodontics treatment		

VI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of	Contact
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1	Introduction	a1	<ul style="list-style-type: none"> - Course description - Review of objectives and requirements of the course 	1 week	2
2	Intra-canal medicaments and Temporizations	a1,b1	<ul style="list-style-type: none"> - Antibacterial agents - Mode of action - Irrigation and chelation - Calcium hydroxide 	2 weeks	4
3	Microbiology and Immunology	a1,b1	<ul style="list-style-type: none"> - Role of bacteria in pulpal and periradicular diseases - Pathways of pulpal and periradicular infections - Flora of the root canal and periradicular lesions - Methods to control the root canal infection 	2 weeks	4
4	Pulp reaction to caries and dental Procedures	a1,a2,b1	<ul style="list-style-type: none"> - Relationship between pulp and dentin. - Pulpal reactions to dentinal caries - Effect of various restorative procedures on the pulp - Effect of local anesthesia on the pulp - Postoperative sensitivity and preventive measures 	2 weeks	4
5	Mid-Term Theoretical Exam	a1,a2,b1	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
6	Pulpal Diseases	a1, a2, b1, b2	<ul style="list-style-type: none"> - Hypremia - Reversible pulpitis - Irreversible pulpitis - Internal resorption - Chronic hyperplastic pulpitis - Necrotic pulp 	2 weeks	4
7	Peri- Radicular Diseases	a1, a2, b1, b2	<ul style="list-style-type: none"> - Periradicular lesions of pulpal origin (endodontic origin) 	2 weeks	4

			<ul style="list-style-type: none"> - Non-endodontic periradicular lesions - Differential diagnosis 		
8	Vital pulp therapy	a1, a2, b1, b2	<ul style="list-style-type: none"> - Reversible pulpitis treatment - Pulp capping (Indirect, Direct), - Pulpotomy (conventional, partial) - Problem of open apex - Apexogenesis and Apexification 	2 weeks	4
9	Review	a1, a2, b1, b2	<ul style="list-style-type: none"> - Previous topics 	1 week	2
10	Final Theoretical Exam	a1, a2, b1, b2	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Review: Instrumentation and obturation of anterior teeth and premolar 	c1-c2	1 st and 2 nd	6
2	<ul style="list-style-type: none"> - Teeth selection and - Mounting of teeth (extracted teeth) in plaster/acrylic Models (upper and lower molars) - Endodontic Radiography 	c1-c2	3 rd	3
3	<ul style="list-style-type: none"> - Root canal treatment of maxillary molar tooth <ul style="list-style-type: none"> • Access preparation for Posterior teeth • Working length Determination and straight line access • Cleaning and shaping of root canal system for posterior, • Teeth Stepback Technique • Obturation and Temporization 	c1-c2	4 th to 8 th	15
4	<ul style="list-style-type: none"> - Root canal treatment of mandibular molar tooth <ul style="list-style-type: none"> • Access preparation for Posterior teeth • Working length Determination and straight 	c1-c2	9 th to 12 th	15

	<ul style="list-style-type: none"> • Cleaning and shaping of root canal system for posterior, • Teeth Stepback Technique • Obturation and Temporization 			
5	– Review and Repetition of missed out classes	c1-c2	14 th	3
6	– Final Practical Exam	c1-c2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- Discussions
- Demonstrations
- Brainstorming
- Practical Sessions
- Problem-solving
- Self-Learning



CLXXXI. Assessment Methods of the Course:

- Written Exam
- Oral Exam
- Quizzes
- Practical Exam
- Assignments
- Observation

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CLXXXII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	- Practical Requirements and Laboratory work during the Practical Sessions	1 st to 14 th	10	a2, b1, b2, c1, c2, d1, d2
Total			10	

CLXXXIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes 1 & 2	4 th and 12 th	10	10 %	a1,b2
2	Mid-Term Theoretical Exam	8 th	20	20 %	a1,a2,b1
3	Final Theoretical Exam	16 th	40	40 %	a1, a2, b1, b2
Total			70	70%	
Assessment of Practical Part					
1	Assignments	1 st to 14 th	10	10 %	a2, b1, b2,c1, c2, d1, d2
2	Final Practical Exam	15 th	20	20 %	c1-c2
Total			30	30%	

CLXXXIV. Learning Resources:

108- Required Textbook(s) (maximum two)

- 1- NishaGarg, Amit Garg.,2019: Textbook of Endodontics, 4th Edition, Jaypee Brothers Medical Publishers (P) Ltd, India
- 2- B. Suresh Chandra, V. Gopikrishna, 2014: Grossman's Endodontic Practice, 13th Edition, Wolters Kluwer, India

109- Essential References

- 21- Ilan R; John I I. 2019: Ingles Endodontics, 7th Edition, Raleigh, North Carolina, PMPH USA
- 22- Torabinejad et al., 2016: Endodontics. Principles and Practice, 6th Edition., Elsevier, China.

110- Electronic Materials and Web Sites, etc.

- 43- American Association of endodontists:
www.aae.org
- 44- Journal of Endodontics
<https://www.jendodon.com/>
- 45- International Endodontic Journal
<https://onlinelibrary.wiley.com/journal/13652591>

CLXXXV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness:

	class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

الجامعة الوطنية

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCCXXIV. Course Identification and General Information:

1	Course Title:	Pre-clinical Endodontics 2				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Pre-clinical Endodontics 1				
6	Co-requisite:	Pre-clinical Operative dentistry 2				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CCCXXV. Course Description:

The second pre-clinical endodontic course covers the physiology and pathology of the human tooth and in particular the dental pulp, root and peri-radicular tissues. Emphasis is placed on the biology of the normal pulp, crown root and peri-radicular tissues and the aetiology, prevention, diagnosis and treatment of diseases that affect these tissues, the laboratory part focused on the Endodontic treatment and procedures preparing, and filling the root canals system on natural molar teeth in phantom lab.

CCCXXVI. Outcomes of the Course

1. Students would be able to master differential diagnosis and recognize conditions that may require multidisciplinary approach or a clinical situation outside the realm of the specialty, which he or she should be able to recognize and refer to appropriate specialist
2. Students would undertake complete patient monitoring including preoperative as well as post operative care of the patient.

CCCXXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the vital pulp therapy for reversible pulpitis
a2-	Recognize the basic concepts of non-surgical endodontics treatment and their applications.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Describe the proper use of instruments to prevent breakage within the canal.
b2-	Describe the different producers and materials used for endodontics treatments

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Perform endodontic treatment on multiple natural upper and lower molar teeth, both handheld and mounted in blocks and dentoform
c2-	Define a basic set of instruments appropriate for procedures: diagnosis, emergency treatment, canal preparation, and obturation.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Select appropriate sterilization methods for each instrument type to maintain a safe practice with proper infection control measures
d2-	Learn how to use the latest technology for endodontics treatment

CCCXXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction	<ul style="list-style-type: none"> Course description Review of objectives and requirements of the course 	1 week	2
2	Intra-canal medicaments	<ul style="list-style-type: none"> Antibacterial agents 	2	4

		<ul style="list-style-type: none"> - Mode of action - Irrigation and chelation - Calcium hydroxide 	s	
3	Microbiology and Immunology	<ul style="list-style-type: none"> - Role of bacteria in pulpal and periradicular diseases - Pathways of pulpal and periradicular infections - Flora of the root canal and periradicular lesions - Methods to control the root canal infection 	2 weeks	4
4	Pulp reaction to caries and dental Procedures	<ul style="list-style-type: none"> - Relationship between pulp and dentin. - Pulpal reactions to dentinal caries - Effect of various restorative procedures on the pulp - Effect of local anesthesia on the pulp - Postoperative sensitivity and preventive measures 	2 weeks	4
5	Mid-Term Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
6	Pulpal Diseases	<ul style="list-style-type: none"> - Hypremia - Reversible pulpitis - Irreversible pulpitis - Internal resorption - Chronic hyperplastic pulpitis - Necrotic pulp 	2 weeks	4
7	Peri- Radicular Diseases	<ul style="list-style-type: none"> - Periradicular lesions of pulpal origin (endodontic origin) - Non-endodontic periradicular lesions - Differential diagnosis 	2 weeks	4
8	Vital pulp therapy	<ul style="list-style-type: none"> - Reversible pulpitis treatment - Pulp capping (Indirect, Direct), - Pulpotomy (conventional, partial) - Problem of open apex 	2 weeks	4

9	Review	- Previous topics	1 week	2
10	Final Theoretical Exam	- MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	- Review: Instrumentation and obturation of anterior teeth and premolar	1 st and 2 nd	6
2	- Teeth selection and - Mounting of teeth (extracted teeth) in plaster/acrylic Models (upper and lower molars) - Endodontic Radiography	3 rd	3
3	- Root canal treatment of maxillary molar tooth <ul style="list-style-type: none"> • Access preparation for Posterior teeth • Working length Determination and straight line access • Cleaning and shaping of root canal system for posterior, • Teeth Stepback Technique • Obturation and Temporization 	4 th to 8 th	15
4	- Root canal treatment of mandibular molar tooth <ul style="list-style-type: none"> • Access preparation for Posterior teeth • Working length Determination and straight line access • Cleaning and shaping of root canal system for posterior, • Teeth Stepback Technique • Obturation and Temporization 	9 th to 13 th	15
5	- Review and Repetition of missed out classes	14 th	3
6	- Final Practical Exam	15 th	3
Number of Weeks / Units per Semester			

CCCXXIX. Teaching strategies of the course
<ul style="list-style-type: none"> - Lectures - Discussions - Demonstrations - Project/termine

- Practical Sessions
- Problem-solving
- Self-Learning

CCCXXX. Assessment Methods of the Course:

- Written Exam
- Oral Exam
- Quizzes
- Practical Exam
- Assignments
- Observation

CCCXXXI. Assignments:

No.	Assignments	Week due	Mark
1	- Practical Requirements and Laboratory work during the Practical Sessions	1 st to 14 th	10
Total			10

CCCXXXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes 1 & 2	4 th and 12 th	10	10 %
2	Mid-Term Theoretical Exam	8 th	20	20 %
3	Final Theoretical Exam	16 th	40	40 %
Total			70	70%
Assessment of Practical Part				
1	Assignments	1 st to 14 th	10	10 %
2	Final Practical Exam	15 th	20	20 %
Total			30	30%

CCCXXXIII. Learning Resources:	
49- Required Textbook(s) (maximum two)	
	1- NishaGarg, Amit Garg.,2019: Textbook of Endodontics, 4th Edition, Jaypee Brothers Medical Publishers (P) Ltd, India 2- B. Suresh Chandra, V. Gopikrishna, 2014: Grossman's Endodontic Practice, 13 th Edition, Wolters Kluwer, India
35- Essential References	
	1- Ilan R; John I I. 2019: Ingles Endodontics, 7th Edition, Raleigh, North Carolina, PMPH USA 2- Torabinejad et al., 2016: Endodontics. Principles and Practice, 6th Edition., Elsevier, China.
3- Electronic Materials and Web Sites, etc.	
	1- American Association of endodontists: www.aae.org 2- Journal of Endodontics https://www.jendodon.com/ 3- International Endodontic Journal https://onlinelibrary.wiley.com/journal/13652591

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	

	Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Pre-clinical Fixed Prosthodontics 2

Course No.()

2021/2022



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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

LVII. Course Identification and General Information:						
1	Course Title:	Pre-clinical Fixed Prosthodontics 2				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3		3	
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Pre-clinical Fixed Prosthodontics 1				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

LVIII. Course Description:
<p>This is the second pre-clinical fixed prosthodontic course It provide the students with the principles and techniques required for the preparation of teeth, and fabrication of casting. This course prepares the student for the practice of sound clinical FP through a patient simulation phase of mechanical and technical procedures. It will focus on teaching the students the actual technical skills required in preparing teeth for the various restorations informing fixed prosthodontics and how to use the required relevant tools and diagnostic aids during the fabrication of such restorations. Students will perform tooth preparation for PFM crown on typodont anterior teeth.</p>

XLIX. Outcomes of the Course
<ol style="list-style-type: none"> 1.The candidate would be able to communicate in simple understandable language with the patient and explain the principles of fixed prosthodontics to the patient 2. Dental graduate with knowledge on prosthetics needs of patients, fabrication of all prosthodontic modes of treatment

CL. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A1	a1-	Describe the various techniques, materials and derived treatment plans for FPD.
	A2	a2-	Describe the rationale of material selection for different types of Fixed prosthodontic replacements.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Demonstrations Discussions, Practical Sessions	Written Exams Quizzes Oral exam Observation
a1-	Describe the various techniques, materials and derived treatment plans for FPD.		
a2-	Describe the rationale of material selection for different types of Fixed prosthodontic replacements.		

(B) Intellectual Skills			
Alignment of Course CILOs to PILOs in intellectual skills:			
PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B1	b1-	Evaluate different types of tooth preparations for different abutment conditions and positions.
	B	b2-	Determining the treatment plan for the replacement of missing teeth in FPD
		b3-	Differentiate correct and incorrect defective

		laboratory steps (different dies and wax up procedure, investing and casting techniques and the finishing and polishing procedure's for FPD).
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Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Evaluate different types of tooth preparations for different abutment conditions and positions.	Lectures	Written Exams
b2-	Determining the treatment plan for the replacement of missing teeth in FPD	Demonstrations	Quizzes
		Discussions,	Oral exam
b3-	Differentiate correct and, or defective laboratory steps (different dies and wax up procedure, investing and casting techniques and the finishing and polishing procedure's for FPD).	Practical Sessions	Observation
		Self-learning	Practical exams

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C1	c1-	Perform the steps of preparation on model for porcelain fused to metal (PFM) crowns for anterior teeth.
	C2	c2-	Plan the laboratory technique needed for the construction for single units.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills	Teaching strategies/methods	Methods of assessment
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After participating in the course, students would be able to:		Practical Sessions Demonstrations Discussions	Practical Exams Oral exams, Direct observation Semester work assignments
c1	Perform the steps of preparation on model for porcelain fused to metal (PFM) crowns for anterior teeth.		
c1	Plan the laboratory technique needed for the construction for single units.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D3	d1-	Communicate properly with each other and with colleagues in a team work and display appropriate professional behavior
	D2	d2-	Illustrate E-learning, self-teaching using recent technology and present thoughts and ideas to enhance his/her own learning skills
	D4	d3-	Manage time during lab work

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Discussion Seminars Self-Learning Presentation Demonstrations	Direct observation Oral exams, Practical Exams Semester work
d1-	Communicate properly with each other and with colleagues in a team work and display appropriate professional behavior		
d2-	Illustrate E-learning, self-teaching using recent technology and present thoughts and ideas to enhance his/her own learning skills		
d3-	Manage time during lab work		

LI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Waxing Patterns	a2, a3, b3, c1, c2, d1,d2	<ul style="list-style-type: none"> - Direct technique - Indirect technique - Wax pattern fabrication - Coping - Axial contour and emergence profile - Occlusal morphology - Cusp to marginal ridge arrangement - Cusp to fossa arrangement (description, advantages and disadvantages) - Margin finishing 	1 week	2
2	Investing and casting	a1,a2, a3,b3, c1, c2, c3,d2	<ul style="list-style-type: none"> - Investing Materials - Requirements of an investment material - Shrinkage compensation - Sprue former attachment - Investing procedure & cleaning of casting - Burnout (wax elimination) - Casting - Common casting defects and their causes 	2 weeks	4
3	Fitting, finishing and delivery of cast restoration		<ul style="list-style-type: none"> - Significance of finishing and polishing cast restorations - Abrasives and polishing materials - Preliminary finishing (Try-in) of metal restorations in sequence - Proximal contacts - Margins (completeness of seating) - Occlusion 	2 weeks	4

			<ul style="list-style-type: none"> - Contours - Esthetics 		
4	Cementation		<ul style="list-style-type: none"> - Types of dental cement - Resin luting agents - Step –by –step procedure of cementation 	2 weeks	4
5	Mid-Term Theoretical Exam	a1, a2, a3, b1, b2	MCQs and essay questions	1 week	2
6	Interim restoration	a1, a2, b2, b3, c2, d1	<ul style="list-style-type: none"> - Definition - Indication - Ideal requirements - Types of provisional restorations prefabricated vs. custom restorations - Direct, indirect and combination techniques: advantages & disadvantages - Resins for provisional restorations - Techniques for fabricating custom made provisional restorations (FPD) 	2 weeks	4
7	Diagnosis	a1,a3, a4 b2, c1,c3, d2	<ul style="list-style-type: none"> - Health history - TMJ and occlusal evaluation - Intraoral examination - Diagnostic casts - Full mouth radiograph 	1 week	2
8	Treatment planning for the replacement of missing teeth		<ul style="list-style-type: none"> - Selection of type of prosthesis: - RPD - Conventional FPD - Resin bonded FPD - Implant supported FPD - No prosthetic treatment 	1 week	2
9	Abutment evaluation	a1, b1, c1, c2, c3, d2	<ul style="list-style-type: none"> - Crown/root ratio - Root configuration - Periodontal ligament area - Factors Affecting the Selection 	1 week	2

			of Abutment Teeth –		
10	Pontic Design and connectors	a1, a2, b2, b3, c2, d1,d2	– Definition – Ideal requirement – Different pontic designs – Pontic materials – Types of Connectors – Solder joints and other connectors	2 weeks	4
11	Final Theoretical Exam	a1, a2, a3, b1, b2, c1, c2, c3, d1	– MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	laboratory preparation of upper central incisor	a1, b1, c1, c2, d2	Week 2,3	6
2	laboratory preparation of upper lateral incisor	a1, a2 b1, b3 c1, c2,d1,d2	Week 4,5	6
3	laboratory preparation of upper canine	a1, a2 b1, b3 c1, c2,d1, d2	Week 6 to week 8	9
4	laboratory preparation of lower central incisor	a1, a2 b1, b3 c1, c2,d1,d2	Week 10,11	6
5	laboratory preparation of lower lateral incisor	a1, a2 b1, b3 c1, c2,d1,d2	Week 12	3
6	laboratory preparation of lower canine	a1, a2 b1, b3 c1, c2,d1,d2	Week 13,14	6
7	Final practical exam	a1, a2, a3,	Week 15	3

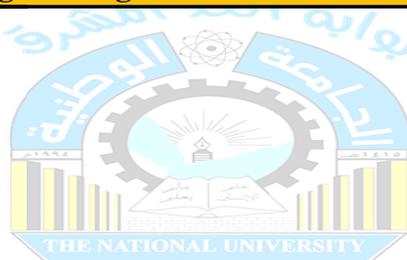
		c2, d1, d2		
Number of Weeks / Units per Semester			14	42

VI. Teaching strategies of the course

- Lectures
- Demonstrations
- Discussions
- Seminars
- Practical Sessions
- Self-Learning
- Seminars

CLXXXVI. Teaching Strategies of the Course:

- Final Written Exam
- Midterm Exam
- Oral Assessment
- Quizzes
- Practical Exam
- Semester work and Assignments



CLXXXVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Practical Requirements	2 nd to 14 th	10	a1, a2, a3, b1, b2, c1, c2, d1, d2
Total			10	

CLXXXVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	6 th and 12 th	10	10%	a1, a2, a3, b1, b2, c1, c2, c3

2	Mid-Term Theoretical Exam	8 th	20	20%	a1, a2, a3, b1, b2
3	Final Theoretical Exam	16 th	40	40%	a1, a2, a3, b1, b2, c1, c2, c3, d1
Total			70	70%	
Assessment of Practical Part					
1	Assignments	2 nd to 14 th	10	10%	a1, a2, a3, b1, b2
2	Final Practical Exam	15 th	20	20%	a1, a2, a3, b1, b2, c1, c2, c3, d1, d3
Total			30	100%	

CLXXXIX. Learning Resources:

111- Required Textbook(s) (maximum two)

- 1- Shillingburg,H,T,etal. :Fundamentals of Fixed Prosthodontics, Last Edition. Quintessence.
- 2- Stephen F Rosenstiel, Martin F Land, Junhei Fujimoto, 2006: Contemporary Fixed Prosthodontics, 4th ed., Mosby Inc. ISBN

112- Essential References

- 1 -Shillingburg HT, Jacobi R, Brackett SE,: Fundamental of Tooth Preparation for Cast Metal and Porcelain. 2nd edition, Quintessence ISBN 0-86715-157-9 SF
- 2 - Smith et al.: Planning and Making Crown and Bridges Last Edition.

113- Electronic Materials and Web Sites, etc.

- 46- The British Society of Prosthodontics
http://www.bsspd.org/For*patients/fixed*prosthodontics.aspx
- 47- European Prosthodontic Association (EPA)
<http://www.epadental.org/patients/fixed-prosthodontics>

CXC. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.

	No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCCXXXIV. Course Identification and General Information:					
1	Course Title:	Pre-clinical Fixed Prosthodontics 2			
2	Course Number & Code:				
3	Credit hours:	C.H			Total
		Th.	Pr.	Tr.	
		2	3		3
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester			
5	Prerequisites:	Pre-clinical Fixed Prosthodontics 1			
6	Co -requisite:	None			
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)			
8	Language of teaching the course:	English			
9	Study System:	Semester based System			
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry			
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami			
12	Date of Approval	2020-2021			

CCCXXXV. Course Description:
<p>This is the second pre-clinical fixed prosthodontic course It provide the students with the principles and techniques required for the preparation of teeth, and fabrication of casting. This course prepares the student for the practice of sound clinical FP through a patient simulation phase of mechanical and technical procedures. It will focus on teaching the students the actual technical skills required in preparing teeth for the various restorations informing fixed prosthodontics and how to use the required relevant tools and diagnostic aids during the fabrication of such restorations. Students will perform tooth preparation for PFM crown on typodont anterior teeth.</p>

CCCXXXVI. Outcomes of the Course

1. The candidate would be able to communicate in simple understandable language with the patient and explain the principles of fixed prosthodontics to the patient
2. Dental graduate with knowledge on prosthetics needs of patients, fabrication of all prosthodontic modes of treatment

CCCXXXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Describe the various techniques, materials and derived treatment plans for FPD. |
| a2- | Describe the rationale of material selection for different types of Fixed prosthodontic replacements. |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | Evaluate different types of tooth preparations for different abutment conditions and positions. |
| b2- | Determining the treatment plan for the replacement of missing teeth in FPD |
| b3- | Differentiate correct and, or defective laboratory steps (different dies and wax up procedure, investing and casting techniques and the finishing and polishing procedure's for FPD). |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | Perform the steps of preparation on model for porcelain fused to metal (PFM) crowns for anterior teeth. |
| c2- | Plan the laboratory technique needed for the construction for single units. |

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| d1- | Communicate properly with each other and with colleagues in a team work and display appropriate professional behavior |
|-----|---|

	enhance his/her own learning skills
d3-	Manage time during lab work

CCCXXXVIII. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Waxing Patterns	<ul style="list-style-type: none"> - Direct technique - Indirect technique - Wax pattern fabrication - Coping - Axial contour and emergence profile - Occlusal morphology - Cusp to marginal ridge arrangement - Cusp to fossa arrangement (description, advantages and disadvantages) - Margin finishing 	1 week	2
2	Investing and casting	<ul style="list-style-type: none"> - Investing Materials - Requirements of an investment material - Shrinkage compensation - Sprue former attachment - Investing procedure & cleaning of casting - Burnout (wax elimination) - Casting - Common casting defects and their causes 	2 weeks	4
3	Fitting, finishing and delivery of cast restoration	<ul style="list-style-type: none"> - Significance of finishing and polishing cast restorations - Abrasives and polishing materials - Preliminary finishing (Try-in) of metal restorations in sequence - Proximal contacts - Margins (completeness of seating) - Occlusion - Contours 	2 weeks	4

		- Esthetics		
4	Cementation	- Types of dental cement - Resin luting agents - Step –by –step procedure of cementation	2 week s	4
5	Mid-Term Theoretical Exam	MCQs and essay questions	1 week	2
6	Interim restoration	- Definition - Indication - Ideal requirements - Types of provisional restorations prefabricated vs. custom restorations - Direct, indirect and combination techniques: advantages & disadvantages - Resins for provisional restorations - Techniques for fabricating custom made provisional restorations (FPD)	2 week s	4
7	Diagnosis	- Health history - TMJ and occlusal evaluation - Intraoral examination - Diagnostic casts - Full mouth radiograph	1wee k	2
8	Treatment planning for the replacement of missing teeth	- Selection of type of prosthesis: - RPD - Conventional FPD - Resin bonded FPD - Implant supported FPD - No prosthetic treatment	1 week	2
9	Abutment evaluation	- Crown/root ratio - Root configuration - Periodontal ligament area - Factors Affecting the Selection of Abutment Teeth -	1wee k	2
10	Pontic Design and connectors	- Definition - Ideal requirement - Different pontic designs - Pontic materials	2 week s	4

		<ul style="list-style-type: none"> - Types of Connectors - Solder joints and other connectors 		
11	Final Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	laboratorypreparation of upper central incisor	Week 2,3	6
2	laboratorypreparation of upper lateral incisor	Week 4,5	6
3	laboratorypreparation of upper canine	Week 6 to week 8	9
4	laboratorypreparation of lower central incisor	Week 10,11	6
5	laboratorypreparation of lower lateral incisor	Week 12	3
6	laboratorypreparation of lower canine	Week 13,14	6
7	Final practical exam	Week 15	3
Number of Weeks / Units per Semester		14	42

CCCXXXIX. Teaching strategies of the course
<ul style="list-style-type: none"> - Lectures - Demonstrations - Discussions - Seminars - Practical Sessions - Self-Learning - Seminars
CCCXL. Assessment Methods of the Course:

- Final Written Exam
- Midterm Exam
- Oral Assessment
- Quizzes
- Practical Exam
- Semester work and Assignments

CCCXLI. Assignments:

No.	Assignments	Week due	Mark
1	Practical Requirements	2 nd to 14 th	10
Total			

CCCXLII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	6 th and 12 th	10	10%
2	Mid-Term Theoretical Exam	8 th	20	20%
3	Final Theoretical Exam	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Assignments	2 nd to 14 th	10	10%
2	Final Practical Exam	15 th	20	20%
Total			30	30%

CCCXLIII. Learning Resources:

50- Required Textbook(s) (maximum two)

- 1- Shillingburg,H,T,etal, :Fundamentals of Fixed Prosthodontics, Last Edition. Quintessence.

	2- Stephen F Rosenstiel, Martin F Land, Junhei Fujimoto, 2006: Contemporary Fixed Prosthodontics, 4 th ed., Mosby Inc. ISBN
36- Essential References	
	. 1 -Shillingburg HT, Jacobi R, Brackett SE,: Fundamental of Tooth Preparation for Cast Metal and Porcelain. 2 nd edition, Quintessence ISBN 0-86715-157-9 SF 2 - Smith et al.: Planning and Making Crown and Bridges Last Edition.
37- Electronic Materials and Web Sites, etc.	
	1- The British Society of Prosthodontics http://www.bsspd.org/For*patients/fixed*prosthodontics.aspx 2- European Prosthodontic Association (EPA) http://www.epadental.org/patients/fixed-prosthodontics

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam



assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Pre-clinical Operative Dentistry (3)



Course No.()

2021/2022

الجامعة الوطنية
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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

CLII. Course Identification and General Information:						
1	Course Title:	Pre-clinical Operative Dentistry (3)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3		3	
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Pre-clinical Operative Dentistry (2)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CLIII. Course Description:

This is the last pre-clinical operative dentistry course provided during the second semester of the third year that representing different restorative procedures in operative dentistry preparing the students for the clinical courses. students will be trained to prepare posterior compound & complex cavities and restore with Amalgam and advanced restorative materials like resin composite and modified glass ionomer cement on artificial teeth, know the differences between direct and indirect restorations, know the basic principles and technique of cavity preparation for cast gold and direct gold restorations and apply rubber dam on the manikin.

CLIV. Outcomes of the Course

1. Students would be able to describe aetiology, pathophysiology, diagnosis and management of common restorative situations, that will include contemporary management of dental caries, non-carious lesions and hypersensitivity.
2. Students would be able to take proper chair side history, examine the patient and perform medical and dental diagnostic procedures; as well as perform relevant tests and interpret them to come to a reasonable diagnosis about the dental condition

CLV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1		a1-	Identify the applied aspects of glass ionomer cement and the various characteristics of the adhesive bonding systems and composite materials
A2		a2-	Describe the protection systems pulp-dentin complex
A4		a3-	Understand the concepts of cavity preparations of direct and indirect restorations and the various steps involved in it

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Discussions Practical Sessions	Written Exams Practical Exam Oral discussion Quizzes
a1-	Identify the applied aspects of glass ionomer cement and the various characteristics of the adhesive bonding systems and composite materials		
a2-	Describe the protection systems pulp-		

	dentin complex		
a3-	Understand the concepts of cavity preparations of direct and indirect restorations and the various steps involved in it		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B1	b1-	Identify different types of Carious and non-Carious Lesions that affect tooth structure
	B5	b2-	Differentiate between different dental materials used in operative dentistry

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Identify different types of Carious and non-Carious Lesions that affect tooth structure	Lectures Demonstrations Discussions	Written Exams Quizzes Oral discussion
b2-	Differentiate between different dental materials used in operative dentistry		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C2	c1-	Prepare different types of compound and complex cavities and restoring using different materials and technique

	C4	c2-	perform appropriate preventive and restorative treatment options
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Practical Sessions Demonstrations	Direct observation Oral discussion Practical Exams Semester work
c1	Prepare different types of compound and complex cavities and restoring using different materials and technique		
c1	perform appropriate preventive and restorative treatment options		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D3	d1-	Communicate with dental assistants and colleagues easily
	D1	d2-	Advocate proper self-evaluation.
	D4	d3-	Manage time, set priorities and work to prescribed time limits.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Demonstrations Practical Sessions Self-Learning	Semester work Discussions
d1-	Communicate with dental assistants and colleagues easily		
d2-	Advocate proper self-evaluation.		

d3-	Manage time, set priorities and work to prescribed time limits.		
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VI. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Direct Posterior Composite Restorations	a1, b2, c1, d3	<ul style="list-style-type: none"> – Indication and contraindications – advantages, and disadvantages – Preparation types and Restorative Procedures: Class I, and Class II – Preparation of operating site. – Shade selection and Pulp protection – Finishing and polishing 	2 weeks	4
2	Preventive Resin Restorations	a2, b2, c2, d3	<ul style="list-style-type: none"> – Pit and Fissures Sealants – Fissures Sealant procedure – Class VI preparation 	1 week	2
3	None Caries Lesions	a2, b1, b2,	<ul style="list-style-type: none"> – Definitions and types – Causes – Signs and symptoms – Bruxism: etiology and clinical presentation – Diagnosis and prevention of tooth surface loss 	1 week	2
4	Glass ionomer restorative material	a1, b2, c1, d3	<ul style="list-style-type: none"> - Conventional, modified, Compomers and smart materials - Types - Differences between conventional GI, resin modified GI, and Compomers. 	1 week	2

			<ul style="list-style-type: none"> - Advantages of resin modified GI over conventional type. - Clinical Manipulation - Sandwich technique 		
5	Complex Amalgam Restoration	c1, d2, d3	<ul style="list-style-type: none"> - Introduction - Pin less-retained complex amalgam preparations, - The additional means of retention: <ul style="list-style-type: none"> - retentive grooves, amalgam pins, slots, steps, circumferential slots. - Restorative Technique - Cusps capping 	2 weeks	4
6	Midterm Examination	a1, a2, b2, d2,	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
7	Pin retained Amalgam Restorations	a3, c1, d2, d3	<ul style="list-style-type: none"> - Advantages, disadvantages, - Indications, contraindications, - Types of pins and technique of placement - Tooth preparation - clinical applications - Complications and failure 	2 weeks	4
8	Pulp Protection therapy	a1, a2, b1, c2, d3	<ul style="list-style-type: none"> - Definitions and material properties - Indications for Insulating materials placed under amalgam and composite. - Pulp-dentin complex reaction to cavity liners and varnishes - dentine adhesive systems as cavity liners. 	1 week	2
9	Provisional Restoration	a3, b2, c2, d3	<ul style="list-style-type: none"> - Definition. - Objectives and Requirements - Provisional restoration materials. - Techniques 	1 week	2
10	Principles of Tooth Preparation for Indirect	a3, b2, c1, d3	<ul style="list-style-type: none"> - Definitions. - Classification 	1 week	2

	Restorations		<ul style="list-style-type: none"> - Materials - Indications, contraindications, - advantages and disadvantages. 		
11	Tooth Preparation for Cast Gold Inlay and only Restorations	a3, b2, c1, d3	<ul style="list-style-type: none"> - Indications for cast gold inlay, onlay - Steps of preparation for Cast Gold Inlay and Onlay Restoration - Difference between amalgam and inlay preparation. 	1 week	2
12	Review	a1, a2, a3, b1, b2	<ul style="list-style-type: none"> - All Previews topics 	1 week	2
13	Final Theoretical Exam	a1, a2, a3, b1, b2	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	- Demonstration and practice: Rubber Dam Application on Mandibular Teeth and Class II (compound) Amalgam Cavity Preparation	b2, c1, c2, c3, d3	Week 1	3
2	- Practice: Class III Cavity Preparation for Composite Resin on Natural Tooth	b2, c1, c2, c3, d3	Week 2	3
3	- Practice : Class IV (Traumatic) Cavity Preparations and Restorations for Composite Resin on Natural Tooth	b2, c1, c2, c3, d3	Week 3	3
4	- Practice: Class V Facial Cavity Preparation and Composite Resin / GIC Restoration Closed and open Sandwich Technique	b2, c1, c2, c3, d3	Week 4 and 5	6
5	- Demonstration and practice: Class I Cavity Preparation and Restoration for Composite Resin	b2, c1, c2, c3, d3	Week 6	3
6	- Demonstration and practice: Class II (MOD) Posterior Composite Cavity Preparation &	b2, c1, c2, c3, d3	Week 7	3

	Restoration (Conventional)			
7	– Demonstration and practice: Class II Slot Posterior Composite Cavity Preparation & Restoration	b2, c1, c2, c3, d3	Week 8	3
8	– Demonstration and practice: Compound & complex cavity preparation and restorations using direct restorations Class II (MOD) Amalgam Cavity Preparation with (MB) Cusp Removal and (DL) Cusp Reduction	b2, c1, c2, c3, d3	Week 9 and 10	6
9	– Demonstration and practice: Complex cavity preparation and restorations and Pin Placement	b2, c1, c2, c3, d3	Week 11	3
10	– Demonstration and practice: Class II (MOD) Preparation for indirect restorations Inlay and only	b2, c1, c2, c3, d3	Week 12 and 13	6
11	– Practice: Preparation and restoration: Amalgam and Composite (general)	b2, c1, c2, c3, d3	Week 14	3
12	– Final Practical Exam	b1, b2, c1, c2, c3, d3	Week 15	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- Demonstrations
- Practical Sessions
- Self-Learning

CXCI. Teaching Strategies of the Course:

- Written Exam
- Quizzes
- Practical Exam
- Semester work (practical Requirements)
- Oral discussion

– Direct observation

CXCII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester work: - practical laboratory work and Requirements	Week 2 to week 14	10	b1, b2, c1, c2, c3, d3
Total			10	

CXCIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	Week 6	10	10 %	a1, a2, b2, d2, d3
2	Mid-Term Theoretical Exam	Week 8	20	20 %	a1, a2, b2, d2,
3	Final Theoretical Exam	Week 16	40	40 %	a1, a2, a3, b1, b2
Total			70	70%	
Assessment of Practical Part					
1	Assignments	Week 2 to week 14	10	10%	b1, b2, c1, c2, c3, d3
2	Final Practical Exam	Week 15	20	20 %	c1, c2, d1, d2, d3
Total			30	30%	

CXCIV. Learning Resources:

114-	Required Textbook(s) (maximum two)
	48- Theodore Roberson, Harald O. Heymann, 2013: Sturdevant's Art and Science of

	Operative Dentistry, 6th Edition, Mosby, USA. 49- Hilton, Thomas J.; Ferracane, Jack L., and Broome, James, 2013: Fundamentals of Operative Dentistry: A Contemporary Approach, Fourth Edition, Quintessence, USA.
115- Essential References	
	23- A. J. E. Qualtrough, Julian Satterthwaite, Leean Morrow, and Paul Brunton, 2009: Principles of Operative Dentistry, John Wiley & Sons, USA. 24- NishaGarg, AmitGarg, 2015: Textbook of Operative Dentistry. 3rd Edition, JP Medical Pub, India. 25- Harpreet Singh, 2011: Essentials of Preclinical Conservative Dentistry, 2nd Edition, Walter Kluwer, Netherland.
116- Electronic Materials and Web Sites, etc.	
	1- Journal of dentistry https://www.journals.elsevier.com/journal-of-dentistry 2- Operative Dentistry Journal https://www.meridian.allenpress.com/operative-dentistry 3- Dental Materials Journal https://www.researchgate.net 4- Digital Restorative Dentistry https://www.springer.com/gp/book

CXCV. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments

CCCXLIV. Course Identification and General Information:

1	Course Title:	Pre-clinical Operative Dentistry (3)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	Pre-clinical Operative Dentistry (2)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CCCXLV. Course Description:

This is the last pre-clinical operative dentistry course provided during the second semester of the third year that representing different restorative procedures in operative dentistry preparing the students for the clinical courses. students will be trained to prepare posterior compound & complex cavities and restore with Amalgam and advanced restorative materials like resin composite and modified glass ionomer cement on artificial teeth, know the differences between direct and indirect restorations, know the basic principles and technique of cavity preparation for cast gold and direct gold restorations and apply rubber dam on the manikin.

CCCXLVI. Outcomes of the Course

1. Students would be able to describe aetiology, pathophysiology, diagnosis and management of common restorative situations, that will include contemporary management of dental caries, non-carious lesions and hypersensitivity.
2. Students would be able to take proper chair side history, examine the patient and perform medical and dental diagnostic procedures; as well as perform relevant tests and interpret them to come to a reasonable diagnosis about the dental condition

CCCXLVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Identify the applied aspects of glass ionomer cement and the various characteristics of the adhesive bonding systems and composite materials |
| a2- | Describe the protection systems pulp-dentin complex |
| a3- | Understand the concepts of cavity preparations of direct and indirect restorations and the various steps involved in it |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | Identify different types of Carious and non-Carious Lesions that affect tooth structure |
| b2- | Differentiate between different dental materials used in operative dentistry |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| c1- | Prepare different types of compound and complex cavities and restoring using different materials and technique |
| c2- | perform appropriate preventive and restorative treatment options |

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| d1- | Communicate with dental assistants and colleagues easily |
| d2- | Advocate proper self-evaluation. |
| d3- | Manage time, set priorities and work to prescribed time limits |

CCCXLVIII. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Direct Posterior Composite Restorations	<ul style="list-style-type: none"> – Indication and contraindications – advantages, and disadvantages – Preparation types and Restorative Procedures: Class I, and Class II – Preparation of operating site. – Shade selection and Pulp protection – Finishing and polishing 	2 weeks	4
2	Preventive Resin Restorations	<ul style="list-style-type: none"> – Pit and Fissures Sealants – Fissures Sealant procedure – Class VI preparation 	1 week	2
3	None Caries Lesions	<ul style="list-style-type: none"> – Definitions and types – Causes – Signs and symptoms – Bruxism: etiology and clinical presentation – Diagnosis and prevention of tooth surface loss 	1 week	2
4	Glass ionomer restorative material	<ul style="list-style-type: none"> - Conventional, modified, Compomers and smart materials - Types - Differences between conventional GI, resin modified GI, and Compomers. - Setting reaction of each type. - Advantages of resin modified GI over conventional type. - Clinical Manipulation - Sandwich technique 	1 week	2
5	Complex Amalgam	<ul style="list-style-type: none"> – Introduction – Pin less-retained complex amalgam preparations, 	2 weeks	4

	Restoration	<ul style="list-style-type: none"> - The additional means of retention: - retentive grooves, amalgam pins, slots, steps, circumferential slots. - Restorative Technique - Cusps capping 		
6	Midterm Examination	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
7	Pin retained Amalgam Restorations	<ul style="list-style-type: none"> - Advantages, disadvantages, - Indications, contraindications, - Types of pins and technique of placement - Tooth preparation - clinical applications - Complications and failure 	2 weeks	4
8	Pulp Protection therapy	<ul style="list-style-type: none"> - Definitions and material properties - Indications for Insulating materials placed under amalgam and composite. - Pulp-dentin complex reaction to cavity liners and varnishes - dentine adhesive systems as cavity liners. 	1 week	2
9	Provisional Restoration	<ul style="list-style-type: none"> - Definition. - Objectives and Requirements - Provisional restoration materials. - Techniques 	1 week	2
10	Principles of Tooth Preparation for Indirect Restorations	<ul style="list-style-type: none"> - Definitions. - Classification - Materials - Indications, contraindications, - advantages and disadvantages. 	1 week	2
11	Tooth Preparation for Cast Gold Inlay and only Restorations	<ul style="list-style-type: none"> - Indications for cast gold inlay, onlay - Steps of preparation for Cast Gold Inlay and Onlay Restoration - Difference between amalgam and inlay preparation. 	1 week	2
12	Review	<ul style="list-style-type: none"> - All Previous topics 	1 week	2
13	Final Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1	2

			week	
Number of Weeks /and Units per Semester				

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	– Demonstration and practice: Rubber Dam Application on Mandibular Teeth and Class II (compound) Amalgam Cavity Preparation	Week 1	3
2	– Practice: Class III Cavity Preparation for Composite Resin on Natural Tooth	Week 2	3
3	– Practice : Class IV (Traumatic) Cavity Preparations and Restorations for Composite Resin on Natural Tooth	Week 3	3
4	– Practice: Class V Facial Cavity Preparation and Composite Resin / GIC Restoration Closed and open Sandwich Technique	Week 4 and 5	6
5	– Demonstration and practice: Class I Cavity Preparation and Restoration for Composite Resin	Week 6	3
6	– Demonstration and practice: Class II (MOD) Posterior Composite Cavity Preparation & Restoration (Conventional)	Week 7	3
7	– Demonstration and practice: Class II Slot Posterior Composite Cavity Preparation & Restoration	Week 8	3
8	– Demonstration and practice: Compound & complex cavity preparation and restorations using direct restorations Class II (MOD) Amalgam Cavity Preparation with (MB) Cusp Removal and (DL) Cusp Reduction	Week 9 and 10	6
9	– Demonstration and practice: Complex cavity preparation and restorations and Pin Placement	Week 11	3
10	– Demonstration and practice: Class II (MOD) Preparation for indirect restorations Inlay and only	Week 12 and 13	6
11	– Practice: Preparation and restoration: Amalgam and Composite (general)	Week 14	3

12	- Final Practical Exam	Week 15	3
Number of Weeks / Units per Semester		15	45

CCCXLIX. Teaching strategies of the course

- Lectures
- Demonstrations
- Practical Sessions
- Self-Learning

CCCL. Assessment Methods of the Course:

- Written Exam
- Quizzes
- Practical Exam
- Semester work (practical Requirements)
- Oral discussion
- Direct observation



CCCLI. Assignments:

No.	Assignments	Week due	Mark
1	Semester work: - practical laboratory work and Requirements	Week 2 to week 14	10
Total			10

CCCLII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	Week 6	10	10 %
2	Mid-Term Theoretical Exam	Week 8	20	20 %
3	Final Theoretical Exam	Week 16	40	40 %

Total		70	70%
Assessment of Practical Part			
1	Assignments	Week 2 to week 14	10
			10%
2	Final Practical Exam	Week 15	20
			20 %
Total		30	30%

CCCLIII. Learning Resources:

51- Required Textbook(s) (maximum two)

- 1- Theodore Roberson, Harald O. Heymann, 2013: Sturdevant's Art and Science of Operative Dentistry, 6th Edition, Mosby, USA.
- 2- Hilton, Thomas J.; Ferracane, Jack L., and Broome, James, 2013: Fundamentals of Operative Dentistry: A Contemporary Approach, Fourth Edition, Quintessence, USA.

38- Essential References

- 1- A. J. E. Qualtrough, Julian Satterthwaite, Leean Morrow, and Paul Brunton, 2009: Principles of Operative Dentistry, John Wiley & Sons, USA.
- 2- Nisha Garg, Amit Garg, 2015: Textbook of Operative Dentistry. 3rd Edition, JP Medical Pub, India.
- 3- Harpreet Singh, 2011: Essentials of Preclinical Conservative Dentistry, 2nd Edition, Walter Kluwer, Netherland.

4- Electronic Materials and Web Sites, etc.

- 1- Journal of dentistry
<https://www.journals.elsevier.com › journal-of-dentistry>
- 2- Operative Dentistry Journal
<https://www.meridian.allenpress.com/operative-dentistry>
- 3- Dental Materials Journal
<https://www.researchgate.net>
- 4- Digital Restorative Dentistry
<https://www.springer.com/gp/book>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness:

	A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Psychology

Course No.()

2021/2022



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Prepared by:

Dr. AbdulhafedhSaifAlkhamery

Reviewed by:

Dr. Mokhtar Abdul
Hafize Al-ghorafi

Quality Assurance

Dean:



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LVII. Course Identification and General Information:						
1	Course Title:	Psychology				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		<i>1</i>				<i>1</i>
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester				
5	Prerequisites:	None				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. AbdulhafedhSaifAlkhamery				
12	Date of Approval	2020-2021				

LVIII. Course Description:
<p>This course is designed to provide the student with the necessary basics knowledge in definitions of behavioral sciences, characteristics of behavior, its approaches, its branches, motives for behavior, emotions, cognitive processes, perception, learning, remembering, psychological development, social development, emotional growth, personality, beliefs values, and attitudes. At the end of the course, the candidate will be able to deal with essence of psychology, the cognitive, and the affective aspects of human behavior.</p>

CLIX. Outcomes of the Course
<ol style="list-style-type: none"> 1) Recognize the essence of psychology; its importance, fields and research methods 2) Clarify subjects related to integrated aspects of human behavior such as cognitive and learning styles. 3) Differentiate between self-concept, self-awareness and self-understanding 4) Analyze formal and informal relationships. 5) Develop appropriate professional attitudes, communication and problem solving techniques 6) Deal with students having different psychological disorders

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1.	Describe the scientific basis of dentistry and the relevant biomedical and behavioral sciences which form the basis for understanding human growth, development and health.	a1-	Understand the important and applications of behavioral science in the medical and health fields.
A1.	Describe the scientific basis of dentistry and the relevant biomedical and behavioral sciences which form the basis for understanding human growth, development and health.	a2-	Describe the component of cognitive, affective and psychomotor aspects of human behavior and integration among them

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		-Lectures - Discussion	-Quizzes -Midterm Exam -Final Written Exam
a1-	Understand the important and applications of behavioral science in the medical and health fields.		
a2-	Describe the component of cognitive, affective and psychomotor aspects of human behavior and integration among them		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1	Incorporate theoretical basic biomedical,	b1-	Differentiate between intellectual

	clinical signs and symptoms for appropriate understanding of disease and its management.		Sciences, and other behavior.
B1	Incorporate theoretical basic biomedical, behavioral and dental sciences with the clinical signs and symptoms for appropriate understanding of disease and its management.	b2-	Analyze formal and uniformal relationships.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Differentiate between self-behavioral Sciences, and other behavior.	-Lectures - Discussion	-Quizzes -Midterm Exam -Final Written Exam
b2-	Analyze formal and uniformal relationships.		

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(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1.	Obtain and record a comprehensive history, perform an appropriate physical examination, and carry out different investigations to reach a correct diagnosis and treatment.	c1-	Deal with students having different Psychological disorders.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills	Teaching strategies/methods	Methods of assessment
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After participating in the course, students would be able to:		Group learning	student self-assessment
c1	Deal with students having different psychological disorders.		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D3.	Demonstrate leadership and teamwork skills with colleagues and other oral health team for effective delivery of oral health care.	d1-	Work effectively as part of a team to collect data and/or produce reports and Presentations.
D1.	Commit to continuous education, self-development and lifelong learning to remain updated with advances in dental practice.	d2-	Develop the decision-making and problem solving abilities.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
d1-	Work effectively as part of a team to collect data and/or produce reports and presentations	- Discussion - Self Learning - Presentation - Seminars	Research Homework Group work
d2-	Develop the decision making and problem solving abilities		

XI. Course Content:

I – Course Topics/Items:

a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction	a1, a2,b2	<ul style="list-style-type: none"> – An introduction to the behavioural sciences – Acquaintance 	1	1
2	The importance of studying behavioral science in the medical and health fields	a1,a2, b1	<ul style="list-style-type: none"> – Definitions of the behavioural sciences – The importance of behavioural sciences in the medical fields – Science goals – The goal of distant psychology – Characteristics of the humanitarian response – Conditions for establishing knowledge – Ethical considerations in handling behaviour 	1	1
3	The Scientific Method	a1, a2,b1, b2,d1	<ul style="list-style-type: none"> – Introspection Method – Experimental method – The semi-experimental method – Descriptive method 	1	1
4	Branches of Psychology and Behavioral Sciences	a1,b2	<ul style="list-style-type: none"> – The most important theoretical branches – The most important practical branches 	1	1
5	Motives for human behavior	a1, a2,b1, b2,d1	<ul style="list-style-type: none"> – Motives – Needs – Motivation classification – First: the internal physiological motives – Second, the social physiological motives – Third: individual psychological motives 	1	1

			– Fourth: Psychosocial motives		
6	Emotions	a1, a2,b1, b2	– The meaning of emotions – How to appreciate and distinguish emotions – Aspects of emotions – Duration of emotions	1	
7	Cognitive Processes	a1, a2,b1, b2,d1	– Sense – Sensory organs – Attention – Factors affecting attention distribution – Perception – The most important laws of perception	1	1
8	Mid-Term Theoretical Exam	a1, a2,b1, b2		1	1
9	Learning	a1, a2,b1, b2,d2	– Learning levels – Methods of quality education – Foundations of good study	1	1
10	Memory	a1, a2,b1	– Definition of remembrance – Types of memory – Stages of memory work – Forgetting – Factors of forgetting	1	1
11	Psychological development	a1,b2,	– Aspects of human growth and advancement – Principles and laws of growth – Factors affecting growth and advancement – Childhood – Adolescence	1	1
12	<i>Personality</i>	a1,b2, d1	– Definitions – Theories of personality – personality dimensions	1	1

			<ul style="list-style-type: none"> - Psychological and personal phenomenon - How to benefit from these facts 		
13	Psychosocial aspects in behavioral phenomena	a1, a2,b1, b2,d2	<ul style="list-style-type: none"> - Beliefs - Values - Attitudes - Changing directions according to the characteristics of the individual - Changing directions according to it's characteristics - Negative and positive attitudes 	1	1
14	Applications of behavioral sciences in the fields of medicine and health sciences	a1, a2,b1, b2,d1	<ul style="list-style-type: none"> - Applications of behavioural sciences in human medicine - Applications of behavioural sciences in dentistry - Applications of behavioural sciences in clinical pharmacy 	2	2
15	Final Theoretical Exam	a1, a2,b1, b2		1	1
Number of Weeks /and Units per Semester				16	16

VI. Teaching strategies of the course

- Lectures
- Discussion
- Self Learning
- Presentation
- Seminars
- Group learning

CXCVI. Teaching Strategies of the Course:

- Quizzes
- Midterm Exam

- Final Written Exam
- Student Self-assessment
- Research
- Homework
- Group work

CXCVII. Assignments:				
No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	– Assignment 1: Search about applications of behavioral sciences in medicine	3 rd week	10	a1 ,b1,d1,d2
Total			10	



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CXCVIII. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Assignments	3 rd week	10	10%	a1 ,b1,d1,d2
2	Quizzes 1 & 2	4 th and 6 th week	10	10%	a1 ,a2,b1,b2
3	Mid-Term Theoretical Exam	8 th week	20	20%	a1 ,a2,b1,b2
4	Final Theoretical Exam	16 th	60	60%	a1 ,a2,b1,b2,d1

		week			
5					
	Total		100	100%	

CXCIX. Learning Resources:

117- Required Textbook(s) (maximum two)

19-	Alkamery, AbdulhafedhSaif, 2020: Behavioral Sciences. Emirates International University, Sanaa.
20-	Nolen-Hoeksema, Susan, et al. Introduction to psychology. Cengage Learning, 2014..

118- Essential References

1.	Coon, Dennis, John O. Mitterer, and Tanya S. Martini. <i>Introduction to psychology: Gateways to mind and behavior</i> . Cengage Learning, 2021.
26-	2.COON, Dennis; MITTERER, John O.; MARTINI, Tanya S. <i>Introduction to psychology: Gatew to mind and behavior</i> . Cengage Learning, 2021.

119- Electronic Materials and Web Sites, etc.

	https://www.psychologicalscience.org/index.php/news
27-	https://umdearborn.edu/casl/undergraduate-programs/areas-study/behavioral-sciences

CC. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism:



	assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



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Faculty of Dentistry
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Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Psychology

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCCLIV. Course Identification and General Information:

1	Course Title:	Psychology					
2	Course Number & Code:						
3	Credit hours:	C.H				Total	
		Th.	Pr.	Tr.	Seminar.		
		1					1
4	Study level/ semester at which this course is offered:	3 rd Level / 2 nd Semester					
5	Prerequisites:	None					
6	Co-requisite:	None					
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery					
8	Language of teaching the course:	English					
9	Study System:	Semester based System					
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry					
11	Prepared by:	Dr. AbdulhafedhSaifAlkhamery					
12	Date of Approval	2020-2021					

CCCLV. Course Description:

behavioral sciences, characteristics of behavior, its approaches, and its branches, motives for behavior, emotions, cognitive processes, perception, learning, remembering, psychological development, social development, emotional growth, personality, beliefs values, and attitudes. At the end of the course, the candidate will be able to deal with essence of psychology, the cognitive, and the affective aspects of human behavior.

CCCLVI. Outcomes of the Course

- 1) Recognize the essence of psychology; its importance, fields and research methods
- 2) Clarify subjects related to integrated aspects of human behavior such as cognitive and learning styles.
- 3) Differentiate between self-concept, self-awareness and self-understanding
- 4) Analyze formal and uniformal relationships.
- 5) Develop appropriate professional attitudes, communication and problem solving techniques
- 6) Deal with students having different psychological disorders

CCCLVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Understand the important and applications of behavioral science in the medical and health fields. |
| a2- | Describe the component of cognitive, affective and psychomotor aspects of human behavior and integration among them |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | Differentiate between self-behavioral Sciences, and other behavior. |
| b2- | Analyze formal and uniformal relationships. |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | Deal with students having different psychological disorders |
|-----|---|

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Work effectively as part of a team to collect data and/or produce reports and Presentations
d2-	Develop the decision making and problem solving abilities

CCCLVIII. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction	<ul style="list-style-type: none"> – An introduction to the behavioural sciences – Acquaintance 	1	1
2	The importance of studying behavioral science in the medical and health fields	<ul style="list-style-type: none"> – Definitions of the behavioural sciences – The importance of behavioural sciences in the medical fields – Science goals – The goal of distant psychology – Characteristics of the humanitarian response – Conditions for establishing knowledge – Ethical considerations in handling behaviour 	1	1
3	The Scientific Method	<ul style="list-style-type: none"> – Introspection Method – Experimental method – The semi-experimental method – Descriptive method – 	1	1
4	Branches of Psychology and Behavioral Sciences	<ul style="list-style-type: none"> – The most important theoretical branches – The most important practical branches 	1	1
5	Motives for human behavior	<ul style="list-style-type: none"> – Motives – Needs – Motivation classification – First: the internal physiological motives – Second, the social physiological 	1	1

		<ul style="list-style-type: none"> - Third: individual psychological motives - Fourth: Psychosocial motives 		
6	Emotions	<p>The meaning of emotions</p> <ul style="list-style-type: none"> - How to appreciate and distinguish emotions - Aspects of emotions - Duration of emotions 	1	
7	Cognitive Processes	<ul style="list-style-type: none"> - Sense - Sensory organs - Attention - Factors affecting attention distribution - Perception - The most important laws of perception 	1	1
8	Mid-Term Theoretical Exam	-	1	1
9	Learning	<ul style="list-style-type: none"> - Learning levels - Methods of quality education - Foundations of good study 	1	1
10	Memory	<ul style="list-style-type: none"> - Definition of remembrance - Types of memory - Stages of memory work - Forgetting - Factors of forgetting 	1	1
11	Psychological development	<ul style="list-style-type: none"> - Aspects of human growth and advancement - Principles and laws of growth - Factors affecting growth and advancement - Childhood - Adolescence 	1	1
12	Personality	<p>Definitions</p> <ul style="list-style-type: none"> - Theories of personality - personality dimensions 	1	1

		- How to benefit from these facts		
13	Psychosocial aspects in behavioral phenomena	<ul style="list-style-type: none"> - Beliefs - Values - Attitudes - Changing directions according to the characteristics of the individual - Changing directions according to it's characteristics - Negative and positive attitudes 	1	1
14	Applications of behavioral sciences in the fields of medicine and health sciences	<ul style="list-style-type: none"> - Applications of behavioural sciences in human medicine - Applications of behavioural sciences in dentistry - Applications of behavioural sciences in clinical pharmacy 	2	2
15	Final Theoretical Exam	Final Theoretical Exam	1	1
Number of Weeks /and Units per Semester			16	16

CCCLIX. Teaching strategies of the course

- Lectures
- Discussion
- Self-Learning
- Presentation
- Seminars
- Group learning

CCCLX. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Student Self-assessment
- Research
- Homework
- Group work

CCCLXI. Assignments:

No.	Assignments	Week due	Mark
1	Assignment 1: Search about applications of behavioural sciences in medicine	3rd week	10
Total			10

CCCLXII. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	
1	Assignments	3rd week	10	10%	
2	Quizzes 1 & 2	4th and 6 th week	10	10%	
3	Mid-Term Theoretical Exam	8th week	20	20%	
4	Final Theoretical Exam	16th week	60	60%	
Total			100	100%	

CCCLXIII. Learning Resources:	
52- Required Textbook(s) (maximum two)	
	39- Alkamery, <u>Abdulhafedh</u> Saif, 2020: Behavioral Sciences. Emirates International University, Sanaa. 40- 2. Nolen-Hoeksema, Susan, et al. Introduction to psychology. Cengage Learning, 2014.
41- Essential References	
	10- 1. Coon, <u>Dennis</u> , John O. Mitterer, and Tanya S. Martini. <i>Introduction to psychology: Gateways to mind and behavior</i> . Cengage Learning, 2021. 11- 2. COON, Dennis; MITTERER, John O.; MARTINI, Tanya S. Introduction to psychology: Gatewa mind and behavior. Cengage Learning, 2021..
42- Electronic Materials and Web Sites, etc.	
	29- https://www.psychologicalscience.org/index.php/news

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Clinical Endodontic (1)

Course No.()

2021/2022



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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:



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LXII. Course Identification and General Information:						
1	Course Title:	Clinical Endodontic (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2		3	
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Pre-clinical Endodontics 2				
6	Co -requisite:	Clinical Operative dentistry 1 periodontics 1				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

LXIII. Course Description:	
<p>This course is the first clinical course in Endodontics provided for the fourth year dental students during the first semester, the course provides the students with the theoretical and practical skills of Endodontics, the scope of the course includes diagnosis, treatment planning and pain management onpatients, Traumatic injuries, Endo emergencies and management, Clinical Endodontic procedures and. restoration of endodontically treated tooth. The practical clinical part includes Root canal treatment in anterior teeth and premolars (Access cavity, root canal preparation, instrumentation and obturation).</p>	

LXIV. Outcomes of the Course	

restorative treatment and basic endodontic procedures.

2. To provide restorative care in dentistry in a competent and ethical manner which will contribute to the oral health and general well being of the individual and community.

CLXV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding	CILOs in knowledge and understanding
After completing this program, students would be able to:	After participating in the course, students would be able to:
A1, A3	a1- Recognize how to maintain safe environment with proper infection control measures and sterilization
A2	a2- Describe in detail the Clinical Endodontic procedures and the different diagnosis methods and tools used in relation to the different clinical cases and treatment planning

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		
a1- Recognize how to maintain safe environment with proper infection control measures and sterilization	Lectures Discussion Practical Sessions Demonstrations	Written Exam Oral Exam Quizzes
a2- Describe in detail the Clinical Endodontic procedures and the different diagnosis methods and tools used in relation to the different clinical cases and treatment planning		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PIOs in intellectual skills		CIOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B1	b1-	Demonstrate the importance of restoration of endodontically treated tooth and the management of traumatized permanent teeth
	B2	b2-	Interpret diagnostic findings for treatment of pulpal disease and differentiate the source of pain

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CIOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Demonstrate the importance of restoration of endodontically treated tooth and the management of traumatized permanent teeth	Lectures Discussion Problem-solving	Written Exam Oral Exam Quizzes
b2-	Interpret diagnostic findings for treatment of pulpal disease and differentiate the source of pain	Practical Sessions	

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(C) Professional and Practical Skills

Alignment of CIOs to PIOs in professional and practical skills

PIOs in professional and practical skills		CIOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C2	c1-	Provide practical clinical Root canal treatment in anterior teeth and premolars (Access cavity, root canal preparation, instrumentation and obturation) on patients
	C1	c2-	Perform emergency endodontic treatment and manage pain for patient's using

		clinical diagnostic tools	
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations Problem-solving Brainstorming	Oral examination Observation Practical examinations Assignments
c1	Provide practical clinical Root canal treatment in anterior teeth and premolars (Access cavity, root canal preparation, instrumentation and obturation) on patients		
c1	Perform emergency endodontic treatment and manage pain for patient's using clinical diagnostic tools		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D3	d1-	Create appropriate professional communication skills with the patients and staff.
	D4	d2-	Manage time, set priorities and work to prescribed time limits.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Discussion	Oral examination Assignments Practical examinations Observation
d1-	Create appropriate professional communication skills with the patients and staff.		
d2-	Manage time set priorities and work to		

	prescribed time limits.		
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VI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Infection control and Isolation	a1,b1, d2	<ul style="list-style-type: none"> – Definitions – Personal hygiene practices – Infection control strategy and vaccination – cleaning, disinfection, and sterilization procedures – management of needle stick and sharps injuries – Types of isolation – Rubber dam Application – Local anesthesia and supplementary injection techniques 	2	4
2	Clinical Diagnostic Procedures	a2,b2	<ul style="list-style-type: none"> – Systematic approach to endodontic diagnosis. – Patient history (chief complaint, present dental illness and medical history) – Clinical examination (vital signs, extra and intra- oral examination, clinical tests and periodontal evaluation) – Radiographic examination (interpretation, and importance of radiograph in diagnosis) – Case Selection and treatment planning 	3	6
3	pain and treatment strategies	a2,b1	<ul style="list-style-type: none"> – Definitions – Pain types 	2	4

			<ul style="list-style-type: none"> - Factors affecting endodontic anesthesia, - Anesthetic management of pulpal or periapical pathoses - Anesthesia difficulties in endodontics 		
4	Mid-Term Theoretical Exam	a1,a2, b1,b2, d2	<ul style="list-style-type: none"> - MCQs and essay questions 	1	2
5	Clinical Endodontic procedures	a2,b2, d1,d2	<ul style="list-style-type: none"> - Instruments in Modern Endodontic - Diagnostic instruments - Instruments used during access preparation - Root canal exploring & enlarging instruments - Canal preparation techniques - Timing, Instruments and Preparation of obturation. - Methods of obturation 	1	2
6	Post endodontic restorations	a2,b1, d1,d2	<ul style="list-style-type: none"> - Special features of endodontically treated teeth. - Restorative materials and options - Pretreatment evaluation and treatment strategy 	1	2
7	Odontogenic pain and non-Odontogenic pain	a1, b1, d2	<ul style="list-style-type: none"> - Definitions - Pain types - Odontogenic pain <ul style="list-style-type: none"> • pulp pains • periradicular pains • periodontal lesion pains - Non - Odontogenic pain <ul style="list-style-type: none"> • neurovascular pains • neuropathic pains • musculoskeletal pains 	2	4

8	Management of Endodontic Emergencies	a2,b1, b2,d1, d2	<ul style="list-style-type: none"> - Emergency classifications - Emergency endodontic management. - Analgesics and antibiotics - Cracked and fractured teeth 	1	2
9	Traumatic Injuries I, II	a2,b1, b2,d1, d2	<ul style="list-style-type: none"> - Classification - Radiographic examination. - Clinical management. - Follow-up after dental trauma 	2	4
10	Final Theoretical Exam	a1, a2, b1, b2, d1, d2	<ul style="list-style-type: none"> - MCQs and essay questions 	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Introduction of the practical endodontics - Clinical rolls - Infection control and serializations - Patient and operator positions 	a1,b2,c1	1 st	3
2	<ul style="list-style-type: none"> - History, examination, diagnosis, treatment plan and patents record (Case sheets) ▪ Root canal treatment of maxillary and mandibular anterior tooth (using hand technique) ▪ Root canal treatment of maxillary and mandibular premolars. ((using hand technique) ▪ Indirect pulp capping for reversible pulpitis 	b1, b2, c2, d1, d2	2 nd -14 th	39
3	Final Practical Exam	a1, b1 b2, c1, c2, d1, d2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- Discussions
- Demonstrations
- Brainstorming
- Practical Sessions
- Problem-solving

CCI. Teaching Strategies of the Course:

- Written Exam
- Oral Exam
- Quizzes
- Practical Exam
- Assignments
- Observation

CCII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Practical Requirements and Clinical work during the Practical Sessions	1 st - 14 th	20	b1, b2, c1, c2, d1, d2
Total			20	

CCIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes 1 & 2	6 th and 12 th	10	10 %	a1, a2, b1, b2,
2	Mid-Term Theoretical Exam	8 th	20	20 %	a1,a2,b1,b2,d2
3	Final Theoretical Exam	16 th	40	40 %	a1, a2, b1, b2, d1, d2
Total			70	70%	

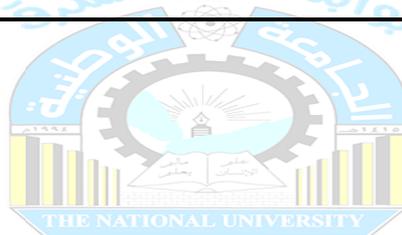
Assessment of Practical Part					
1	Assignments	1 st to 14 th	20	20 %	a1,b1, b2, c1, c2, d1, d2
2	Final Practical Exam	15 th	10	10 %	a1,b1, b2, c1, c2, d1, d2
Total			30	30%	

CCIV. Learning Resources:	
120-	Required Textbook(s) (maximum two)
	21- NishaGarg, AmitGarg, 2019: Textbook of Endodontics, 4th Edition, Jaypee Brothers Medical Publishers (P) Ltd, India 22- B. Suresh Chandra, V. Gopikrishna, 2014 : Grossman's Endodontic Practice, 13 th Edition, Wolters Kluwer, India
121-	Essential References
	50- Ilan R; John I I. 2019: Ingles Endodontics, 7th Edition, Raleigh, North Carolina, PMPH USA 51- Torabinejad et al., 2016: Endodontics. Principles and Practice, 6 th Edition., Elsevier, China
122-	Electronic Materials and Web Sites, etc.
	28- American Association of endodontists: www.aae.org 29- Journal of Endodontics https://www.jendodon.com/ 30- International Endodontic Journal 31- https://onlinelibrary.wiley.com/journal/13652591

CCV. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.



4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



الجامعة الوطنية

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Clinical Endodontic (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU



الجامعة الوطنية

CCCLXIV. Course Identification and General Information:

1	Course Title:	Clinical Endodontic (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Pre-clinical Endodontics 2				
6	Co -requisite:	Clinical Operative dentistry 1				
		periodontics 1				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				

8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami
12	Date of Approval	2020-2021

CCCLXV. Course Description:

This course is the first clinical course in Endodontics provided for the fourth year dental students during the first semester, the course provides the students with the theoretical and practical skills of Endodontics, the scope of the course includes diagnosis, treatment planning and pain management on patients, Traumatic injuries, Endo emergencies and management, Clinical Endodontic procedures and restoration of endodontically treated tooth. The practical clinical part includes Root canal treatment in anterior teeth and premolars (Access cavity, root canal preparation, instrumentation and obturation).

CCCLXVI. Outcomes of the Course

1. To educate and impart clinical skill to students which will help them in providing quality restorative treatment and basic endodontic procedures.
2. To provide restorative care in dentistry in a competent and ethical manner which will contribute to the oral health and general well being of the individual and community.

CCCLXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Recognize how to maintain safe environment with proper infection control measures and sterilization |
| a2- | Describe in detail the Clinical Endodontic procedures and the different diagnosis methods and tools used in relation to the different clinical cases and treatment planning |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | Demonstrate the importance of restoration of endodontically treated tooth and the |
|-----|---|

	management of traumatized permanent teeth
b2-	Interpret diagnostic findings for treatment of pulpal disease and differentiate the source of pain

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Provide practical clinical Root canal treatment in anterior teeth and premolars (Access cavity, root canal preparation, instrumentation and obturation) on patients
c2-	Perform emergency endodontic treatment and manage pain for patient's using clinical diagnostic tools

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Create appropriate professional communication skills with the patients and staff.
d2-	Manage time, set priorities and work to prescribed time limits.



CCCLXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Infection control and Isolation	<ul style="list-style-type: none"> – Definitions – Personal hygiene practices – Infection control strategy and vaccination – cleaning, disinfection, and sterilization procedures – management of needle stick and sharps injuries – Types of isolation – Rubber dam Application – Local anesthesia and supplementary 	2	4

2	Clinical Diagnostic Procedures	<ul style="list-style-type: none"> - Systematic approach to endodontic diagnosis. - Patient history (chief complaint, present dental illness and medical history) - Clinical examination (vital signs, extra and intra- oral examination, clinical tests and periodontal evaluation) - Radiographic examination (interpretation, and importance of radiograph in diagnosis) - Case Selection and treatment planning 	3	6
3	pain and treatment strategies	<ul style="list-style-type: none"> - Definitions - Pain types - Factors affecting endodontic anesthesia, - Anesthetic management of pulpal or periapical pathoses - Anesthesia difficulties in endodontics 	2	4
4	Mid-Term Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1	2
5	Clinical Endodontic procedures	<ul style="list-style-type: none"> - Instruments in Modern Endodontic - Diagnostic instruments - Instruments used during access preparation - Root canal exploring & enlarging instruments - Canal preparation techniques - Timing, Instruments and Preparation of obturation. - Methods of obturation 	1	2
6	Post endodontic restorations	<ul style="list-style-type: none"> - Special features of endodontically treated teeth. - Restorative materials and options - Pretreatment evaluation and treatment strategy 	1	2
7	Odontogenic pain and non-	<ul style="list-style-type: none"> - Definitions 	2	4

		<ul style="list-style-type: none"> - Odontogenic pain <ul style="list-style-type: none"> • pulp pains • periradicular pains • periodontal lesion pains - Non - Odontogenic pain <ul style="list-style-type: none"> • neurovascular pains • neuropathic pains • musculoskeletal pains 		
8	Management of Endodontic Emergencies	<ul style="list-style-type: none"> - Emergency classifications - Emergency endodontic management. - Analgesics and antibiotics - Cracked and fractured teeth 	1	2
9	Traumatic Injuries I, II	<ul style="list-style-type: none"> - Classification - Radiographic examination. - Clinical management. - Follow-up after dental trauma 	2	4
10	Final Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Introduction of the practical endodontics - Clinical rolls - Infection control and serializations - Patient and operator positions 	1 st	3
2	<ul style="list-style-type: none"> - History, examination, diagnosis, treatment plan and patents record (Case sheets) <ul style="list-style-type: none"> ▪ Root canal treatment of maxillary and mandibular anterior tooth (using hand technique) ▪ Root canal treatment of maxillary and mandibular premolars. (using hand technique) ▪ Indirect pulp capping for reversible pulpitis 	2 nd -14 th	39
3	Final Practical Exam	15 th	3

Number of Weeks / Units per Semester	15	45
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CCCLXIX. Teaching strategies of the course

- Lectures
- Discussions
- Demonstrations
- Brainstorming
- Practical Sessions
- Problem-solving

VIII. Teaching Strategies of the Course:

- Written Exam
- Oral Exam
- Quizzes
- Practical Exam
- Assignments
- Observation



CCCLXX. Assignments:

No.	Assignments	Week due	Mark
1	Practical Requirements and Clinical work during the Practical Sessions	1 st -14 th	20
Total			20

CCCLXXI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes 1 & 2	6 th and 12 th	10	10 %
2	Mid Term Theoretical Exam	8 th	20	20 %

3	Final Theoretical Exam	16 th	40	40 %
Total			70	70%
Assessment of Practical Part				
1	Assignments	1 st to 14 th	20	20 %
2	Final Practical Exam	15 th	10	10 %
Total			30	30%

CCCLXXII. Learning Resources:	
53- Required Textbook(s) (maximum two)	
	<p>1- NishaGarg, AmitGarg, 2019: Textbook of Endodontics, 4th Edition, Jaypee Brothers Medical Publishers (P) Ltd, India</p> <p>2- B. Suresh Chandra, V. Gopikrishna, 2014 : Grossman's Endodontic Practice, 13th Edition, Wolters Kluwer, India</p>
2- Essential References	
	<p>1- Ilan R; John I I. 2019: Ingles Endodontics, 7th Edition, Raleigh, North Carolina, PMPH USA</p> <p>2- Torabinejad et al., 2016: Endodontics. Principles and Practice, 6th Edition., Elsevier, China</p>
3- Electronic Materials and Web Sites, etc.	
	<p>1- American Association of endodontists: www.aae.org</p> <p>2- Journal of Endodontics https://www.jendodon.com/</p> <p>3- International Endodontic Journal https://onlinelibrary.wiley.com/journal/13652591</p>

XII. Course Policies:	
1	<p>Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.</p>
2	<p>Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.</p>

3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Clinical Fixed Prosthodontics (1)

Course No.()



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr.Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:



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XVII. Course Identification and General Information:						
1	Course Title:	Clinical Fixed Prosthodontics (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Pre-clinical Fixed Prosthodontics 1&2				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

XVIII. Course Description:	
<p>This is the first clinical fixed prosthodontic course. It provides the students with the theoretical topics focusing on the clinical procedures of different types of crown and bridge in fixed-prosthetics, Effect of tooth loss and types of bridges, management of soft tissue, Restoration of Endodontically treated teeth, dental ceramic and all ceramic restorations. The Intracoronal Restorations will also be addressed. The students will be supervised during the clinical course to gain all required skills for successful extra coronal tooth preparation of a single unit for porcelain fused to metal (PFM) restorations, Impression making and techniques used for the respective technical purpose.</p>	

1. Dental graduate with knowledge on prosthetics needs of patients, fabrication of all prosthodontic modes of treatment
2. Dental graduate who is able to diagnose, motivate and treat patients who are partially and completely edentulous (including geriatric patients) with complete and partial dentures
3. Dental graduate skilled enough to identify cases requiring specialist prosthodontic treatment needs and refer them for further follow up

CLXX. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A2		a1-	Recognize the effect of tooth loss and the management of soft tissue
A4		a2-	Identify the different types of bridges and the construction techniques and components for fixed denture prosthesis (pontics and retainer)
A2		a3-	Recognize the steps to restore a badly broken-down tooth
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lecture Demonstrations Supervision Instruction	Written Exams, Oral discussion Quizzes Practical Examinations
a1-	Recognize the effect of tooth loss and the management of soft tissue		
a2-	Identify the different types of bridges and the construction techniques and components for fixed denture prosthesis (pontics and retainer)		

a3-	Recognize the steps to restore a badly broken-down tooth		
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(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B1	b1-	Analyze the clinical diagnosis and treatment planning of fixed prosthodontic problems
	B5	b2-	Enumerate principles of tooth preparation of all ceramic restorations & compare the properties of various dental materials used in fixed prosthodontic to select the proper material for final restoration

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Analyze the clinical diagnosis and treatment planning of fixed prosthodontic problems	Lectures	Written Exam
b2-	Enumerate principles of tooth preparation of all ceramic restorations & compare the properties of various dental materials used in fixed prosthodontic to select the proper material for final restoration	Demonstrations	Practical Exams
		Case presentation	Oral Exams
		Practical Sessions	
		Self-learning	

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills	CILOs in professional and practical skills
After completing this program, students would be able to:	After participating in the course, students would be able

	C1	c1-	Perform all the clinical procedures for crown preparation of a single unit for porcelain fused to metal restorations, Impression making and techniques used for the respective technical purpose.
	C7	c2-	Practice Fiber post crown construction and select the proper line of treatment for each prosthetic case and the proper cementation technique

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations Supervision Instruction	Direct observation Oral discussion Practical Exams Assignments (Semester work and Practical Requirements)
c1	Perform all the clinical procedures for crown preparation of a single unit for porcelain fused to metal restorations, Impression making and techniques used for the respective technical purpose.		
c1	Practice Fiber post crown construction and select the proper line of treatment for each prosthetic case and the proper cementation technique		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D3	d1-	Communicate and work effectively and respectfully with patients, clinical staff and colleagues in a team work.
	D7	d2-	Communicate with E-learning, self-teaching and recent education technology
	D4	d3-	Manage time, set priorities and work to

			prescribed time limits.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Supervision Instruction	Assignments
d1-	Communicate and work effectively and respectfully with patients, clinical staff and colleagues in a team work.		(Semester work and Practical Requirements)
d2-	Communicate with E-learning, self-teaching and recent education technology		Observation
d3-	Manage time, set priorities and work to prescribed time limits.		Continuous Assessment

XI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Clinical Fixed Prosthodontics	a1, a2, b1, c2, d1	– Examination, Diagnosis and treatment planning	1 week	2
2	Soft tissue management and definitive impressions	a1, a3, b1, c2, d1	– management and classification of gingival tissues displacement – Sulcus-enlargement: aims, instruments, materials and methods.	1 week	2
3	Effect of tooth loss and types of bridges	a1, a2, b1, b2, c1, d2	– Classification, – Basic designs, – Types of bridges – Definition of resin bonded fixed partial dentures – Advantages and	2 weeks	4

			<ul style="list-style-type: none"> disadvantages - Indication and contraindication - Tooth preparation - Delivery 		
4	Restoration of Endodontically treated teeth	a3, b1, b2, c2, d1, d2	<ul style="list-style-type: none"> - Definition - Different Parapost system - Components and its uses - Custom cast dowel cores (direct/indirect) - Procedure for preparation of custom dowel core <ul style="list-style-type: none"> - Canal preparation - Resin pattern fabrication - Finishing and cementation of the custom dowel core 	3 weeks	6
5	Mid-Term Theoretical Exam	a1, a2, a3, b1, b2, c1, d2	MCQs and essay questions	1 week	2
6	Dental ceramic	a2, b2, d2	<ul style="list-style-type: none"> - Definition - Classification - Composition, - Properties and uses. 	1 week	2
7	Preparation of metal coping for porcelain application	a2, b2, c1, d2	<ul style="list-style-type: none"> - Rationale of preparation - Alloy surface treatment - Oxidation - Procedures 	1 week	2
8	Porcelain application, staining, glazing and polishing of metal ceramic restoration	a2, b2, c1, d2	<ul style="list-style-type: none"> - Porcelain addition - Opaque porcelain application - Dentin and enamel porcelain application - Porcelain surface treatment - Shade modification - Chairside correction - Alloys used in fabrication 	1 week	2

	All Ceramic restorations	c1, d1, d2, d3	– Materials – Technique		
10	Intra-coronal Restorations	a3, b1, b2, c1, d1,d2	– Definition, Types, Indications, Contra- indications, – Advantages and Disadvantages of Intracoronel Restorations. – Preparations for Intracoronel Restorations, Proximo- occlusal Inlays, Metal Inlay Variations, – MOD Onlay.	2 weeks	2
11	Review	a1, a2, b1, b2, c1, d2	– All previews topics	1 week	2
12	Final Theoretical Exam	a1, a2, b1, b2, c1,d2	– MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> – Orientation to the dental clinic, – Distribution of instruments, – Assignment of instructors – Clinic and patient records system 	b1, b2, c1, c2, d1, d2, d3	1 st week	3
2	<ul style="list-style-type: none"> – Patient assessment: examination, diagnosis and treatment planning <ul style="list-style-type: none"> - Radiographs - Primary impression – Practicing the clinical procedures and steps of crown preparation and construction for ceramic fused to metal crowns on anterior and posterior teeth: <ul style="list-style-type: none"> - Tooth preparation procedures - Soft tissue management and definitive 	a3, b2, c1, c2, d1, d2, d3	2 nd to 14 th	39

	- Provisional restorations - Final insertion and cementation - Practicing Fiber post crown construction			
3	- Final Practical Examination	a3,b2, c1, c2, d1,d2, d3	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lecture
- Clinical Demonstrations
- Supervision (on each clinical case)
- Instruction (on each clinical case)
- Case presentation (Clinical)
- Practical Sessions (clinical work)
- Self-learning

CCVI. Teaching Strategies of the Course:

- Final Written Theoretical Exam
- Mid-Term Written Theoretical Exam
- Quizzes
- Final Practical Exam
- Oral Exam and discussion
- Assignments
- Direct observation: continuous assessment on the practical work
- Assessment of clinical cases and their completion and follow up

CCVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester practical work: - Clinical Cases and Practical Requirements.	2 nd to 14 th	10	a3, b2, c1, c2, d1, d2, d3
Total			10	

CCVIII. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	6 th and 12 th	10	10%	a1, a2, a3, b1, b2, c1, d2
2	Mid-Term Theoretical Exam	8 th	20	20%	a1, a2, a3, b1, b2, c1, d2
3	Final Theoretical Exam	16 th	40	40%	a1, a2, b1, b2, c1,d2
Total			70	70%	
Assessment of Practical Part					
1	Assignments	2 nd to 14 th	10	10%	a3, b2, c1, c2, d1, d2, d3
2	Final Practical Exam (including Oral discussion)	15 th	20	20%	a3,b2, c1, c2, d1,d2, d3
Total			30	30%	

CCIX. Learning Resources:	
123-	Required Textbook(s) (maximum two)
	1- Shillingburg,H,T,etal, :Fundamentals of Fixed Prosthodontics, Last Edition. Quintessence. 2- Stephen F Rosenstiel, Martin F Land, Junhei Fujimoto, 2006: Contemporary Fixed Prosthodontics, 4 th ed., Mosby Inc. ISBN
124-	Essential References
	1 -Shillingburg HT, Jacobi R, Brackett SE, Fundamental of Tooth Preparation for Cast Metal and Porcelain. 2 nd edition, Quintessence ISBN 0-86715-157-9 SF 2 - Smith et al.: Planning and Making Crown and Bridges Last Edition. 3- Philips Science of Dental Materials. 10th ed., WB Saunders, Philadelphia.
125-	Electronic Materials and Web Sites, etc.

32- The British Society of Prosthodontics http://www.bsspd.org/For*patients/fixed*prosthodontics.aspx
33- European Prosthodontic Association (EPA)
34- http://www.epadental.org/patients/fixed-prosthodontics

CCX. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Clinical Fixed Prosthodontics (1)



الجامعة الوطنية

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCCLXXIII. Course Identification and General Information:						
1	Course Title:	Clinical Fixed Prosthodontics (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		L..	Pr.	Tr.	Seminar.	
		2		3		3

4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester
5	Prerequisites:	Pre-clinical Fixed Prosthodontics 1&2
6	Co –requisite:	None
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami
12	Date of Approval	2020-2021

CCCLXXIV. Course Description:

This is the first clinical fixed prosthodontic course. It provides the students with theoretical topics focusing on the clinical procedures of different types of crown and bridge in fixed-prosthetics, Effect of tooth loss and types of bridges, management of soft tissue, Restoration of Endodontically treated teeth, dental ceramic and all ceramic restorations. The Intracoronal Restorations will also be addressed. The students will be supervised during the clinical course to gain all required skills for successful extra coronal tooth preparation of a single unit for porcelain fused to metal (PFM) restorations, Impression making and techniques used for the respective technical purpose.

CCCLXXV. Outcomes of the Course

1. Dental graduate with knowledge on prosthetics needs of patients, fabrication of all prosthodontic modes of treatment
2. Dental graduate who is able to diagnose, motivate and treat patients who are partially and completely edentulous (including geriatric patients) with complete and partial dentures
3. Dental graduate skilled enough to identify cases requiring specialist prosthodontic treatment needs and refer them for further follow up

CCCLXXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Recognize the effect of tooth loss and the management of soft tissue
a2-	Identify the different types of bridges and the construction techniques and components for fixed denture prosthesis (pontics and retainer)
a3-	Recognize the steps to restore a badly broken-down tooth

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Analyze the clinical diagnosis and treatment planning of fixed prosthodontic problems
b2-	Enumerate principles of tooth preparation of all ceramic restorations & compare the properties of various dental materials used in fixed prosthodontic to select the proper material for final restoration

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Perform all the clinical procedures for crown preparation of a single unit for porcelain fused to metal restorations, Impression making and techniques used for the respective technical purpose.
c2-	Practice Fiber post crown construction and select the proper line of treatment for each prosthetic case and the proper cementation technique

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Communicate and work effectively and respectfully with patients, clinical staff and colleagues in a team work.
d2-	Communicate with E-learning, self-teaching and recent education technology
d3-	Manage time, set priorities and work to prescribed time limits.

CCCLXXVII. Course Content:

1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction to Clinical Fixed Prosthodontics	– Examination, Diagnosis and treatment planning	1 week	2
2	Soft tissue management and definitive impressions	– management and classification of gingival tissues displacement – Sulcus-enlargement: aims, instruments, materials and methods.	1 week	2
3	Effect of tooth loss and types of bridges	– Classification, – Basic designs, – Types of bridges – Definition of resin bonded fixed partial dentures – Advantages and disadvantages – Indication and contraindication – Tooth preparation – Delivery	2 weeks	4
4	Restoration of Endodontically treated teeth	– Definition – Different Parapost system – Components and its uses – Custom cast dowel cores (direct/indirect) – Procedure for preparation of custom dowel core - Canal preparation - Resin pattern fabrication - Finishing and cementation of the custom dowel core	3 weeks	6
5	Mid-Term Theoretical Exam	– MCQs and essay questions	1 week	2
6	Dental ceramic	– Definition – Classification – Composition, – Properties and uses.	1 week	2
7	Preparation of metal coping	–	1 week	2

	for porcelain application	<ul style="list-style-type: none"> – Alloy surface treatment – Oxidation – Procedures 		
8	Porcelain application, staining, glazing and polishing of metal ceramic restoration	<ul style="list-style-type: none"> – Porcelain addition – Opaque porcelain application – Dentin and enamel porcelain application – Porcelain surface treatment – Shade modification – Chairside correction – Alloys used in fabrication 	1 week	2
9	All Ceramic restorations	<ul style="list-style-type: none"> – Types – Materials – Technique 	1 week	2
10	Intra-coronal Restorations	<ul style="list-style-type: none"> – Definition, Types, Indications, Contra-indications, – Advantages and Disadvantages of Intracoronal Restorations. – Preparations for Intracoronal Restorations, Proximo-occlusal Inlays, Metal Inlay Variations, – MOD Onlay. 	2 weeks	2
11	Review	<ul style="list-style-type: none"> – All previews topics 	1 week	2
12	Final Theoretical Exam	<ul style="list-style-type: none"> – MCQs and essay questions 	1 week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> – Orientation to the dental clinic, – Distribution of instruments, – Assignment of instructors – Clinic and patient records system 	1 st week	3

2	<ul style="list-style-type: none"> - Patient assessment: examination, diagnosis and treatment planning <ul style="list-style-type: none"> - Radiographs - Primary impression - Practicing the clinical procedures and steps of crown preparation and construction for ceramic fused to metal crowns on anterior and posterior teeth: <ul style="list-style-type: none"> - Tooth preparation procedures - Soft tissue management and definitive impressions - Provisional restorations - Final insertion and cementation - Practicing Fiber post crown construction 	2 nd to 14 th	39
3	<ul style="list-style-type: none"> - Final Practical Examination 	15 th	3
Number of Weeks / Units per Semester		15	45

CCCLXXVIII. Teaching strategies of the course

- Lecture
- Clinical Demonstrations
- Supervision (on each clinical case)
- Instruction (on each clinical case)
- Case presentation (Clinical)
- Practical Sessions (clinical work)
- Self-learning

CCCLXXIX. Assessment Methods of the Course:

- Final Written Theoretical Exam
- Mid-Term Written Theoretical Exam
- Quizzes
- Final Practical Exam
- Oral Exam and discussion
- Assignments
- Direct observation: continuous assessment on the practical work
- Assessment of clinical cases and their completion and follow up

CCCLXXX. Assignments:			
No.	Assignments	Week due	Mark
1	Semester practical work: - Clinical Cases and Practical Requirements.	2 nd to 14 th	10
Total			10

CCCLXXXI. Schedule of Assessment Tasks for Students During the Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	6 th and 12 th	10	10%
2	Mid-Term Theoretical Exam	8 th	20	20%
3	Final Theoretical Exam	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Assignments	2 nd to 14 th	10	10%
2	Final Practical Exam (including Oral discussion)	15 th	20	20%
Total			30	30%

CCCLXXXII. Learning Resources:	
54- Required Textbook(s) (maximum two)	
	1- Shillingburg,H,T,etal, :Fundamentals of Fixed Prosthodontics, Last Edition. Quintessence. 2- Stephen F Rosenstiel, Martin F Land, Junhei Fujimoto, 2006: Contemporary Fixed Prosthodontics, 4 th ed., Mosby Inc. ISBN
2- Essential References	
	1 -Shillingburg HT, Jacobi R, Brackett SE, Fundamental of Tooth Preparation for Cast Metal and Porcelain. 2 nd edition, Quintessence ISBN 0-86715-157-9 SF

	2 - Smith et al.: Planning and Making Crown and Bridges Last Edition. 3- Philips Science of Dental Materials. 10th ed., WB Saunders, Philadelphia.
3- Electronic Materials and Web Sites, etc.	
	1- The British Society of Prosthodontics http://www.bsspd.org/For*patients/fixed*prosthodontics.aspx 2- European Prosthodontic Association (EPA) http://www.epadental.org/patients/fixed-prosthodontics

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
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7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Clinical Operative Dentistry (1)

Course No.()

2021/2022



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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

XXII. Course Identification and General Information:						
1	Course Title:	27				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	--	3	--	3
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Pre-clinical Operative Dentistry (3)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

XXIII. Course Description:	
<p>In this course the students will be trained to control the infection in the dental operator, diagnose the disease and plan the treatment for the patient, minimize the adverse effects while preparing cavities with high speed equipment's, minimize the side effects of restorative materials, control the pain and moisture while treating the patient, prepare simple and compound cavities, manage deep caries lesions and restore with different restorative material, counteract or repair the failed restorations, know the differences between direct and indirect posterior esthetic restorations.</p>	

XXIV. Outcomes of the Course

1. Students would be able to describe etiology, pathophysiology, diagnosis and management of common restorative situations, that will include contemporary management of dental caries, non-carious lesions and hypersensitivity.
2. Students would be able to take proper chair side history, examine the patient and perform medical and dental diagnostic procedures; as well as perform relevant tests and interpret them to come to a reasonable diagnosis about the dental condition
3. Perform all levels of restorative work including Aesthetic procedures and treatment of complicated restorative procedures

LXXV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Describe the concepts of moisture control, sterilization and disinfection in Operative dentistry
A2-	A4	a2-	obtain a detailed case history of the patient, diagnose the disease and plan the treatment accordingly
A3-	A6	a3-	List various material and techniques used to restore different cavity preparations

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lecture Demonstrations	Written Exams, Oral discussion
a1-	Describe the concepts of moisture control, sterilization and disinfection in		

	Operative dentistry	Supervision Instruction	Quizzes
a2-	obtain a detailed case history of the patient, diagnose the disease and plan the treatment accordingly		
a3-	List various material and techniques used to restore different cavity preparations		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	B1	b1-	Identify pulpal and gingival responses to cavity preparation and restorative materials.
	B2	b2-	Predict and assess the clinical manifestations of failure or success of any present restoration.
	B5	b3-	Select and use the proper restorative material for each case

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Demonstrations Case presentation	Written Exams, Oral discussion Quizzes
b1-	Identify pulpal and gingival responses to cavity preparation and restorative materials.		
b2-	Predict and assess the clinical manifestations of failure or success of any present restoration.		
b3-	Select and use the proper restorative material for each case		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C7	c1-	Perform different operative procedure and restore all types of cavities properly.
C2-	C6	c2-	Manage Patient complaint professionally.
C3-	C2	c3-	Detect caries lesions, assess caries risk and diagnose dental caries in a clinical field.
C4-	C5	c4-	Perform deep conservative cavities and preserve pulp vitality

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1	Perform different operative procedure and restore all types of cavities properly.	Practical Sessions Demonstrations Supervision Instruction	Direct observation Oral discussion Practical Exams Semester work
c1	Manage Patient complaint professionally.		
c3	Detect caries lesions, assess caries risk and diagnose dental caries in a clinical field.		
c4-	Perform deep conservative cavities and preserve pulp vitality		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills	
PILOs in general and transferable skills	CILOs in general and transferable skills
After completing this program, students would be able to:	After participating in the course, students would be able to:

D1-	D3	d1-	Communicate and work effectively and respectfully with patients, clinical staff and colleagues
D2-	D4	d2-	Manage time, set priorities and work to prescribed time limits.
D3-	D7	d3-	Demonstrate the different clinical managing skills

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Supervision Instruction	Semester work (Practical Requirements) Observation Continuous Assessment
d1-	Communicate and work effectively and respectfully with patients, clinical staff and colleagues		
d2-	Manage time, set priorities and work to prescribed time limits.		
d3-	Demonstrate the different clinical managing skills		

VI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Infection control in dental clinic	a1, b2, d3	– Environmental hazards, cross contamination in dental units and apparatus. – Different modes of sterilizations and disinfection	1 week	2
2	Isolation and Control of the Operating Field	a3, b1, b2, c1, d3	– Goals of isolation – Moisture Management – Rubber dam systems and its application.	1 week	2

			<ul style="list-style-type: none"> - Alternative and additional methods and factors - Other isolation techniques 		
3	patient assessment, examination, diagnosis and treatment planning.	a2, b2, c2, c3, c4, d1, d3	<ul style="list-style-type: none"> - Caries detection, diagnosis - Extra and intraoral examination. - Caries prevention and control 	2 weeks	4
4	Dental pain in operative procedures	a2, b1, c2, c4, d3	<ul style="list-style-type: none"> - Types, causes, mechanism - Control and management 	2 weeks	4
5	Biological Considerations of Restorative Materials and during tooth Preparation	a3, b1, b3, c1, d3	<ul style="list-style-type: none"> - Defense mechanisms of dentin against injury - Reaction of the pulp to operative procedures and materials and the line of prevention - Irritation, types of irritants - Mercury exposure and hazard. 	1 week	2
6	Midterm Examination	a1, a2, a3, b1,	- MCQs and essay questions	1 week	2
7	Management of Deep - carious lesions	a3, b1, c1, c3, c4, d3	<ul style="list-style-type: none"> - Pulpal exposure: traumatic and Pathological exposure - principles and considerations - Treatment and management of deep-seated caries - Zones of Caries lesion. - Direct and indirect pulp capping - Capping agents and healing process in the pulp following trauma 	2 weeks	4
8	Selection of appropriate restorative materials	a3, b2, b3, c4, d3	<ul style="list-style-type: none"> - Types of restorative materials - the ideal restoration. - factors affecting material selection 	1 week	2
9	Failure of dental Restoration (composite and Amalgam)	a3, b2, b3, c1, c2	<ul style="list-style-type: none"> - Etiology (Causes) of failure - Factors affecting the success 	2 weeks	4

			<ul style="list-style-type: none"> of dental restoration – Clinical manifestations of different restorations failure – Management and Repair of failed dental restorations 		
10	Indirect Posterior Esthetic Restorations	a2, a3, b1, b3, c1, d3	<ul style="list-style-type: none"> – Types, clinical indications, contraindications, advantages, disadvantages. – Composite inlays & onlays. – Advantages over direct resin composite restorations. – Posterior porcelain restoration. – Preparation for Indirect tooth colored restoration: Inlays & onlays. 	1 week	2
11	Review	a1, a2, a3, b1, b2, b3,	– All Previews topics	1 week	2
12	Final Theoretical Exam	a1, a2, a3, b1, b2, b3,	– MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Orientation to the dental clinic, dental units, its accessories and hand pieces. - Patient preparation, Dental chair and operating positions, - infection control and sterilization. 	a1, a3, b2, c1, c3, d1, d3	2 nd to 14 th	3 Hours per week
2	<ul style="list-style-type: none"> - Patient assessment: examination, diagnosis and treatment planning - Clinic and patient records system 	a2, a3, b2, c1, c3, d1,	2 nd to 14 th	3 Hours per week

	- Control of oral fluids & rubber dam application (Demonstration and Practicing)			
3	Practicing simple cavity prep. & restoration with direct restorations (Amalgam and Composite) for different classes.	b3, c1, c2, c3, c4, d1, d2, d3	2 nd to 14 th	3 Hours per week
4	Practicing compound cavity prep. & restoration with direct restorations (Amalgam and Composite) for different classes	b3, c1, c2, c3, c4, d1, d2, d3	2 nd to 14 th	3 Hours per week
5	Management of Deep - carious lesions (Direct and indirect pulp capping)	b3, c1, c2, c3, c4, d1, d2, d3	2 nd to 14 th	3 Hours per week
6	Practical Examination	b2, c1-c4 d1-d3	15 th	3
Number of Weeks / Units per Semester			14	42

VI. Teaching strategies of the course

- Lectures
- Demonstrations
- Case presentation
- Practical Sessions (evaluation on the clinical work)
- Clinical demonstrations
- Case Presentation
- Self-learning
- Complete supervision and instruction on each clinical case

CCXI. Assessment Strategies of the Course:

- Written Exam
- Quizzes
- Practical Exam
- Oral discussion
- Direct observation: continuous assessment on the practical work
- Assessment of clinical cases and their completion and follow up

CCXII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
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1	Semester practical work: - Clinical Cases and Requirements	Week 2 to week 14	20	b2, c1-c4 d1-d3
Total			20	

CCXIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	Week 7	5	5 %	a1, a2, a3, b1, d3
2	Midterm Theoretical Exam	Week 9	20	20 %	a1, a2, a3, b1, d3
3	Final Theoretical Exam	Week 16	40	40 %	a1, a2, a3, b1, b2, b3
Total			65	65%	
Assessment of Practical Part					
1	Assignments	Week 2 to week 14	20	20 %	b2, c1-c4 d1-d3
2	Final Practical Exam	Week 15	15	15 %	b2, c1-c4 d1-d3
Total			35	35%	

CCXIV. Learning Resources:

126- Required Textbook(s) (maximum two)	
	23- Harold Heymann, Edward Swift, Andre Ritter, 2019: Sturdevant's Art and Science of Operative Dentistry, 7th Edition, Mosby, USA.
	24- Avijit Banerjee, Timothy F. Watson, 2011: Pickard's Manual of Operative Dentistry, 9th Edition, Oxford, England.
127- Essential References	
	27- NishaGarg, AmitGarg, 2015: Textbook of Operative Dentistry. 3rd Edition, JP Medical Ltd, India.

	<p>28- Peter Jacobsen, 2008: Restorative Dentistry: An Integrated Approach, 2nd Edition, Wiley-Blackwell, USA.</p> <p>29- Ramya Raghu, Raghu Srinivasan, 2017: CLINICAL OPERATIVE DENTISTRY PRINCIPLES AND PRACTICE, 2nd Edition, Emmess, India..</p>
128-	Electronic Materials and Web Sites, etc.
	<p>1-Journal of dentistry https://www.journals.elsevier.com › journal-of-dentistry</p> <p>2- Operative Dentistry Journal https://www.meridian.allenpress.com/operative-dentistry</p> <p>3- Dental Materials Journal https://www.researchgate.net</p> <p>4- Digital Restorative Dentistry https://www.springer.com/gp/book</p>

CCXV. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
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Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Plan (Syllabus) of Clinical Operative Dentistry (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CCCLXXXIII. Course Identification and General Information:						
1	Course Title:	Clinical Operative Dentistry (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	

4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester
5	Prerequisites:	Pre-clinical Operative Dentistry (3)
6	Co –requisite:	None
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami
12	Date of Approval	2020-2021

CCCLXXXIV. Course Description:

In this course the students will be trained to control the infection in the dental operator, diagnose the disease and plan the treatment for the patient, minimize the adverse effects while preparing cavities with high speed equipment's, minimize the side effects of restorative materials, control the pain and moisture while treating the patient, prepare simple and compound cavities, manage deep caries lesions and restore with different restorative material, counteract or repair the failed restorations, know the differences between direct and indirect posterior esthetic restorations.

CCCLXXXV. Outcomes of the Course

1. Students would be able to describe etiology, pathophysiology, diagnosis and management of common restorative situations, that will include contemporary management of dental caries, non-carious lesions and hypersensitivity.
2. Students would be able to take proper chair side history, examine the patient and perform medical and dental diagnostic procedures; as well as perform relevant tests and interpret them to come to a reasonable diagnosis about the dental condition
3. Perform all levels of restorative work including Aesthetic procedures and treatment of complicated restorative procedures

CCCLXXXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the concepts of moisture control, sterilization and disinfection in Operative dentistry
a2-	obtain a detailed case history of the patient, diagnose the disease and plan the treatment accordingly
a3-	List various material and techniques used to restore different cavity preparations

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Identify pulpal and gingival responses to cavity preparation and restorative materials.
b2-	Predict and assess the clinical manifestations of failure or success of any present restoration.
b3-	Select and use the proper restorative material for each case

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Perform different operative procedure and restore all types of cavities properly.
c2-	Manage Patient complaint professionally.
c3-	Detect caries lesions, assess caries risk and diagnose dental caries in a clinical field.
c4-	Perform deep conservative cavities and preserve pulp vitality

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Communicate and work effectively and respectfully with patients, clinical staff and colleagues
d2-	Manage time, set priorities and work to prescribed time limits.
d3-	Demonstrate the different clinical managing skills

1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Infection control in dental clinic	<ul style="list-style-type: none"> – Environmental hazards, cross contamination in dental units and apparatus. – Different modes of sterilizations and disinfection 	1 week	2
2	Isolation and Control of the Operating Field	<ul style="list-style-type: none"> – Goals of isolation – Moisture Management – Rubber dam systems and its application. – Alternative and additional methods and factors – Other isolation techniques 	1 week	2
3	patient assessment, examination, diagnosis and treatment planning.	<ul style="list-style-type: none"> – Caries detection, diagnosis – Extra and intraoral examination. – Caries prevention and control 	2 weeks	4
4	Dental pain in operative procedures	<ul style="list-style-type: none"> – Types, causes, mechanism – Control and management 	2 weeks	4
5	Biological Considerations of Restorative Materials and during tooth Preparation	<ul style="list-style-type: none"> – Defense mechanisms of dentin against injury – Reaction of the pulp to operative procedures and materials and the line of prevention – Irritation, types of irritants – Mercury exposure and hazard. 	1 week	2
6	Midterm Examination	<ul style="list-style-type: none"> – MCQs and essay questions 	1 week	2
7	Management of Deep - carious lesions	<ul style="list-style-type: none"> – Pulpal exposure: traumatic and Pathological exposure – principles and considerations – Treatment and management of deep-seated caries – Zones of Caries lesion. 	2 weeks	4

		<ul style="list-style-type: none"> – Direct and indirect pulp capping – Capping agents and healing process in the pulp following trauma 		
8	Selection of appropriate restorative materials	<ul style="list-style-type: none"> – Types of restorative materials – the ideal restoration. – factors affecting material selection 	1 week	2
9	Failure of dental Restoration (composite and Amalgam)	<ul style="list-style-type: none"> – Etiology (Causes) of failure – Factors affecting the success of dental restoration – Clinical manifestations of different restorations failure – Management and Repair of failed dental restorations 	2 weeks	4
10	Indirect Posterior Esthetic Restorations	<ul style="list-style-type: none"> – Types, clinical indications, contraindications, advantages, disadvantages. – Composite inlays & onlays. – Advantages over direct resin composite restorations. – Posterior porcelain restoration. – Preparation for Indirect tooth colored restoration: Inlays & onlays. 	1 week	2
11	Review	<ul style="list-style-type: none"> – All Previews topics 	1 week	2
12	Final Theoretical Exam	<ul style="list-style-type: none"> – MCQs and essay questions 	1 week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	- Orientation to the dental clinic, dental units, its accessories and hand pieces.	2 nd to 4 th	3 Hours

	positions, - infection control and sterilization.		
2	- Patient assessment: examination, diagnosis and treatment planning - Clinic and patient records system - Control of oral fluids & rubber dam application (Demonstration and Practicing)	2 nd to 14 th	3 Hours per week
3	Practicing simple cavity prep. & restoration with direct restorations (Amalgam and Composite) for different classes.	2 nd to 14 th	3 Hours per week
4	Practicing compound cavity prep. & restoration with direct restorations (Amalgam and Composite) for different classes	2 nd to 14 th	3 Hours per week
5	Management of Deep - carious lesions (Direct and indirect pulp capping)	2 nd to 14 th	3 Hours per week
6	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

CCCLXXXVIII. Teaching strategies of the course

- Lectures
- Demonstrations
- Case presentation
- Practical Sessions (evaluation on the clinical work)
- Clinical demonstrations
- Case Presentation
- Self-learning
- Complete supervision and instruction on each clinical case

CCCLXXXIX. Assessment Methods of the Course:

- Written Exam
- Quizzes
- Practical Exam
- Oral discussion
- Direct observation: continuous assessment on the practical work
- Assessment of clinical cases and their completion and follow up

CCCXC. Assignments:			
No.	Assignments	Week due	Mark
1	Semester practical work: - Clinical Cases and Requirements	Week 2 to week 14	20
Total			20

CCCXCI. Schedule of Assessment Tasks for Students During the Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	Week 7	5	5 %
2	Midterm Theoretical Exam	Week 9	20	20 %
3	Final Theoretical Exam	Week 16	40	40 %
Total			65	65%
Assessment of Practical Part				
1	Assignments	Week 2 to week 14	20	20 %
2	Final Practical Exam	Week 15	15	15 %
Total			35	35%

CCCXCII. Learning Resources:	
55- Required Textbook(s) (maximum two)	
	1- Harold Heymann, Edward Swift, Andre Ritter, 2019: Sturdevant's Art and Science of Operative Dentistry, 7th Edition, Mosby, USA.
	2- Avijit Banerjee, Timothy F. Watson, 2011: Pickard's Manual of Operative Dentistry, 9th Edition, Oxford, England.
43- Essential References	

	<p>1- NishaGarg, AmitGarg, 2015: Textbook of Operative Dentistry. 3rd Edition, JP Medical Ltd, India.</p> <p>2- Peter Jacobsen, 2008: Restorative Dentistry: An Integrated Approach, 2nd Edition, Wiley-Blackwell, USA.</p> <p>3- Ramya Raghu, Raghu Srinivasan, 2017: CLINICAL OPERATIVE DENTISTRY PRINCIPLES AND PRACTICE, 2nd Edition, Emmess, India..</p>
4- Electronic Materials and Web Sites, etc.	
	<ul style="list-style-type: none"> - Journal of dentistry 30- https://www.journals.elsevier.com › journal-of-dentistry - Operative Dentistry Journal 31- https://www.meridian.allenpress.com/operative-dentistry - Dental Materials Journal 32- https://www.researchgate.net - Digital Restorative Dentistry 33- https://www.springer.com/gp/book

XII. Course Policies:

1	<p>Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.</p>
2	<p>Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.</p>
3	<p>Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.</p>
4	<p>Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.</p>
5	<p>Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>
6	<p>Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the</p>



	Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Clinical Removable Prosthodontics (1)

Course No.()

2021/2022



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Prepared by:

Dr.Abbas M. Al-kebsi

Reviewed by:

Dr.

Quality Assurance

Dean:

XVII. Course Identification and General Information:						
1	Course Title:	Clinical Removable Prosthodontics (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Pre-clinical Removable Prosthodontics (3)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr.Abbas M. Al-kebsi				
12	Date of Approval	2020-2021				

XVIII. Course Description:	
<p>The students have a full understanding of the sequence of clinical procedures involved in treating completely and partially edentulous cases. The course includes a detail step by step clinical procedures and impression materials and techniques, problems and post insertion care. Different philosophies and rationales concerning patient's examination, impression making, occlusion and jaw relation will be discussed. A special interest will be given to denture insertion, post-insertion follows up and maintenance. The students should treat completely edentulous patients in addition to the partially edentulous cases.</p>	

XXIX. Outcomes of the Course

1. Dental student with sound knowledge on landmarks in edentulous patients would be able to do all lab procedures to make a conventional complete denture.
2. The candidate would be able to adopt ethical principles in Prosthodontic practice. Professional honesty and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient.

Intended learning outcomes (ILOs) of the course		
(A) Knowledge and Understanding:		
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.		
PILOs in knowledge and understanding	CILOs in knowledge and understanding	
After completing this program, students would be able to:	After participating in the course, students would be able to:	
A1-	A4	a1- knowledge the importance of history-taking and examination as pillars for good diagnosis and treatment planning
A2-	A1	a2- Demonstrate sound knowledge in the designs and choice of materials used in the production of different prosthesis, along with knowledge of laboratory procedures and how to overcome problems encountered in both the clinical and laboratory setup.
A3-	A3	a3- Demonstrate sound knowledge on the laws and ethics governing dental practice.
A4-	A6	a4- Identify the applications of other dental disciplines that can assist in prosthodontic treatment.
Teaching and Assessment Methods for Achieving Learning Outcomes		
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:		
CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	· Lectures	· Written exam
a1- knowledge the importance of history-	· Training	· Practical sessions

	diagnosis and treatment planning	· Discussion	and exam
a2-	Demonstrate sound knowledge in the designs and choice of materials used in the production of different prosthesis, along with knowledge of laboratory procedures and how to overcome problems encountered in both the clinical and laboratory setup.		· Coursework activities
a3-	Demonstrate sound knowledge on the laws and ethics governing dental practice.		
a4-	Identify the applications of other dental disciplines that can assist in prosthodontic treatment.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Assimilate information derived from the history, examination and special investigations to produce a diagnosis then accordingly formulate the appropriate treatment plan
B2-	B2	b2-	Apply critical thinking and evidence-based problem solving whenever it should be needed for patient's care
B3-	B1	b3-	Identify cases that can benefit from other dental specialties intervention.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		· Lectures	· Written exam
b1-	Assimilate information derived from the history, examination and special		· Practical sessions

	investigations to produce a diagnosis then accordingly formulate the appropriate treatment plan	. Training . Discussion	and exam . Coursework activities
b2-	Apply critical thinking and evidence-based problem solving whenever it should be needed for patient's care		
b3-	Identify cases that can benefit from other dental specialties intervention.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Register a history of the present complaint and medical history and perform an extra-oral and intra-oral examination appropriate to the case presented.
C2-	C3	c2-	Apply infection control and radiation protection according to international standard
C3-	C2	c3-	Diagnose and appropriately refer patients requiring complex treatment procedures to a specialist.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	. Written exam
c1-	Register a history of the present complaint and medical history and perform an extra-oral and intra-oral examination appropriate to the case	exercise Debate	. Practical sessions and exam . Coursework activities

	presented.		
c2-	Apply infection control and radiation protection according to international standard		
c3-	Diagnose and appropriately refer patients requiring complex treatment procedures to a specialist.		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D7	d1-	Establish communication skills that allow the effective delivery of dental treatment and to identify patient expectations, desires and attitudes.
D2-	D3	d2-	Establish a team work treatment.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Exercise Dialogue and discussion Brainstorming Debate	· Practical sessions and exam · Coursework activities · Assignments
d1-	Establish communication skills that allow the effective delivery of dental treatment and to identify patient expectations, desires and attitudes.		
d2-	Establish a team work treatment.		

XX. Course Content:

1 – Course Topics/Items:

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction	a1, a2, a3, b1, b2	- Introduction to clinical course for complete denture (CD)	1	2
2	Examination, Diagnosis and treatment planning for CD	a1, a2, a3, b1, b2	- History, and clinical examination	1	2
3	Complete denture impression (Primary impression).	a1, a2, a3, b1, b2	- types, techniques	1	2
4	Theories of Final Impression and clinical impression technique for CD.	a1, a2, a3, b1, b2	- explain the different theories	2	4
5	Recording Maxillo-mandibular relations for CD	a1, a2, a3, b1, b2	Occlusal plane orientation, determination of vertical dimension, mounting upper cast by maxillary face bow record	2	4
6	Mid-Term Theoretical Exam	a1, a2, a3, b1, b2		1	2
7	Selection of artificial	a1, a2, a3, b1, b2	- Selection of artificial teeth for completely edentulous patients	1	2
8	Complete denture	a1, a2, a3, b1, b2	- occlusion - try-in of the trial denture - insertion (Maintenance and servicing) - Post insertion care for CD (relining, rebasing)	4	8
9	Removable partial denture	a1, a2, a3, b1, b2	- Introduction, objectives, indication and contraindication of RPD.	1	2
10	Case History, Diagnosis and evaluation of diagnostic data of partial denture and preliminary impression to obtain	a1, a2, a3, b1, b2	- Clinical examination (visual and digital examination) - Surveying the diagnostic casts. - Mounting diagnostic casts. - Analysis of occlusion	1	2

	diagnostic cast.		- Radiographic interpretation and - Treatment planning.		
11	Revision	a1, a2, a3, b1, b2	-	1	2
12	Final Exam	a1, a2, a3, b1, b2		1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	- Two Cases: full complete Dentures (Upper and Lower) [In one case of the complete dentures, all the clinical and laboratory procedures should be done by the student himself]. - One Case: A single Cr-Co partial Denture. - One Case: A single Acrylic (temporary) partial Denture.	c1-c3,d1,d2	1 st - 14 th	42
2	Practical exam	c1-c3,d1,d2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- Exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CCXVI. Teaching Strategies of the Course:

- Quizzes

- Midterm Exam
- Final Written Exam
- Oral Exam
- Final Practical Exam
- Research
- Group work

CCXVII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Clinical work	1 st - 14 th	20	c1-c3,d1,d2
Total			20	

CCXVIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	4 th - 12 th	10	10%	a1, a2, b1
2	Mid theoretical Exam	8 th	10	10%	a1, a2, a3, b1, b2
3	Final theoretical Exam	16 th	40	40%	a1, a2, a3, b1, b2
Total			60	60%	
Assessment of Practical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Assignment	1 st - 14 th	20	20%	c1-c3,d1,d2
2	Final-Practical Exam	14 th	20	20%	c1-c3,d1,d2
Total			40	40%	

CCXIX. Learning Resources:

129- Required Textbook(s) (maximum two)

1. Book of the department, 2010, Removable partial dentures technology, 2nd Ed, Egypt, Cairo University press
2. Carr AB, McGivney GP, Brown DT.2005 McCracken's Removable partial Prosthodontic. 11th

	EdSt. Louis, C V. Mosby
130-	Essential References
	Arthur O. Rahn, John R. Lvanhoe and Kerin D. Plummer. 2009, Text book of Complete Dentures, 6th edition
4.	Electronic Materials and Web Sites, etc.
	7- http://www.quintpub.com/journals/ijp/index.php

CCXX. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Clinical Removable Prosthodontics (1)

Course No. (----)

I. Information about Faculty Member Responsible for the Course:									
Name of Faculty Member:				Office Hours					
Location & Telephone No.:									
E-mail:				SAT	SUN	MON	TUE	WED	THU

2021/2022

CCCXCIII. Course Identification and General Information:					
1	Course Title:	Clinical Removable Prosthodontics (1)			
2	Course Number & Code:				
3	Credit hours:	C.H			Total
		Th.	Pr.	Tr.	
		2		3	3
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester			
5	Prerequisites:	Pre-clinical Removable Prosthodontics (3)			
6	Co-requisite:	None			
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery			
8	Language of teaching the course:	English			
9	Study System:	Semester based System			
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry			
11	Prepared by:	Dr. Abbas M. Al-kebsi			
12	Date of Approval	2020-2021			

CCCXCIV. Course Description:

The students have a full understanding of the sequence of clinical procedures involved in treating completely and partially edentulous cases. The course includes a detail step by step clinical procedures and impression materials and techniques, problems and post insertion care. Different philosophies and rationales concerning patient's examination, impression making, occlusion and jaw relation will be discussed. A special interest will be given to denture insertion, post-insertion follows up and maintenance. The students should treat completely edentulous patients in addition to the partially edentulous cases.

CCCXCV. Outcomes of the Course

1. Dental student with sound knowledge on landmarks in edentulous patients would be able to do all lab procedures to make a conventional complete denture.
2. The candidate would be able to adopt ethical principles in Prosthodontic practice. Professional honesty and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient.

CCCXCVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | knowledge the importance of history-taking and examination as pillars for good diagnosis and treatment planning |
| a2- | Demonstrate sound knowledge in the designs and choice of materials used in the production of different prosthesis, along with knowledge of laboratory procedures and how to overcome problems encountered in both the clinical and laboratory setup. |
| a3- | Demonstrate sound knowledge on the laws and ethics governing dental practice. |
| a4- | Identify the applications of other dental disciplines that can assist in prosthodontic treatment. |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Assimilate information derived from the history, examination and special investigations to produce a diagnosis then accordingly formulate the appropriate treatment plan |
|-----|--|

	for patient's care
b3-	Identify cases that can benefit from other dental specialties intervention.

(C) Professional and Practical Skills

After participating in the course, students would be able to:	
c1-	Register a history of the present complaint and medical history and perform an extra-oral and intra-oral examination appropriate to the case presented.
c2-	Apply infection control and radiation protection according to international standard
c3-	Diagnose and appropriately refer patients requiring complex treatment procedures to a specialist.

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1-	Establish communication skills that allow the effective delivery of dental treatment and to identify patient expectations, desires and attitudes.
d2-	Establish a team work treatment.

CCCXCVII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction	– Introduction to clinical course for complete denture (CD)	1	2
2	Examination, Diagnosis and treatment planning for CD	- History, and clinical examination	1	2
3	Complete denture impression (Primary impression).	- types, techniques	1	2
4	Theories of Final Impression and clinical impression technique for	- explain the different theories	2	4

	CD.			
5	Recording Maxillo-mandibular relations for CD	Occlusal plane orientation, determination of vertical dimension, mounting upper cast by maxillary face bow record	2	4
6	Mid-Term Theoretical Exam		1	2
7	Selection of artificial	- Selection of artificial teeth for completely edentulous patients	1	2
8	Complete denture	- occlusion - try-in of the trial denture - insertion (Maintenance and servicing) - Post insertion care for CD (relining, rebasing)	4	8
9	Removable partial denture	- Introduction, objectives, indication and contraindication of RPD.	1	2
10	Case History, Diagnosis and evaluation of diagnostic data of partial denture and preliminary impression to obtain diagnostic cast.	- Clinical examination (visual and digital examination) - Surveying the diagnostic casts. - Mounting diagnostic casts. - Analysis of occlusion. - Radiographic interpretation and - Treatment planning.	1	2
11	Revision	-	1	2
12	Final Exam		1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	- Two Cases: full complete Dentures (Upper and Lower) [In one case of the complete dentures, all the clinical and laboratory procedures should be done by the student himself]. - One Case: A single Cr-Co partial Denture. - One Case: A single Acrylic (temporary) partial Denture.	1 st - 14 th	42

2	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

CCCXCVIII. Teaching strategies of the course

- Lectures
- Exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CCCXCIX. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Oral Exam
- Final Practical Exam
- Research
- Group work



CD. Assignments:

No.	Assignments	Week due	Mark
1	Practical work	1 st - 14 th	20
Total			20

CDI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	4 th - 12 th	10	10%
2	Mid theoretical Exam	8 th	10	10%
3	Final theoretical Exam	16 th	40	40%
Total			60	60%

Assessment of Practical Part

1	Assignment	1 st - 14 th	20	20%
2	Final-Practical Exam	14 th	20	20%
Total			40	40%

CDII. Learning Resources:

56- Required Textbook(s) (maximum two)

1. Book of the department, 2010, Removable partial dentures technology, 2nd Ed, Egypt, Cairo University press
2. Carr AB, McGivney GP, Brown DT. 2005 McCracken's Removable partial Prosthodontic. 11th Ed. St. Louis, C V. Mosby

44- Essential References

- Arthur O. Rahn, John R. Lvanhoe and Kerin D. Plummer. 2009, Text book of Complete Dentures, 6th edition

45- Electronic Materials and Web Sites, etc.

- 8- <http://www.quintpub.com/journals/ijp/index.php>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the

	Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral Medicine (1)

Course No.()

الجامعة الوطنية
2021/2022
NU



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Prepared by:

Dr. Manal Mohammed Al-Hajri

Reviewed by:

Dr.

Quality Assurance

Dean:

XXXI. Course Identification and General Information:						
1	Course Title:	Oral Medicine (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	General Anatomy, Immunology, Head and Neck Anatomy, Oral histology, microbiology, oral radiology and oral pathology				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

XXXII. Course Description:
This course is to train students to perform perfect oral and extra oral examination and diagnosis by taking history, clinical examination, and other diagnostic tests. In addition, this course is designed to improve the students' abilities on how to develop critical scientific thinking in order to make a correct diagnosis.

XXIII. Outcomes of the Course
1. The student would be proficient in describing the etiology, pathophysiology, principles of diagnosis and management of common oro facial disorders.
2. the student would be proficient in formulating a differential diagnosis and investigations plan and frame the treatment strategy.
3. The student would develop communication skills and ability to explain the disease process to the patient and to obtain a informed consent from the patient.

XXIV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding	CILOs in knowledge and understanding
After completing this program, students would be able to:	After participating in the course, students would be able to:
A1,2,3,4	a1 Understanding the sequence of oral diagnostic process.
A1,2	a2 Understanding the different components of patient's history taking
A1,2,3,4	a3 List the different methods of collecting data from patients

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	Lectures	Exam
a1- Understanding the sequence of oral diagnostic process.	exercise Debate	Homework
a2- Understanding the different components of patient's history taking		
A3 List the different methods of collecting data from patients	Lectures exercise Debate	Exam Homework

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills	CILOs of intellectual skills
After completing this program, students would be able to:	After participating in the course, students would be able to:
A2,4,6,b1,3,4	B1 Categorize clinical findings and radiographic features of pathological conditions to a level

			that allows a differential diagnosis.
	A2,4,6,b1,3,4	B2	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
b1-	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.		
b2-	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1,2,5	c1-	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief complaints.
C2-	C1,2, 5,6	C2	Request special investigations needed to confirm the clinical, working or tentative diagnosis.
C3-	C7	C3	Select indicated clinical examination for specific oral lesion
C4-	C 5,7	C4	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations
C5-	C1,2, 5,6,7	C5	Assemble and link the data obtained from the

			patient's history and clinical examination to develop the differential diagnosis of patients chief complaint.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
c1	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief complaints.	exercise Debate	Homework
C2	Request special investigations needed to confirm the clinical, working or tentative diagnosis.	Lectures exercise Debate	Exam Homework
C3	Select indicated clinical examination for specific oral lesion	Lectures exercise Debate	Exam Homework
C4	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations	Lectures exercise Debate	Exam Homework
c5	Assemble and link the data obtained from the patient's history and clinical examination to develop the differential diagnosis of patients chief complaint	Lectures exercise Debate	Exam Homework

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills	CILOs in general and transferable skills
After completing this program, students would be able to:	After participating in the course, students would be able

D1-	D2	d1	Use internet and multimedia.
D2-	D3,4	d2	Manage time and resources
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
d1-	Use internet and multimedia.		
d2-	Manage time and resources		

XV. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	ف	78ذذذ	<ul style="list-style-type: none"> • Methods of obtain the patient history. • Diagnostic interview • Types of questions • Patient history • Patient identification • Chief complain • History of chief complain • Dental history • Medical history • Review od system • Family history • Social history 	6	12

			<ul style="list-style-type: none"> Personal habits 		
	Clinical examination	A1,b1,2, C1,2, 3,4, 5	<ul style="list-style-type: none"> Methods of clinical examination The extra oral clinical examination The intra oral clinical examination 	5	10
2	Mid-Term Exam	A1,2, 3		1	2
3	Laboratory investigation	A1,2, B1,2, 3,4,C1,2, 3,4, 5,6, 7, 8	<ul style="list-style-type: none"> Complete blood count Hemostasis Test for diabetes. Blood chemistry Biopsy 	3	6
6	Final Exam	A1, 2,3,4,b1,2,C 1,2, 3,4, 5	<ul style="list-style-type: none"> 	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect					
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours	
1	Taking patient history	A1,2,3,c1,2,3,4, 5	1st,2 nd	6	
2	Clinical examination	A1,2,3,c1,2,3,4, 5	3 rd to 6 th	12	
3	Taking intra-oral biopsy	A1,2,3,c1,2,3,4, 5	4 th 5 th	6	
4	Lab investigations	A1,2,3,c1,2,3,4, 5	5 th 6 th	6	
5	Take examples of differential diagnosis	A1,2,3,c1,2,3,4, 5	8 th to 14 th	21	
6	Practical exam		15 th	3	
Number of Weeks / Units per Semester			15	45	

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CCXXI. Assignments Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CCXXII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the instructor	10	a1, a2, a3,b1,2,c1,2,3,4,5, , d1, d2
Total			10	

CCXXIII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Mid tem exam	4 th	20	20%	a1a2,a3
2	Final tem exam	14 th	40	40%	a1a2a3,b1,2,c1,2,3,4,5
3	Attending and assignment	1 st ,14 th	10	10%	a1, a2, a3, d1, d2

Assessment of Practical Part					
1	Taking patient history	1st,2nd	6	6%	A1,2,3,c1,2,3,4, 5
2	Clinical examination	3rd to 6th	6	6%	A1,2,3,c1,2,3,4, 5
3	Taking intra-oral biopsy	4th 5th	6	6%	A1,2,3,c1,2,3,4, 5
4	Lab investigations	5th 6th	6	6%	A1,2,3,c1,2,3,4, 5
5	Take examples of differential diagnosis	8th to 14th	6	6%	A1,2,3,c1,2,3,4, 5
Total			30	30%	

CCXXIV. Learning Resources:	
131- Required Textbook(s) (maximum two)	
	25- Norman K. Wood - Differential Diagnosis of Oral and Maxillofacial Lesions: 5th (fifth) Edition Hardcover – October 15, 1997
132- Essential References	
	30- Principles of oral diagnosis in dental practice, faculty of oral and dental medicine- Cairo university
133- Electronic Materials and Web Sites, etc.	
	Websites: Open e-learning

CCXXV. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or



	Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan of Oral Medicine (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:	Dr.Manal Mohammed Al-Hajri	Office Hours					
Location & Telephone No.:	00967779212007						
E-mail:	dent.manal@yahoo.com	SAT	SUN	MON	TUE	WED	THU

2021/2022

CDIII. Course Identification and General Information:

1	Course Title:	Oral Medicine (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is	4 th Level / 1 st Semester				

5	Prerequisites:	General Anatomy, Immunology, Head and Neck Anatomy, Oral histology, microbiology, oral radiology and oral pathology.
6	Co –requisite:	None
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Dr. Manal Mohammed Al-Hajri
12	Date of Approval	2020-2021

CDIV. Course Description:

This course is to train students to perform perfect oral and extra oral examination and diagnosis by taking history, clinical examination, and other diagnostic tests. In addition, this course is designed to improve the students' abilities on how to develop critical scientific thinking in order to make a correct diagnosis.

CDV. Outcomes of the Course

1. The student would be proficient in describing the etiology, pathophysiology, principles of diagnosis and management of common oro facial disorders.
2. the student would be proficient in formulating a differential diagnosis and investigations plan and frame the treatment strategy.
3. The student would develop communication skills and ability to explain the disease process to the patient and to obtain an informed consent from the patient.

CDVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1	Understanding the sequence of oral diagnostic process.
a2	Understanding the different components of patient's history taking
A3	List the different methods of collecting data from patients

After participating in the course, students would be able to:	
B1	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis
B2	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

(C) Professional and Practical Skills

After participating in the course, students would be able to:	
c1	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief complaints.
C2	Request special investigations needed to confirm the clinical, working or tentative diagnosis.
C3	Select indicated clinical examination for specific oral lesion
C4	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations
c5	Assemble and link the data obtained from the patient's history and clinical examination to develop the differential diagnosis of patients chief complaint.

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1	Use internet and multimedia.
d2	Manage time and resources

CDVII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Rule of obtain the patient history.	<ul style="list-style-type: none"> • Methods of obtain the patient history. • Diagnostic interview • Types of questions • Patient history • Patient identification • Chief complain 	6	12

		<ul style="list-style-type: none"> Dental history Medical history Review of system Family history Social history Personal habits 		
2	Midterm Exam	•	1	2
3	Clinical examination	<ul style="list-style-type: none"> Methods of clinical examination The extra oral clinical examination The intra oral clinical examination 	5	10
4	Laboratory investigation	<ul style="list-style-type: none"> Complete blood count Hemostasis Test for diabetes. Blood chemistry Biopsy 	3	6
5	Final Exam	•	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Taking patient history	1 st , 2 nd	8
2	Clinical examination	3 rd to 6 th	8
3	Taking intra-oral biopsy	4 th 5 th	2
4	Lab investigations	5 th 6 th	2
	Take examples of differential diagnosis	8 th to 14 th	8
	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

CDVIII. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CDIX. Assessment Methods of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CDX. Assignments:

No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

CDXI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exam	14th ERSIT	40	40%
1	Mid tem exam	4th	20	20%
3	Attending and assignment	1st to 14th	10	10%
Total			70	70%
Assessment of Practical Part				
1	Taking patient history	1st, 2 nd	6	6%
2	Clinical examination	3 rd to 6 th	6	6%
3	Taking intra-oral biopsy	4 th 5 th	6	6%
4	Lab investigations	5 th 6 th	6	6%
5	Take examples of differential diagnosis	8 th to 14 th	6	6%
Total			30	30%

CDXII. Learning Resources:

57- Required Textbook(s) (maximum two)

1- 46 Newman K, Woodard Paul W, Green J. Differential diagnosis of oral and maxillo-facial

	lesions,(5th Ed).
47- Essential References	
	12- Principles of oral diagnosis in dental practice, faculty of oral and dental medicine- Cairo universit
48- Electronic Materials and Web Sites, etc.	
	Open e-learning

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral surgery (1)

Course No.()



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Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:

XXVI. Course Identification and General Information:						
1	Course Title:	Oral surgery (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Dental Anesthesia and Medically Compromised Patients				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

XXVII. Course Description:	
<p>The aim of this course is known the students about techniques for tooth extraction in upper and lower jaw, know mechanisms of normal extraction wound healing, therapy options for complications during and after tooth extraction. It covers the basic knowledge about Oral Surgery as they relate to the general practitioner of dentistry, also begin basic exodontia steps, as well as developing an understanding of aseptic techniques, local anesthetic and exodontia techniques / armentarium, and principles of tooth extraction</p>	

XXVIII. Outcomes of the Course	
<p>The students would be well trained in the assessment and management of:</p> <ol style="list-style-type: none"> 1. Basic Exodontia 2. Complicated Exodontia 3. Surgical management of Impacted teeth 4. Complications of Dentoalveolar Surgery <p>The students would be able to diagnose and manage</p> <p>Medical emergencies like, prevention and management of altered consciousness (syncope, orthostatic</p>	

hypotension, seizures, diabetes mellitus, adrenal insufficiency), hypersensitivity reactions, chest discomfort, and respiratory difficulty

The students would be knowledgeable about

1. Diagnosis and Perioperative Management of Head and Neck Injuries
2. Basic Principles of Treatment: Hard and Soft Tissue injuries

XXIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A4	a1-	Describe the basic facts, concepts and techniques needed for the diagnosis and treatment of basic oral surgeries and exodontia.
A2-	A5	a2-	Discuss the complications associated with basic oral surgical procedures.
A3-	A2	a3-	Properly identify and diagnose those impacted teeth that require removal, describe surgical techniques for removal of impacted teeth and Discuss complications associated with surgical removal of impacted teeth
A4-	A6	a4-	Describe the preprosthetic surgical procedures of the partially and completely edentulous patient and the role of general dentist, describe the various ridge augmentation procedures available to patients, endodontic surgery and dentoalveolar surgery performed by oral and maxillofacial surgeons and identify the role of oral and maxillofacial surgeons in implant placement

Teaching and Assessment Methods for Achieving Learning Outcomes

methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the basic facts, concepts and techniques needed for the diagnosis and treatment of basic oral surgeries and exodontia.		
a2-	Discuss the complications associated with basic oral surgical procedures.		
a3-	Properly identify and diagnose those impacted teeth that require removal, describe surgical techniques for removal of impacted teeth and Discuss complications associated with surgical removal of impacted teeth	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam.
a4-	Describe the preprosthetic surgical procedures of the partially and completely edentulous patient and the role of general dentist, describe the various ridge augmentation procedures available to patients, endodontic surgery and dentoalveolar surgery performed by oral and maxillofacial surgeons and identify the role of oral and maxillofacial surgeons in implant placement		

(B) Intellectual Skills			
Alignment of Course CILOs to PILOs in intellectual skills:			
PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1, B3	b1-	Make and formulate an appropriate treatment plan as well as justify it if challenged.
B2-	B5	b2-	Select suitable materials and instruments to perform basic oral surgical procedures as well as prescribe different medications

B3-	B4	b3-	Consider appropriately patients' rights, particularly with regard to confidentiality and obtaining a valid consent.
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Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Make and formulate an appropriate treatment plan as well as justify it if challenged.		
b2-	Select suitable materials and instruments to perform basic oral surgical procedures as well as prescribe different medications depending on the patient's needs.	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion 	<ul style="list-style-type: none"> ▪ Oral exam. ▪ Assignments
b3-	Consider appropriately patients' rights, particularly with regard to confidentiality and obtaining a valid consent.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Properly perform exodontia and basic minor oral surgery procedures including removal of roots, simple wisdom teeth, apicectomy and proper suturing technique
C2-	C4	c2-	Consider appropriately patients' rights, particularly with regard to confidentiality and valid consent, and of patients' obligations
C3-	C7	c3-	Perform a clinical examination of the bone disease and assist in relevant surgical procedures.

C4-	C7	c4-	Prepare and assist biopsy procedure as incorporated into general practice
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Demonstration ▪ Exercise ▪ Debate 	<ul style="list-style-type: none"> ▪ Practical exam. ▪ Case based scenario / Problem based learning. ▪ Approved procedures documented in logbook. ▪ Assignments
c1-	Properly perform exodontia and basic minor oral surgery procedures including removal of roots, simple wisdom teeth, apisectomy and proper suturing technique		
c2-	Consider appropriately patients' rights, particularly with regard to confidentiality and valid consent, and of patients' obligations		
c3-	Perform a clinical examination of the bone disease and assist in relevant surgical procedures.		
c4-	Prepare and assist biopsy procedure as incorporated into general practice		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3	d1-	Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients
D2-	D6	d2-	Manage patients with confidence, sympathy and understanding.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Training ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d1-	Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients		
d2-	Manage patients with confidence, sympathy and understanding.		

KC. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction	a1,b2	– Instruments for incising tissue, Instruments for elevating mucoperiosteum, Instruments for retracting soft tissue, Instruments for controlling hemorrhage, Instruments for removing bone, Instruments for removing soft tissue, From bony defects, Instruments for suturing mucosa, Instruments for irrigation, Dental elevators & Extraction forceps	1 st , 2 nd	4
2	Infection Control in Surgical Practice	a1	– Introduction, Terminology and Sterilization and Disinfection, Surgical Staff Preparation, Clean versus sterile Technique. Sharps Management	3 rd , 4 th	4
3	Principles of dental extraction I	a1,b1	– Indication and contraindication for exodontia, clinical evaluation of teeth for removal, radiographic	5 th	2

			removal, Patient and dentist position, forceps and elevator extraction		
4	Principles of dental extraction II	a1,b1,b2	– Modification for extraction of teeth, Definition, Indication, contraindication of surgical extraction, steps of extraction of complicated teeth and roots, Post extraction instructions and care of socket	6 th	2
5	Patient Clerking	a1,b2	History and Physical Examinations, Common Health Conditions, Review of Maxillofacial Regions , cardiovascular and respiratory Systems, (ASA)Classification And general Anxiety-Reduction Protocol	7 th	2
6	Mid-Term Theoretical Exam	a1-a2, b1,b2		8 th	2
7	Management of impacted teeth I	a1, a3	– Definition, theory ,causes, diagnosis, classification of mandibular and maxillary teeth impaction, and frequency of impacted teeth.	9 th	2
8	Management of impacted teeth II	a3,b2	– Factor effecting difficult or non-difficult, surgical technique and surgical exposure.	10 th	2
9	Suturing technique	a2,b2	Types of flaps, Types of suturing materials and packing, Types of needle, Types of common suturing techniques	11 th	2
10	Dental extraction complications	a2,b2	Definition, prevention, types, and management	12 th	2
11	Wound healing and postoperative management	a1,b2	Causes of tissue damage, Stages of Wound Healing, Factors That Impair Wound Healing, Types of Healing, and Healing of Extraction Sockets	13 th	2

12	Dental therapeutics: Antibiotics	a2,b1	Definition, classification, principles, common used in dentistry, effecting to medical compromised patient	14 th	2
13	Dental therapeutics: Analgesics	a2,b1	Definition, classification, indication and contraindication, effecting to medical compromised patient	15 th	2
14	Final Theoretical Exam	a1-a4, b1-b3		16 th	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Infection Control in Surgical Practice	c1,d1	1 st	3
2	Revision on LA techniques and instrumentation	c1,d1	2 nd	3
3	- Preoperative health status evaluation - Exodontia techniques - Principles of Surgery - Medical Emergencies in Dental Clinic	c1-c4,d2	3 rd -14 th	36
4	Practical exam	c1-c4, d1,d2	15 th	3
Number of Weeks / Units per Semester			15	45

CCXXVI. Assignments:				
No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	10	c1-c4, d1,d2
Total			10	

CCXXVII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	4 th , 12 th	10	10%	a1, a3
2	Mid-term exam	8 th	20	20%	a1-a2, b1,b2
3	Final theory	16 th	40	40%	a1-a4, b1-b3
Total			70	70%	
Assessment of Practical Part					
1	Assignment	1 st -14 th	10	10%	c1-c4, d1,d2
2	Oral exam	15 th	10	10%	a1-a4,b1-b2
3	Final practical exam	15 th	10	10%	c1-c4, d1,d2
Total			30	30%	

CCXXVIII. Learning Resources:

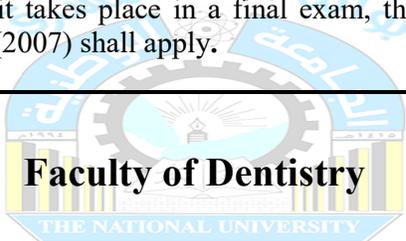
134-	Required Textbook(s) (maximum two)
	1- James Hupp, Edward Ellis and Myron Tucker, 2013, Contemporary Oral and Maxillofacial Surgery, 6th edition . Slsevier 2- Lars Andersson, Karl-ErikKahnberg and M. Anthony Pogrel, 2010, Oral and Maxillofacial Surgery. WielyBlackwell
135-	Essential References
	1- Peterson L, Ellis E, Hupp J, Tucker M., 2008, Contemporary Oral and Maxillofacial Surgery. 5th Edition
136-	Electronic Materials and Web Sites, etc.
	www.joms.org

CCXXIX. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not



	leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Oral surgery (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CDXIII. Course Identification and General Information:						
1	Course Title:	Oral surgery (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Dental Anesthesia and Medically Compromised Patients				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

CDXIV. Course Description:
<p>The aim of this course is known the students about techniques for tooth extraction in upper and lower jaw, know mechanisms of normal extraction wound healing, therapy options for complications during and after tooth extraction. It covers the basic knowledge about Oral Surgery as they relate to the general practitioner of dentistry, also begin basic exodontia steps, as well as developing an understanding of aseptic techniques, local anesthetic and exodontia techniques / armentarium, and principles of tooth extraction</p>

CDXV. Outcomes of the Course
<p>The students would be well trained in the assessment and management of:</p> <ol style="list-style-type: none"> 1. Basic Exodontia

2. Complicated Exodontia
 3. Surgical management of Impacted teeth
 4. Complications of Dentoalveolar Surgery
- The students would be able to diagnose and manage Medical emergencies like, prevention and management of altered consciousness (syncope, orthostatic hypotension, seizures, diabetes mellitus, adrenal insufficiency), hypersensitivity reactions, chest discomfort, and respiratory difficulty
- The students would be knowledgeable about
1. Diagnosis and Perioperative Management of Head and Neck Injuries
 2. Basic Principles of Treatment: Hard and Soft Tissue injuries

CDXVI. Intended learning outcomes (ILOs) of the course	
(A) Knowledge and Understanding:	
After participating in the course, students would be able to:	
a1-	Describe the basic facts, concepts and techniques needed for the diagnosis and treatment of basic oral surgeries and exodontia.
a2-	Discuss the complications associated with basic oral surgical procedures.
a3-	Properly identify and diagnose those impacted teeth that require removal, describe surgical techniques for removal of impacted teeth and Discuss complications associated with surgical removal of impacted teeth
a4-	Describe the preprosthetic surgical procedures of the partially and completely edentulous patient and the role of general dentist, describe the various ridge augmentation procedures available to patients, endodontic surgery and dentoalveolar surgery performed by oral and maxillofacial surgeons and identify the role of oral and maxillofacial surgeons in implant placement

(B) Intellectual Skills	
After participating in the course, students would be able to:	
b1-	Make and formulate an appropriate treatment plan as well as justify it if challenged.
b2-	Select suitable materials and instruments to perform basic oral surgical procedures as well as prescribe different medications depending on the patient's needs.
b3-	Consider appropriately patients' rights, particularly with regard to confidentiality and obtaining a valid consent.

(C) Professional and Practical Skills
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After participating in the course, students would be able to:	
c1-	Properly perform exodontia and basic minor oral surgery procedures including removal of roots, simple wisdom teeth, apsectomy and proper suturing technique
c2-	Consider appropriately patients' rights, particularly with regard to confidentiality and valid consent, and of patients' obligations
c3-	Perform a clinical examination of the bone disease and assist in relevant surgical procedures.
c4-	Prepare and assist biopsy procedure as incorporated into general practice

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1-	Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients
d2-	Manage patients with confidence, sympathy and understanding.

CDXVII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction	– Instruments for incising tissue, Instruments for elevating mucoperiosteum, Instruments for retracting soft tissue, Instruments for controlling hemorrhage, Instruments for removing bone, Instruments for removing soft tissue, From bony defects, Instruments for suturing mucosa, Instruments for irrigation, Dental elevators & Extraction forceps	1 st , 2 nd	4
2	Infection Control in Surgical Practice	– Introduction, Terminology and Sterilization and Disinfection, Surgical Staff Preparation, Clean versus sterile Technique. Sharps Management	3 rd , 4 th	4
3	Principles of dental extraction I	– Indication and contraindication for exodontia, clinical evaluation of teeth	5 th	2

		for removal, radiographic examination of teeth for removal, Patient and dentist position, forceps and elevator extraction		
4	Principles of dental extraction II	– Modification for extraction of teeth, Definition, Indication, contraindication of surgical extraction, steps of extraction of complicated teeth and roots, Post extraction instructions and care of socket	6 th	2
5	Patient Clerking	History and Physical Examinations, Common Health Conditions, Review of Maxillofacial Regions , cardiovascular and respiratory Systems, (ASA)Classification And general Anxiety-Reduction Protocol	7 th	2
6	Mid-Term Theoretical Exam		8 th	2
7	Management of impacted teeth I	– Definition, theory ,causes, diagnosis, classification of mandibular and maxillary teeth impaction, and frequency of impacted teeth.	9 th	2
8	Management of impacted teeth II	– Factor effecting difficult or non-difficult, surgical technique and surgical exposure.	10 th	2
9	Suturing technique	Types of flaps, Types of suturing materials and packing, Types of needle, Types of common suturing techniques	11 th	2
10	Dental extraction complications	Definition, prevention, types, and management	12 th	2
11	Wound healing and postoperative management	Causes of tissue damage, Stages of Wound Healing, Factors That Impair Wound Healing, Types of Healing, and Healing of Extraction Sockets	13 th	2
12	Dental therapeutics: Antibiotics	Definition, classification, principles, common used in dentistry, effecting to medical compromised patient	14 th	2
13	Dental therapeutics: Analgesics	Definition, classification, indication and contraindication, effecting to medical compromised patient	15 th	2

14	Final Theoretical Exam		16 th	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Infection Control in Surgical Practice	1 st	3
2	Revision on LA techniques and instrumentation	2 nd	3
3	- Preoperative health status evaluation - Exodontia techniques - Principles of Surgery - Medical Emergencies in Dental Clinic	3 rd -14 th	36
4	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

CDXVIII. Teaching strategies of the course
<ul style="list-style-type: none"> - Lectures - exercise - Debate - Training - Dialogue and discussion - Brainstorming - Self-independent learning (problem based learning)
CDXIX. Assessment Methods of the Course:
<ul style="list-style-type: none"> - a. Activities(periodical exams) as short answers, mcq questions, true and false,complete and define) - b. Submission of requirements (10 case of closed extraction with the selected anesthetic technique) - c. Midterm written exam (mcq questions, complete, short essay, enumerate, and define) - d. Final written exam (mcq questions, complete, short essay, enumerate, and define) - e. Practical exam(will be carried in the clinic by case administration of local anesthesia and perform painless closed tooth extraction)

- f. Oral exam (will be performed by internal and external examiner through free discussion).

CDXX. Assignments:

No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	10
Total			10

CDXXI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	4 th , 12 th	10	10%
2	Mid-term exam	8 th	20	20%
3	Final theory	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Assignment	1 st -14 th	10	10%
2	Oral exam	15 th	10	10%
3	Final practical exam	15 th	10	10%
Total			30	30%

CDXXII. Learning Resources:

58- Required Textbook(s) (maximum two)

- 3- James Hupp, Edward Ellis and Myron Tucker, 2013, Contemporary Oral and Maxillofacial Surgery, 6th edition . Slsevier
- 4- Lars Andersson, Karl-ErikKahnberg and M. Anthony Pogrel, 2010, Oral and Maxillofacial Surgery. WielyBlackwell

49- Essential References

- 2- Peterson L, Ellis E, Hupp J, Tucker M., 2008, Contemporary Oral and Maxillofacial Surgery. 5th Edition

50- Electronic Materials and Web Sites, etc.

- 34- www.joms.org

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Orthodontics (1)

Course No.()

2021/2022



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Prepared by:

Dr. Ghamdan Abdullah Al-Harazi

Reviewed by:

Dr.

Quality Assurance

Dean:

الجامعة الوطنية
NU

CXCI. Course Identification and General Information:						
1	Course Title:	Orthodontics (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2		3	
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Histology and embryology				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Ghamdan Abdullah Al-Harazi				
12	Date of Approval	2020-2021				

CXCII. Course Description:

This course is an introduction to orthodontics to provide students with basic principles of orthodontics, knowledge of growth and development of face, arch and dentitions, for identifying existing and developing problems associated with dental and skeletal malocclusion, tracing cephalometric radiographs, manipulation of orthodontic wires and acrylics, process of soldering and welding, the most appropriate appliances for malocclusion with practical applications and demonstrations. This course has a preclinical practice that helps in offering experience needed for the preceding clinical courses.

CXCIII. Outcomes of the Course

Under Orthodontic History they would have learned about Historical perspective, Evolution of orthodontic appliances, Pencil sketch history of Orthodontic peers.

Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Identify the principles and fundamentals of orthodontics
A2-	A1	a2-	Understanding the normal facial, dental and occlusal development and recognize the deviations from normal
A3-	A2	a3-	Recognize dental and skeletal malocclusion
A4-	A1,A4	a4-	Describe the outline cephalometric lines and points and analyze the results

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Identify the principles and fundamentals of orthodontics	<ul style="list-style-type: none"> ▪ Lectures ▪ Group Discussion ▪ Exercises ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Coursework activity ▪ Exams
a2-	Understanding the normal facial, dental and occlusal development and recognize the deviations from normal		
a3-	Recognize dental and skeletal malocclusion		
a4-	Describe the outline cephalometric lines and points and analyze the results		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills	CILOs of intellectual skills
------------------------------	------------------------------

		to:	
B1-	B4	b1-	Construct preventive and interceptive treatment
B2-	B5	b2-	Design different types of orthodontic appliances using selected instruments and materials

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Lab sessions and training 	<ul style="list-style-type: none"> ▪ Coursework activity ▪ Exams
b1-	Construct preventive and interceptive treatment		
b2-	Design different types of orthodontic appliances using selected instruments and materials		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C3	c1-	Apply infection control protocols during lab sessions
C2-	C1,C4	c2-	Perform fabrication of orthodontic appliances including wires bending, soldering and welding and acrylic base

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Lab Sessions and training 	<ul style="list-style-type: none"> ▪ Coursework activities ▪ Exam ▪ Practical session
c1-	Apply infection control protocols		

c2-	Perform fabrication of orthodontic appliances including wires bending, soldering and welding and acrylic base		
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(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D2	d1-	Use the latest technology for presenting and collecting data.
D2-	D4	d2-	Manage time and resources.

Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lab Sessions ▪ Exercises 	<ul style="list-style-type: none"> ▪ Coursework activities ▪ Practical sessions
d1-	Use the latest technology for presenting and collecting data.		
d2-	Manage time and resources.		

IV. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Fundamentals of orthodontics	a1	<ul style="list-style-type: none"> • Definition and terminology • Aims of orthodontics – scope of orthodontics 	1	2
2	Craniofacial growth and development	a2,d2	<ul style="list-style-type: none"> • Postnatal growth • Growth pattern and variability • Nature of skeletal growth • Growth in craniofacial complex – Theories of growth control 	2,3	4

3	Development of occlusion	a2,d2	<ul style="list-style-type: none"> • Ideal VS. normal occlusion • Tooth development – Stages of occlusal development 	4	2
4	Malocclusion	a3,d1, d2	<ul style="list-style-type: none"> • Etiology of malocclusion • Classification of malocclusion • Factors that has role in malocclusion: <ul style="list-style-type: none"> - Skeletal - Soft tissue – Local factors 	5,6	4
5	Midterm Exam	a1,a2, d1, d2	– Written exam	7	2
6	Orthodontic Materials and instruments	b2,d1, d2	<ul style="list-style-type: none"> • Materials used in orthodontics Instruments used in orthodontics 	8	2
7	Interceptive treatment	b1,b2, d1,d2	<ul style="list-style-type: none"> • Principles of interceptive orthodontics • Components of removable appliance • The most appropriate removable appliances for different malocclusions • Indications for fabrication of orthodontic appliances. • Procedures for fabrication of orthodontic appliances <ul style="list-style-type: none"> - Manipulation of orthodontics wires and acrylics – Characters of different wires and acrylic 	9,10, 11	6
8	Cephalometric identification and analysis	a4,d1, d2	<ul style="list-style-type: none"> • Definition • Indications • Cephalometric points and lines • Cephalometric analysis – Tracing and interpretation 	12,13	4
9	Review	a1- a4,b1, b2,d2	– Previous topics	14,15	4
10	Final Exam	a1- a4,b1, b2,d2	– MCQs	16	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Wire bending Zigzag, square Adam's Labial bow z-spring	c1,c2,d1,d2	1-14	28
2	Practical exam	c1,c2,d1,d2	15 th	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course	
<ul style="list-style-type: none"> - Lectures - Group discussions - Exercises - Brainstorming - Lab sessions 	
CCXXX. Teaching Strategies of the Course:	
<ul style="list-style-type: none"> - Midterm exam - Requirements - Practical exam - Final MCQ exam - Oral exam 	

CCXXXI. Assignments:				
No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	20	c1,c2,d1,d2
Total			20	

CCXXXII. Schedule of Assessment Tasks for Students During the Semester	
Assessment of Theoretical Part	

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Midterm written exam	7 th	20	20%	a1,a2,d2
2	Final exam	16 th	40	40%	a1-a4,b1,b2,d2
Total			60	60%	
Assessment of Practical Part					
1	Requirements	1 st -14 th	20	20%	c1,c2,d1,d2
2	Final Lab Exam	15 th	10	10%	c1,c2,d1,d2
3	Oral Exam	15 th	10	10%	a1-a4,b1,b2,d2
Total			40	40%	

CCXXXIII. Learning Resources:

137- Required Textbook(s) (maximum two)

26- Proffit W., Fields H., Larson B., Sarver D. 2018. Contemporary Orthodontics.6thed. Mosby, USA.

138- Essential References

5. Graber L., Vanarsdall R., Vig K., Huang G. 2016. Orthodontics current principles and techniques. 6th ed. Mosby, USA.

6. Electronic Materials and Web Sites, etc.

52- <https://www.ajodo.org/>

CCXXXIV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating:

	Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
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7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery



Course Plan (Syllabus) of Orthodontics (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CDXXIII. Course Identification and General Information:

1	Course Title:	Orthodontics (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Histology and embryology				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Ghamdan Abdullah Al-Harazi				
12	Date of Approval	2020-2021				

CDXXIV. Course Description:

This course is an introduction to orthodontics to provide students with basic principles of orthodontics, knowledge of growth and development of face, arch and dentitions, for identifying existing and developing problems associated with dental and skeletal malocclusion, tracing cephalometric radiographs, manipulation of orthodontic wires and acrylics, process of soldering and welding, the most appropriate appliances for malocclusion with practical applications and demonstrations. This course has a preclinical practice that helps in offering experience needed for the preceding clinical courses.

CDXXV. Outcomes of the Course

Under Orthodontic History they would have learned about Historical perspective, Evolution of orthodontic appliances, Pencil sketch history of Orthodontic peers.

CDXXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Identify the principles and fundamentals of orthodontics
a2-	Understanding the normal facial, dental and occlusal development and recognize the deviations from normal
a3-	Recognize dental and skeletal malocclusion
a4-	Describe the outline cephalometric lines and points and analyze the results

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Construct preventive and interceptive treatment
b2-	Design different types of orthodontic appliances using selected instruments and materials

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Apply infection control protocols during lab sessions
c2-	Perform fabrication of orthodontic appliances including wires bending, soldering and welding and acrylic base

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Use the latest technology for presenting and collecting data.
d2-	Manage time and resources.

CDXXVII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Fundamentals of orthodontics	<ul style="list-style-type: none"> • Definition and terminology • Aims of orthodontics – scope of orthodontics 	1	2
2	Craniofacial growth and	<ul style="list-style-type: none"> • Postnatal growth <ul style="list-style-type: none"> • Growth pattern and variability 	2,3	4

		<ul style="list-style-type: none"> Nature of skeletal growth Growth in craniofacial complex Theories of growth control 		
3	Development of occlusion	<ul style="list-style-type: none"> Ideal VS. normal occlusion Tooth development Stages of occlusal development 	4	2
4	Malocclusion	<ul style="list-style-type: none"> Etiology of malocclusion Classification of malocclusion Factors that has role in malocclusion: <ul style="list-style-type: none"> Skeletal Soft tissue Local factors 	5,6	4
5	Midterm Exam	– Written exam	7	2
6	Orthodontic Materials and instruments	<ul style="list-style-type: none"> Materials used in orthodontics Instruments used in orthodontics 	8	2
7	Interceptive treatment	<ul style="list-style-type: none"> Principles of interceptive orthodontics Components of removable appliance The most appropriate removable appliances for different malocclusions Indications for fabrication of orthodontic appliances. Procedures for fabrication of orthodontic appliances <ul style="list-style-type: none"> Manipulation of orthodontics wires and acrylics Characters of different wires and acrylic 	9,10, 11	6
8	Cephalometric identification and analysis	<ul style="list-style-type: none"> Definition Indications Cephalometric points and lines Cephalometric analysis Tracing and interpretation 	12,13	4
9	Review	– Previous topics	14,15	4
10	Final Exam	– MCQs	16	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Wire bending Zigzag square	1-14	28

	Adam's Labial bow z-spring		
2	Practical exam	15 th	2
Number of Weeks / Units per Semester		15	30

CDXXVIII. Teaching strategies of the course

- Lectures
- Group discussions
- Exercises
- Brainstorming
- Lab sessions

CDXXIX. Assessment Methods of the Course:

- Midterm exam
- Requirements
- Practical exam
- Final MCQ exam
- Oral exam



CDXXX. Assignments:

No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	20
Total			20

CDXXXI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Midterm written exam	7 th	20	20%

2	Final exam	16 th	40	40%
Total			60	60%
Assessment of Practical Part				
1	Requirements	1 st -14 th	20	20%
2	Final Lab Exam	15 th	10	10%
3	Oral Exam	15 th	10	10%
Total			40	40%

CDXXXII. Learning Resources:	
59- Required Textbook(s) (maximum two)	
	51- Proffit W., Fields H., Larson B., Sarver D. 2018. Contemporary Orthodontics.6thed. Mosby, USA.
52- Essential References	
	13- Graber L., Vanarsdall R., Vig K., Huang G. 2016. Orthodontics current principles and techniques. 6th ed. Mosby, USA.
53- Electronic Materials and Web Sites, etc.	
	53- https://www.ajodo.org/

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform

	Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Periodontology 1

Course No.()



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Prepared by:

Dr. Manal Mohammed Al-Hajri

Reviewed by:

Dr.

Quality Assurance

Dean:

XCV. Course Identification and General Information:

1	Course Title:	Periodontology 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Oral histology, microbiology and oral pathology				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

XCVI. Course Description:

The course is designed to provide the students with an introduction to the basic concepts of the normal periodontium, early pathologic changes, their etiologic factors.

XCVII. Outcomes of the Course

1. Should have a understanding on the normal structure of periodontium and the contributing etiological factors resulting in the pathogenesis of periodontal diseases and be able to apply this knowledge in the diagnosis.
2. Should be able to record indices and plan out epidemiological survey to assess the prevalence and incidence of early onset periodontitis and adult periodontitis in Indian Population

CVIII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.	
PILOs in knowledge and understanding	CILOs in knowledge and understanding
After completing this program, students would be able to:	After participating in the course, students would be able to:
A1,2,C2	a1- Components of the healthy periodontium and manifest of diseased periodontium
A1,2,C2	a2- Classification of periodontal disease according to latest international classification
A1,2,4 C2	a3- Understanding of the relationship of the oral microbiota to disease; to explain the concepts of the non-specific and specific plaque hypothesis in periodontal disease.
A1,2,4	a4- An understanding of the immunological responses involved in the pathogenesis of periodontal disease
A1,2,4	a5- Understanding cellular immunology, antibody, antibody structure and function, complement system and the immunologic manifestations of inflammatory periodontal disease
A1,2,4	A6 Understanding bacterial structure, the general oral microbial flora and the bacteria associated with inflammatory periodontal disease.
A1,2,4	a7 Understanding bacterial mechanisms of adherence, multiplication, pathogenesis and the interactions between the bacterial and the host tissues and host defence mechanisms.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:		
CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	Lectures exercise Debate	Exam
a1- Components of the healthy periodontium and manifest of diseased periodontium		Homework
a2- Classification of periodontal disease according to latest international classification		
a3- Understanding of the relationship of the oral		

	of the non-specific and specific plaque hypothesis in periodontal disease.		
a4-	An understanding of the immunological responses involved in the pathogenesis of periodontal disease		
a5-	Understanding cellular immunology, antibody, antibody structure and function, complement system and the immunologic manifestations of inflammatory periodontal disease		
A6	Understanding bacterial structure, the general oral microbial flora and the bacteria associated with inflammatory periodontal disease.		
A7	Understanding bacterial mechanisms of adherence, multiplication, pathogenesis and the interactions between the bacterial and the host tissues and host defence mechanisms.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A1,2,4,b1,b3,c1,2,4,7	b1-	Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment.
	A2,4, 5,b1,b3,4, 5,c1,2,3,4, 5,6,7	b2-	Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
b1-	Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment	exercise	Homework

b2-	Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.	Debate	
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(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C1,2,3,4,6	c1-	Examining and monitoring the oral soft and hard tissues of periodontal tissues
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
c1	Examining and monitoring the oral soft and hard tissues of periodontal tissues	exercise Debate	Homework

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D2	d1-	Use internet and multimedia.
	D1,4,6	d2-	Manage time and resources
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment

After participating in the course, students would be able to:		Lectures	Exam
d1-	Use internet and multimedia.	exercise	Homework
d2-	Manage time and resources	Debate	

IX. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Introduction and historical background of periodontology	A 1,2,3,4,b1,2,C1	<ul style="list-style-type: none"> The Normal Periodontium Classification of Diseases and Conditions Affecting the Periodontium. Epidemiology of gingival and periodontal diseases. Aging and periodontium 	5	10
2	Etiology of periodontal diseases-1	A 5,6,b1,2	<ul style="list-style-type: none"> Periodontal microbiology Immunity and inflammation (basic concepts). Microbial interaction with the host on periodontal diseases. Molecular biology of host-microbe interaction in periodontal diseases 	5	10
3	Mid-Term Exam	A 1,2,3		1	2
4	Etiology of periodontal diseases-2	A 5,6,b1,2	<ul style="list-style-type: none"> Genetic factors associated with periodontal diseases. Role of dental calculus and other predisposing factors. Influence of systemic diseases and disorders on periodontium. Periodontal medicine. Smoking and periodontal diseases 	4	8

5	Final Exam			1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	A1- A2- A3- A4-b1,2,C1	1 st and 2 nd	6
2	Examine gingival and perform all requested periodontal measurement in case sheet.	A1- A2- A3- A4-b1,2,C1	3 th to 14 th	36
3-	Practical exam		15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming



CCXXXV. Teaching Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CCXXXVI. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the instructor	10	a1, a2, a3, 4, 5,6,7, b1,2,d1, d2

CCXXXVII. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Mid tem exam	4th	20	20%	a1a2
2	Final tem exam	14th	40	40%	a1a2a3a4, 5,b1,2
4	Attending and assignment	1st to 14th	10	10%	a1,a2,a3,b1,b2
Total			70	70%	
Assessment of Practical Part					
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	1 st and 2 nd	15	15%	A1- A2- A3- A4-b1,2,C1
2	Examine gingival and perform all requested periodontal measurement in case sheet.	3th to 14 th	15	15%	A1- A2- A3- A4-b1,2,C1
Total			30	30%	

CCXXXVIII. Learning Resources:	
139-	Required Textbook(s) (maximum two)
	27- 1.Jan Lindhe Clinical Periodontology and Implant Dentistry , 4th edition.
140-	Essential References
	31- .Carranza's Clinical Periodontology edition, 13th Edition.
141-	Electronic Materials and Web Sites, etc.
	35- Periodontology journals

CCXXXIX. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of

	class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

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Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:									
Name of Faculty Member:	Dr.Manal Mohammed Al-Hajri			Office Hours					
Location & Telephone No.:	00967779212007								
E-mail:	dent.manal@yahoo.com			SAT	SUN	MON	TUE	WED	THU



CDXXXIII. Course Identification and General Information:						
1	Course Title:	Periodontology 1				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	4 th Level / 1 st Semester				
5	Prerequisites:	Oral histology, microbiology and oral pathology				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				

11	Prepared by:	Dr. Manal Mohammed Al-Hajri
12	Date of Approval	2020-2021

CDXXXIV. Course Description:

The course is designed to provide the students with an introduction to the basic concepts of the normal periodontium, early pathologic changes, their etiologic factors.

CDXXXV. Outcomes of the Course

1. Should have a understanding on the normal structure of periodontium and the contributing etiological factors resulting in the pathogenesis of periodontal diseases and be able to apply this knowledge in the diagnosis.
2. Should be able to record indices and plan out epidemiological survey to assess the prevalence and incidence of early onset periodontitis and adult periodontitis in Indian Population

CDXXXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Components of the healthy periodontium and manifest of diseased periodontium
a2-	Classification of periodontal disease according to latest international classification
a3-	Understanding of the relationship of the oral microbiota to disease; to explain the concepts of the non-specific and specific plaque hypothesis in periodontal disease.
a4-	An understanding of the immunological responses involved in the pathogenesis of periodontal disease
a5-	-Understanding cellular immunology, antibody, antibody structure and function, complement system and the immunologic manifestations of inflammatory periodontal disease.
A6	Understanding bacterial structure, the general oral microbial flora and the bacteria associated with inflammatory periodontal disease.
A7	Understanding bacterial mechanisms of adherence, multiplication, pathogenesis and the interactions between the bacterial and the host tissues and host defence mechanisms.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment.
b2-	Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Examining and monitoring the oral soft and hard tissues of periodontal tissues
------------	--

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Use internet and multimedia.
d2-	Manage time and resources

C CDXXXVIII. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Introduction and historical background of periodontology	<ul style="list-style-type: none"> The Normal Periodontium Classification of Diseases and Conditions Affecting the Periodontium. Epidemiology of gingival and periodontal diseases. Aging and periodontium 	5	10
2	Etiology of periodontal diseases-1	<ul style="list-style-type: none"> Periodontal microbiology Immunity and inflammation (basic concepts). Microbial interaction with the host on periodontal diseases. 	5	10

		interaction in periodontal diseases		
3	Mid-Term Exam		1	2
4	Etiology of periodontal diseases-2	<ul style="list-style-type: none"> Genetic factors associated with periodontal diseases. Role of dental calculus and other predisposing factors. Influence of systemic diseases and disorders on periodontium. Periodontal medicine. Smoking and periodontal diseases 	4	8
5	Final Exam		1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	1 st and 2 nd	6
2	Examine gingival and perform all requested periodontal measurement in case sheet.	3 th to 14 th	36
3	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

CDXXXIX. Teaching strategies of the course
<ul style="list-style-type: none"> Lectures exercise Debate Training Dialogue and discussion Brainstorming
CDXL. Assessment Methods of the Course:
<ul style="list-style-type: none"> Mid tem exam Final tem exam Practical exam

CDXLI. Assignments:			
No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

CDXLII. Schedule of Assessment Tasks for Students During the Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exam	14th	40	40%
1	Mid tem exam	4th	20	20%
3	Attending and assignment	1st to 14th	10	10%
Total			70	100%
Assessment of Practical Part				
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	1 st and 2 nd	15	15%
2	Examine gingival and perform all requested periodontal measurement in case sheet.	3th to 14 th	15	15%
Total			30	30%

CDXLIII. Learning Resources:	
60- Required Textbook(s) (maximum two)	
	54- Jan Lindhe Clinical Periodontology and Implant Dentistry , 4th edition.
55- Essential References	
	14- Carranza's Clinical Periodontology edition, 13th Edition.
56- Electronic Materials and Web Sites, etc.	
	35- Periodontology journals

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Periodontology (2)

Course No.()

2021/2022



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Prepared by:

Dr. Manal Mohammed Al-Hajri.

Reviewed by:

Dr.

Quality Assurance

Dean:



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CC. Course Identification and General Information:						
1	Course Title:	Periodontology 2				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	4th Level / 2 nd Semester				
5	Prerequisites:	Periodontology 1				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

CCI. Course Description:

This course is to train students to understand different types of gingivitis and periodontitis. To perform a comprehensive periodontal examination, collect clinical data and document the patient's dental and medical status. Conduct consultations with other medical and dental specialists and demonstrate the ability to effectively communicate in both written and verbal models. Identify the instruments for manual scaling and polishing.

CCII. Outcomes of the Course

1. Should have a sound knowledge of the etiopathogenesis and apply it in diagnosing various periodontal diseases and should be familiar with various periodontal therapies available to treat those cases.
2. Should have an updated knowledge on the recent advancements and be able to modify their treatment accordingly.

CCIII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.	
PILOs in knowledge and understanding	CILOs in knowledge and understanding
After completing this program, students would be able to:	After participating in the course, students would be able to:
A1,2,4,b1,b3,c1,2,4,7	a1- Understanding different types of gingivitis
A1,2,4,b1,b3,c1,2,4,7	a2- Understanding different types of periodontitis
A1,2,4,b1,b3,c1,2,4,7	a3- Understanding periodontal pocket and patterns of attachment loss and their prognostic and treatment implications.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:		
CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	Lectures	Exam
a1- Understanding different types of gingivitis	exercise	Homework
a2- Understanding different types of periodontitis	Debate	
a3- Understanding periodontal pocket and patterns of attachment loss and their prognostic and treatment implications.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills	CILOs of intellectual skills
After completing this program, students would be able to:	After participating in the course, students would be able to:
A1,2,4,b1,b3,c1,2,4,7	b1- Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment.
A2,4, 5,b1,b3,4, 5,c1,2,3,4, 5,6,7	b2- Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.

Teaching and Assessment Methods for Achieving Learning Outcomes

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
b1-	Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment.		
b2-	Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.		

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C1,2,3,4,6	c1-	Taking the medical history as part of the diagnostic process.
	C1,2,3,4,6	C2	Examining the periodontium, establishing a diagnosis.
	C1,2,3,4,6	C3	Examining and monitoring the oral soft and hard tissues including screening (Community Periodontal Index of Treatment Need), plaque and gingival indices, measuring the pocket depth and gingival recession to make the proper diagnosis of various diseases and abnormalities of periodontal tissues
	C1,2,3,4,6	C4	Formulate a comprehensive, sequential dental treatment plan based on the diagnostic findings for the child, adolescent and adult patient.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skillsto teaching and assessment methods:

CILOs in professional and practical skills	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able	Lectures	Fxam

c1	Taking the medical history as part of the diagnostic process.	exercise Debate	Homework
C2	Examining the periodontium, establishing a diagnosis.	Lectures exercise Debate	Exam Homework
C3	Examining and monitoring the oral soft and hard tissues including screening (Community Periodontal Index of Treatment Need), plaque and gingival indices, measuring the pocket depth and gingival recession to make the proper diagnosis of various diseases and abnormalities of periodontal tissues	Lectures exercise Debate	Exam Homework
C4	Formulate a comprehensive, sequential dental treatment plan based on the diagnostic findings for the child, adolescent and adult patient.	Lectures exercise Debate	Exam Homework

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D2		d1-	Use internet and multimedia.
D1,4,6		d2-	Manage time and resources

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
d1-	Use internet and multimedia.	exercise	Homework
d2-	Manage time and resources	Debate	

IV. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Gingival disease	A1,B1,C1	<ul style="list-style-type: none"> • Defense mechanisms of gingiva. • Gingival inflammation. • Clinical features of gingivitis. • Gingival enlargement. • Plaque induced gingivitis • Non-Plaque induced gingivitis • Acute gingival infections. • Desquamative gingivitis. 	7	14
2	Mid-Term Exam	A1,B1,C1		1	2
4	Periodontal Disease	A2, 3,B1,2,C1,2, 3,4	<ul style="list-style-type: none"> • Periodontal microbiology • Immunity and inflammation (basic concepts). • Microbial interaction with the host on periodontal diseases. • Molecular biology of host-microbe interaction in periodontal diseases 	4	8
5	Final Exam	A1,2, 3,B1,2,C1,2, 3,4		1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	a1,a2,a3,b1,b2,c1,c2,c3,c4	1 st to 14 th	3
2	Instruct & motivate patients about all possible Oral hygiene procedures.	b1,b2,c1,c2,c3,c4	1 st to 14 th	3

	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	b1,b2,c1,c2,c3,c4	1 st to 14 th	3
	Make the correct diagnosis and proper treatment plan	b1,b2,c1,c2,c3,c4	1 st to 14 th	3
	Identify the instruments for manual root planning and polishing	b1,b2,c1,c2,c3,c4	1 st to 14 th	3
	Using of manual instruments for scaling , root planning and polishing.	b1,b2,c1,c2,c3,c4	1 st to 14 th	3
	Using ultrasonic scaling and polishing.	b1,b2,c1,c2,c3,c4	6 th to 10 th	3
	Sharpening of currets and scalers by using sharpening stones.	b1,b2,c1,c2,c3,c4	7 th	3
	Practical Exam		15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CCXL. Teaching Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CCXLI. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as	10	a1, a2, a3, 4, 5,6,7, d1, d2

		by the instructor		
	Total		10	

CCXLII. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Mid tem exam	4th	20	20%	a1a2
2	Final tem exame	14th	40	40%	a1a2a3a4, 5
4	Attending and assignment	1st to 14th	10	10%	a1,a2,a3,b1,b2
	Total		70	70%	
Assessment of Practical Part					
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	1 st to 14 th	4	4%	a1,a2,a3,b1,b2,c1,c2,c3,c4
2	Instruct & motivate patients about all possible Oral hygiene procedures.	1 st to 14 th	2	2%	b1,b2,c1,c2,c3,c4
3	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	1 st to 14 th	4	4%	b1,b2,c1,c2,c3,c4
4	Make the correct diagnosis and proper treatment plan	1 st to 14 th	4	4%	b1,b2,c1,c2,c3,c4
	Identify the instruments for manual root planning and polishing	1 st to 14 th	4	4%	b1,b2,c1,c2,c3,c4
6	Using of manual instruments for scaling , root planning and polishing.	1 st to 14 th	4	4%	b1,b2,c1,c2,c3,c4

7	Using ultrasonic scaling and polishing.	6 th to 10 th	4	4%	b1,b2,c1,c2,c3,c4
8	Sharpening of currets and scalers by using sharpening stones.	7 th	3	4%	b1,b2,c1,c2,c3,c4
Total			30	30%	

CCXLIII. Learning Resources:

142- Required Textbook(s) (maximum two)

28- 1.Jan Lindhe Clinical Periodontology and Implant Dentistry , 4th edition.

143- Essential References

32- .Carranza's Clinical Periodontology edition, 13th Edition.

144- Electronic Materials and Web Sites, etc.

36- Periodontology journals

CCXLIV. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies:

Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Plan of Periodontology (2)

Course No. (----)

I. Information about Faculty Member Responsible for the Course:								
Name of Faculty Member:	Dr.Manal Mohammed Al-Hajri		Office Hours					
Location & Telephone No.:	00967779212007							
E-mail:	dent.manal@yahoo.com		SAT	SUN	MON	TUE	WED	THU

2021/2022

CDXLIV. Course Identification and General Information:						
1	Course Title:	Periodontology (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Periodontology 1				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				

9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Dr. Manal Mohammed Al-Hajri
12	Date of Approval	2020-2021

CDXLV. Course Description:

This course is to train students to understand different types of gingivitis and periodontitis. To perform a comprehensive periodontal examination, collect clinical data and document the patient's dental and medical status. Conduct consultations with other medical and dental specialists and demonstrate the ability to effectively communicate in both written and verbal models. Identify the instruments for manual scaling and polishing.

CDXLVI. Outcomes of the Course

1. Should have a sound knowledge of the etiopathogenesis and apply it in diagnosing various periodontal diseases and should be familiar with various periodontal therapies available to treat those cases.
2. Should have an updated knowledge on the recent advancements and be able to modify their treatment accordingly.

CDXLVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Understanding different types of gingivitis |
| a2- | Understanding different types of periodontitis |
| a3- | Understanding periodontal pocket and patterns of attachment loss and their prognostic and treatment implications. |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment. |
|-----|---|

b2-	Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.
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(C) Professional and Practical Skills

After participating in the course, students would be able to:	
c1	Taking the medical history as part of the diagnostic process.
C2	Examining the periodontium, establishing a diagnosis.
C3	Examining and monitoring the oral soft and hard tissues including screening (Community Periodontal Index of Treatment Need), plaque and gingival indices, measuring the pocket depth and gingival recession to make the proper diagnosis of various diseases and abnormalities of periodontal tissues
C4	Formulate a comprehensive, sequential dental treatment plan based on the diagnostic findings for the child, adolescent and adult patient.

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1-	Use internet and multimedia.
d2-	Manage time and resources

CDXLVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Gingival diseases	<ul style="list-style-type: none"> • Defense mechanisms of gingiva. • Gingival inflammation. • Clinical features of gingivitis. • Gingival enlargement. • Plaque induced gingivitis • Non-Plaque induced gingivitis • Acute gingival infections. • Desquamative gingivitis. 	7	14
2	Midterm Exam	•	1	2
3	Periodontal diseases	• The Periodontal Pocket	7	14

		<ul style="list-style-type: none"> Periodontal Response to External Forces Masticatory System Disorders Chronic Periodontitis 		
4	Final Exam	<ul style="list-style-type: none"> 	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	1st to 14th	3
2	Instruct & motivate patients about all possible Oral hygiene procedures.	1st to 14th	3
3	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	1st to 14th	6
4	Make the correct diagnosis and proper treatment plan	1st to 14th	3
	Identify the instruments for manual root planning and polishing	1st to 14th	6
6	Using of manual instruments for scaling , root planning and polishing.	1st to 14th	9
7	Using ultrasonic scaling and polishing.	6th to 10th	9
8	Sharpening of currets and scalers by using sharpening stones.	7th	3
9	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

CDXLIX. Teaching strategies of the course
<ul style="list-style-type: none"> Lectures exercise Debate Training Dialogue and discussion Brainstorming

CDL. Assessment Methods of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CDLI. Assignments:

No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

CDLII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exam	14th	40	40
1	Mid tem exam	4th	20	30
3	Attending and assignment	1st to 14th	10	20
Total			70	70%

Assessment of Practical Part

1	Fill the case sheet for 4th level students and perform all periodontal measurement.	1st to 14th	4	4%
2	Instruct & motivate patients about all possible Oral hygiene procedures.	1st to 14th	4	4%
	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	1st to 14th	4	4%
	Make the correct diagnosis and proper treatment plan	1st to 14th	4	4%

	Identify the instruments for manual root planning and polishing	1st to 14th	3	3%
	Using of manual instruments for scaling , root planning and polishing.	1st to 14th	4	4%
	Using ultrasonic scaling and polishing.	6th to 10th	4	4%
	Sharpening of currets and scalers by using sharpening stones.	7th	4	4%
	Total		30	300%

CDLIII. Learning Resources:

61- Required Textbook(s) (maximum two)

57- Jan Lindhe Clinical Periodontology and Implant Dentistry , 4th edition.

58- Essential References

15- Carranza's Clinical Periodontology edition, 13th Edition.

59- Electronic Materials and Web Sites, etc.

36- Periodontology journals

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism:

	assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Orthodontics (2)

Course No.()

2021/2022



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Prepared by:

Reviewed by:

Quality Assurance

Dean:

Dr. Ghamdan Abdullah Al-Harazi

Dr.

CCV. Course Identification and General Information:						
1	Course Title:	Orthodontics (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2		3	
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Orthodontics (1)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Ghamdan Abdullah Al-Harazi				
12	Date of Approval	2020-2021				

CCVI. Course Description:

This is an orthodontic course aims providing the students with knowledge on the diagnosis of malocclusion, prevention and treatment planning for the common cases encountered by the general practitioner. It also covers methods of space analysis and creation, orthodontic appliance classification, the biomechanical principles and extraoral anchorages. This course is accompanied with a laboratory training for wires bending, space analysis.

CCVII. Outcomes of the Course

1. Concepts of occlusion and esthetics:

Under this, the students would learn about Structure and function of all anatomic components of occlusion, Mechanics of articulation, Recording of masticatory function, Diagnosis of Occlusal dysfunction, Relationship of TMJ anatomy and pathology and related neuromuscular physiology.

2. Etiology and Classification of malocclusion:

Under this, the students would learn about, a comprehensive review of the local and systemic factors in the causation of Malocclusion and Various classifications of malocclusion

Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A3	a1-	Select the most appropriate appliance for a patient with malocclusion that can general practitioner perform within the governmental rules and ethics
A2-	A1,A2	a2-	Understand the orthodontics movements and biomechanics
A3-	A1,A6	a3-	Identify the orthodontic appliances classifications according to evidence based dentistry

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Select the most appropriate appliance for a patient with malocclusion that can general practitioner perform within the governmental rules and ethics	<ul style="list-style-type: none"> ▪ Lectures ▪ Group Discussion ▪ Exercises ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Coursework activity ▪ Exams
a2-	Understand the orthodontics movements and biomechanics		
a3-	Identify the orthodontic appliances classifications according to evidence based dentistry		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills

CILOs of intellectual skills

After completing this program, students would be able to:

After participating in the course, students would be able

B1-	B3	b1-	Interpret study models for space analysis and creation
B2-	B3,B5	b2-	Design and select the suitable orthodontic appliances using different materials and instruments
B3-	B3	b3-	Recommend the proper extraoral anchorage

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Lab sessions and training 	<ul style="list-style-type: none"> ▪ Coursework activity ▪ Exams
b1-	Interpret study models for space analysis and creation		
b2-	Design and select the suitable orthodontic appliances using different materials and instruments		
b3-	Recommend the proper extraoral anchorage		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C2	c1-	Identify patient's chief complaint, appearance and attitude, obtain and interpret medical, social and dental history, conduct clinical and radiographic examination, and distinguish between normal and pathological hard and soft tissue abnormalities of the orofacial area and create a treatment plan
C2-	C3	c2-	Apply infection control protocols during lab sessions

C3-	C1,C4	c3-	Perform fabrication of orthodontic appliances including wires bending, soldering and welding and acrylic base
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Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Lab Sessions and training 	<ul style="list-style-type: none"> ▪ Coursework activities ▪ Exam ▪ Practical session
c1-	Identify patient's chief complaint, appearance and attitude, obtain and interpret medical, social and dental history, conduct clinical and radiographic examination, and distinguish between normal and pathological hard and soft tissue abnormalities of the orofacial area and create a treatment plan		
c2-	Apply infection control protocols during lab sessions		
c3-	Perform fabrication of orthodontic appliances including wires bending, soldering and welding and acrylic base		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D2	d1-	Use the latest technology for presenting and collecting data.
D2-	D4	d2-	Manage time and resources.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills	Teaching	Methods of
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		strategies/methods	assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lab Sessions ▪ Exercises 	<ul style="list-style-type: none"> ▪ Coursework activities ▪ Practical sessions
d1-	Use the latest technology for presenting and collecting data.		
d2-	Manage time and resources.		

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Diagnosis and treatment plan	a1	<ul style="list-style-type: none"> • Extraoral examination • Intraoral examination • Analysis of diagnostic records • Development of problem lists • Treatment plan • Goals and concepts • Treatment possibilities 	1,2,3	6
2	Space analysis and space creation	a2,d1	<ul style="list-style-type: none"> • Methods of space analysis • Reasons of creating space – Options of creating space 	4,5	4
3	Orthodontics biomechanics	a3,d1,d2	– Biochemical principles of orthodontic procedures including tissue reactions in orthodontics	6,7	4
4	Midterm exam	a1,a2,d1,d2	– Written exam	8	2
5	Extraoral anchorage/ traction	a1,a2,d1,d2	<ul style="list-style-type: none"> • Principles of extraoral anchorage • Types of anchorage • Indications of anchorage – Hazards of anchorages 	9,10	4
6	Classification of orthodontic appliance	b2,b3,d1,d2	<ul style="list-style-type: none"> • Mechanical <ul style="list-style-type: none"> - Fixed appliance <ul style="list-style-type: none"> ✓ Components ✓ Indications ✓ Advantages and disadvantages ✓ types - Myofunctional <ul style="list-style-type: none"> ✓ Mode of action ✓ Classification ✓ Common myofunctional appliances ✓ Advantages and limitations 	11,12,13	6

			Combination of both		
7	Review	a1-a3, b1-b3,d1,d2	- Previous topics	14,15	4
8	Final Exam	a1-a3, b1-b3,d1,d2	- MCQs	16	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Wires bending Buccal canine retractor T spring Finger spring Model cast analysis	c1-c3, d1,d2	1-14	28
2	Practical exam	c1-c3, d1,d2	15 th	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course

- Lectures
- Group discussions
- Exercises
- Brainstorming
- Lab sessions

CCXLV. Teaching Strategies of the Course:

- Midterm exam
- Requirements
- Practical exam
- Final MCQ exam
- Oral exam

CCXLVI. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	20	c1-c3, d1,d2

Total	20
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CCXLVII. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Midterm written exam	8 th	20	20%	a1,a2,d1,d2
2	Final exam	16 th	40	40%	a1-a3, b1-b3,d1,d2
Total			60	60%	
Assessment of Practical Part					
1	Requirements	1 st -14 th	20	20%	c1-c3, d1,d2
2	Final Lab Exam	15 th	10	10%	c1-c3, d1,d2
3	Oral Exam	15 th	10	10%	a1-a3,b1,b2,d2
Total			40	40%	

CCXLVIII. Learning Resources:	
145-	Required Textbook(s) (maximum two)
	29- Proffit W., Fields H., Larson B., Sarver D. 2018. Contemporary Orthodontics.6thed. Mosby, USA.
146-	Essential References
	7. Graber L., Vanarsdall R., Vig K., Huang G. 2016. Orthodontics current principles and techniques. 6th ed. Mosby, USA.
8. Electronic Materials and Web Sites, etc.	
	54- https://www.ajodo.org/

CCXLIX. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time and shall not

	leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Orthodontics (2)

Course No. (----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CDLIV. Course Identification and General Information:						
1	Course Title:	Orthodontics (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	2			3
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Orthodontics (1)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Ghamdan Abdullah Al-Harazi				
12	Date of Approval	2020-2021				

CDLV. Course Description:
<p>This is an orthodontic course aims providing the students with knowledge on the diagnosis of malocclusion, prevention and treatment planning for the common cases encountered by the general practitioner. It also covers methods of space analysis and creation, orthodontic appliance classification, the biomechanical principles and extraoral anchorages. This course is accompanied with a laboratory training for wires bending, space analysis.</p>

CDLVI. Outcomes of the Course
<p>1. Concepts of occlusion and esthetics</p> <p>Under this, the students would learn about Structure and function of all anatomic components of occlusion, Mechanics of articulation, Recording of masticatory function, Diagnosis of Occlusal dysfunction, Relationship of TMJ anatomy and pathology and related neuromuscular physiology.</p> <p>2. Etiology and Classification of malocclusion</p>

in the causation of Malocclusion and Various classifications of malocclusion

CDLVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Select the most appropriate appliance for a patient with malocclusion that can general practitioner perform within the governmental rules and ethics
a2-	Understand the orthodontics movements and biomechanics
a3-	Identify the orthodontic appliances classifications according to evidence based dentistry

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Interpret study models for space analysis and creation
b2-	Design and select the suitable orthodontic appliances using different materials and instruments
b3-	Recommend the proper extraoral anchorage

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Identify patient's chief complaint, appearance and attitude, obtain and interpret medical, social and dental history, conduct clinical and radiographic examination, and distinguish between normal and pathological hard and soft tissue abnormalities of the orofacial area and create a treatment plan
c2-	Apply infection control protocols during lab sessions
c3-	Perform fabrication of orthodontic appliances including wires bending, soldering and welding and acrylic base

(D) General and Transferable Skills

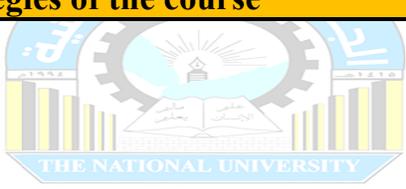
After participating in the course, students would be able to:

d1-	Use the latest technology for presenting and collecting data.
d2-	Manage time and resources.

CDLVIII. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Fundamentals of orthodontics	<ul style="list-style-type: none"> • Definition and terminology • Aims of orthodontics – scope of orthodontics 	1	2
2	Craniofacial growth and development	<ul style="list-style-type: none"> • Postnatal growth <ul style="list-style-type: none"> • Growth pattern and variability • Nature of skeletal growth • Growth in craniofacial complex – Theories of growth control 	2,3	4
3	Development of occlusion	<ul style="list-style-type: none"> • Ideal VS. normal occlusion • Tooth development – Stages of occlusal development 	4	2
4	Malocclusion	<ul style="list-style-type: none"> • Etiology of malocclusion • Classification of malocclusion • Factors that has role in malocclusion: <ul style="list-style-type: none"> - Skeletal - Soft tissue – Local factors 	5,6	4
5	Midterm Exam	– Written exam	7	2
6	Orthodontic Materials and instruments	<ul style="list-style-type: none"> • Materials used in orthodontics Instruments used in orthodontics 	8	2
7	Interceptive treatment	<ul style="list-style-type: none"> • Principles of interceptive orthodontics • Components of removable appliance • The most appropriate removable appliances for different malocclusions • Indications for fabrication of orthodontic appliances. • Procedures for fabrication of orthodontic appliances <ul style="list-style-type: none"> - Manipulation of orthodontics wires and acrylics – Characters of different wires and acrylic 	9,10, 11	6
8	Cephalometric identification and analysis	<ul style="list-style-type: none"> • Definition • Indications • Cephalometric points and lines • Cephalometric analysis – Tracing and interpretation 	12,13	4

10	Final Exam	- MCQs	16	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Wire bending Zigzag, square Adam's Labial bow z-spring	1-14	28
2	Practical exam	15 th	2
Number of Weeks / Units per Semester		15	30

CDLIX. Teaching strategies of the course	
<ul style="list-style-type: none"> - Lectures - Group discussions - Exercises - Brainstorming - Lab sessions 	
CDLX. Assessment Methods of the Course:	
<ul style="list-style-type: none"> - Midterm exam - Requirements - Practical exam - Final MCQ exam - Oral exam 	

CDLXI. Assignments:			
No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	20
Total			20

Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Midterm written exam	7 th	20	20%
2	Final exam	16 th	40	40%
Total			60	60%
Assessment of Practical Part				
1	Requirements	1 st -14 th	20	20%
2	Final Lab Exam	15 th	10	10%
3	Oral Exam	15 th	10	10%
Total			40	40%

CDLXIII. Learning Resources:	
62- Required Textbook(s) (maximum two)	
	60- Proffit W., Fields H., Larson B., Sarver D. 2018. Contemporary Orthodontics.6thed. Mosby, USA.
61- Essential References	
	16- Graber L., Vanarsdall R., Vig K., Huang G. 2016. Orthodontics current principles and techniques. 6th ed. Mosby, USA.
62- Electronic Materials and Web Sites, etc.	
	55- https://www.ajodo.org/

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments

	or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery
Course Specification of Oral surgery (2)
Course No.()



This template of course specifications was prepared by CAQA, Yemen, 2017.

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2021/2022

Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:

CCIX. Course Identification and General Information:						
1	Course Title:	Oral surgery (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Oral surgery (1)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

CCX. Course Description:
<p>This two credit hours course consists of two parts; theory and clinical. This designed to provide dental students with basic knowledge related to oral surgery skills needed to administer local anesthesia and manage dental extraction case. It covers all forms of preprosthetic surgery and odontogenic infections (soft and osseous tissues), recognize basic types of infection abscesses of orofacial region, infection of fascial spaces and pathways of odontogenic infection spreading</p>

CCXI. Outcomes of the Course
<p>The students would be acquainted with the knowledge and clinical skills in the management of</p> <ol style="list-style-type: none"> 1. Special Soft Tissue Injuries 2. Avulsive Hard Tissue Injuries 3. Maxillofacial Injuries in Children 4. Maxillofacial Injuries in the Elderly 5. Complex Facial Trauma Patient

CCXII. Intended learning outcomes (ILOs) of the course
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(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A2	a1-	Describe the basic facts, concepts and techniques needed for the diagnosis and treatment of basic oral surgeries and exodontia and recognize the cause, mechanism and route of spread of odontogenic infection and the principles of its treatment within the scope of general dentist, endodontic surgery and dentoalveolar surgery performed by oral and maxillofacial surgeons
A2-	A2	a2-	Describe the causes, diagnosis and management of myofacial pain, and bone disease.
A3-	A4	a3-	Know the principles of differential diagnosis of different oral surgical pathologies.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the basic facts, concepts and techniques needed for the diagnosis and treatment of basic oral surgeries and exodontia and recognize the cause, mechanism and route of spread of odontogenic infection and the principles of its treatment within the scope of general dentist, endodontic surgery and dentoalveolar surgery performed by oral and maxillofacial surgeons	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam.

	management of myofacial pain, and bone disease.		
a3-	Know the principles of differential diagnosis of different oral surgical pathologies.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Make and formulate an appropriate treatment plan as well as justify it if challenged.
B2-	B5	b2-	Select suitable materials as well as instruments to perform exodontia and basic oral surgical procedures and make appropriate prescription of drugs while monitoring their effectiveness and safety.
B3-	B4	b3-	Interpret, analyze, and correlate clinical laboratory data and special investigations to help formulate a proper relevant treatment plans

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Make and formulate an appropriate treatment plan as well as justify it if challenged.	<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion 	<ul style="list-style-type: none"> ▪ Oral exam. ▪ Assignments
b2-	Select suitable materials as well as instruments to perform exodontia and basic oral surgical procedures and make appropriate prescription of drugs while monitoring their effectiveness and safety.		

b3-	Interpret, analyze, and correlate clinical laboratory data and special investigations to help formulate a proper relevant treatment plans		
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(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Properly perform exodontia and basic minor oral surgery procedures including removal of roots, simple wisdom teeth, apisectomy and proper suturing technique
C2-	C4	c2-	Consider appropriately patients' rights, particularly with regard to confidentiality and valid consent, and of patients' obligations
C3-	C7	c3-	Perform a clinical examination of the bone disease and assist in relevant surgical procedures.
C4-	C7	c4-	Prepare and assist biopsy procedure as incorporated into general practice

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1-	Properly perform exodontia and basic minor oral surgery procedures including removal of roots, simple wisdom teeth, apisectomy and proper suturing technique	<ul style="list-style-type: none"> ▪ Demonstration ▪ Exercise ▪ Debate 	<ul style="list-style-type: none"> ▪ Practical exam. ▪ Case based scenario / Problem based learning. ▪ Approved procedures documented in logbook. ▪ Assignments
c2-	Consider appropriately patients' rights, particularly with regard to confidentiality and valid consent and		

	of patients' obligations		
c3-	Perform a clinical examination of the bone disease and assist in relevant surgical procedures.		
c4-	Prepare and assist biopsy procedure as incorporated into general practice		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3	d1-	Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients
D2-	D1	d2-	praise lifelong learning, problem solving and information technology skills, critical thinking, self-assessment and continuous professional development

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
d1-	Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients	<ul style="list-style-type: none"> ▪ Lectures ▪ Training ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d2-	praise lifelong learning, problem solving and information technology skills, critical thinking, self-assessment and continuous professional development		

III. Course Content:

I – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Preprosthetic surgery I	a1, b1	– Introduction, objective of ideal alveolar ridge, diagnosis, & preventive procedures.	1 st , 2 nd	4
2	Preprosthetic surgery II	a1, b1	– Alveolar ridge atrophy, corrective procedures & augmentation	3 rd , 4 th	4
3	Endodontic surgery	a1, b1	– Definition, Indication and contraindication, Surgical technique, Root end filling materials & Complications	5 th	2
4	Soft tissue and Dentoalveolar injuries	a1, b1	– Types, etiology, diagnosis & management	6 th	2
5	Radiography in omfs intraoral and extraoral techniques	a2, d1	Types, indication, advantage, disadvantage & technique	7 th	2
6	Mid-Term Theoretical Exam	a1-a2, b1		8 th	2
7	Odontogenic infections part I	a2, b1	– Introduction, Causes and types of infection, Spread of infection, Phases and fate of infection, Diagnosis of infection & General management of patient with infection	9 th	2
8	Odontogenic infections part II	a1, b1, b2	– Common infection in the mouth, Fascial spaces infection(Anatomy, Etiology, Clinical Presentation and Treatment) & complication	10 th , 11 th	4
9	Neurological Disorders of the Maxillofacial area	a2, b2	Etiology, character of pain neuralgias, differential diagnosis & myofascial pain management	12 th , 13 th	4
10	Surgical pathology:	a3, b2	Introduction. Causes, compare between mandible and maxilla	14 th	2

	Bone disease Part I		classification.		
11	Surgical pathology: Bone disease part II	a3, b2, d2	Surgical management and osteoradionecrosis	15 th	2
12	Final Theoretical Exam	a1-a3, b1-b2, d1,d2		16 th	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	-Infection Control in Surgical Practice - Preoperative health status evaluation - Exodontia techniques - Principles of Surgery - Medical Emergencies in Dental Clinic	c1-c4, d1,d2	14 th	42
2	Practical exam	c1-c4, d1,d2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CCL. Assessment Methods of the Course:

- a. Activities(periodical exams) as short answers, mcq questions, true and false,complete and define)
- b. Submission of requirements (10 case of closed extraction with the selected anesthetic
- techniaue)

- c. Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- d. Final written exam (mcq questions, complete, short essay, enumerate, and define)
- e. Practical exam(will be carried in the clinic by case administration of local anesthesia and perform painless closed tooth extraction)
- f. Oral exam (will be performed by internal and external examiner through free discussion).

CCLI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	4 th , 12 th	10	10%	a1, a3
2	Mid-term exam	8 th	20	20%	a1-a2, b1,b2
3	Final theory	16 th	40	40%	a1-a4, b1-b3
Total			70	70%	
Assessment of Practical Part					
1	Assignment	1 st -14 th	10	10%	c1-c4, d1,d2
2	Oral exam	15 th	10	10%	a1-a4,b1-b2
3	Final practical exam	15 th	10	10%	c1-c4, d1,d2
Total			30	30%	

CCLII. Learning Resources:

147-	Required Textbook(s) (maximum two)
	5- James Hupp, Edward Ellis and Myron Tucker, 2013, Contemporary Oral and Maxillofacial Surgery, 6th edition . Slsevier 6- Lars Andersson, Karl-ErikKahnberg and M. Anthony Pogrel, 2010, Oral and Maxillofacial Surgery. WielyBlackwell
148-	Essential References
	3- Peterson L, Ellis E, Hupp J, Tucker M., 2008, Contemporary Oral and Maxillofacial Surgery. 5th Edition
149-	Electronic Materials and Web Sites, etc.
	www.joms.org

CCLIII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from
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	taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Oral surgery (2)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CDLXIV. Course Identification and General Information:						
1	Course Title:	Oral surgery (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Oral surgery (1)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

CDLXV. Course Description:

This three credit hours course consists of two parts; theory and clinical. This designed to provide dental students with basic knowledge related to oral surgery skills needed to administer local anesthesia and manage dental extraction case. It covers all forms of preprosthetic surgery and odontogenic infections (soft and osseous tissues), recognize basic types of infection abscesses of orofacial region, infection of fascial spaces and pathways of odontogenic infection spreading

CDLXVI. Outcomes of the Course

The students would be acquainted with the knowledge and clinical skills in the management of

1. Special Soft Tissue Injuries
2. Avulsive Hard Tissue Injuries
3. Maxillofacial Injuries in Children
4. Maxillofacial Injuries in the Elderly
5. Complex Facial Trauma Patient

CDLXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the basic facts, concepts and techniques needed for the diagnosis and treatment of basic oral surgeries and exodontia.
a2-	Discuss the complications associated with basic oral surgical procedures.
a3-	Properly identify and diagnose those impacted teeth that require removal, describe surgical techniques for removal of impacted teeth and Discuss complications associated with surgical removal of impacted teeth
a4-	Describe the preprosthetic surgical procedures of the partially and completely edentulous patient and the role of general dentist, describe the various ridge augmentation procedures available to patients, endodontic surgery and dentoalveolar surgery performed by oral and maxillofacial surgeons and identify the role of oral and maxillofacial surgeons in implant placement

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Make and formulate an appropriate treatment plan as well as justify it if challenged.
b2-	Select suitable materials and instruments to perform basic oral surgical procedures as well as prescribe different medications depending on the patient's needs.

b3-	Consider appropriately patients' rights, particularly with regard to confidentiality and obtaining a valid consent.
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(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Properly perform exodontia and basic minor oral surgery procedures including removal of roots, simple wisdom teeth, apisectomy and proper suturing technique
c2-	Consider appropriately patients' rights, particularly with regard to confidentiality and valid consent, and of patients' obligations
c3-	Perform a clinical examination of the bone disease and assist in relevant surgical procedures.
c4-	Prepare and assist biopsy procedure as incorporated into general practice

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Communicate and appraise clinical problems and treatment plans with other specialties involved in the treatment of patients
d2-	Manage patients with confidence, sympathy and understanding.

CDLXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Preprosthetic surgery I	– Introduction, objective of ideal alveolar ridge, diagnosis, & preventive procedures.	1 st , 2 nd	4
2	Preprosthetic surgery II	– Alveolar ridge atrophy, corrective procedures & augmentation	3 rd , 4 th	4
3	Endodontic surgery	– Definition, Indication and contraindication, Surgical technique, Root end filling materials & Complications	5 th	2
4	Soft tissue and	– Types, etiology, diagnosis & management	6 th	2

5	Radiography in omfs intraoral and extraoral techniques	Types, indication, advantage, disadvantage & technique	7 th	2
6	Mid-Term Theoretical Exam		8 th	2
7	Odontogenic infections part I	– Introduction, Causes and types of infection, Spread of infection, Phases and fate of infection, Diagnosis of infection & General management of patient with infection	9 th	2
8	Odontogenic infections part II	– Common infection in the mouth, Fascial spaces infection(Anatomy, Etiology, Clinical Presentation and Treatment) & complication	10 th , 11 th	4
9	Neurological Disorders of the Maxillofacial area	Etiology, character of pain neuralgias, differential diagnosis & myofascial pain management	12 th , 13 th	4
10	Surgical pathology: Bone disease Part I	Introduction. Causes, compare between mandible and maxilla, classification.	14 th	2
11	Surgical pathology: Bone disease part II	Surgical management and osteoradionecrosis	15 th	2
12	Final Theoretical Exam		16 th	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Infection Control in Surgical Practice - Preoperative health status evaluation - Exodontia techniques - Principles of Surgery - Medical Emergencies in Dental Clinic 	1 st -14 th	42
2	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

CDLXIX. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CDLXX. Assessment Methods of the Course:

- a. Activities(periodical exams) as short answers, mcq questions, true and false, complete and define)
- b. Submission of requirements (10 case of closed extraction with the selected anesthetic technique)
- c. Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- d. Final written exam (mcq questions, complete, short essay, enumerate, and define)
- e. Practical exam(will be carried in the clinic by case administration of local anesthesia and perform painless closed tooth extraction)
- f. Oral exam (will be performed by internal and external examiner through free discussion).

CDLXXI. Assignments:

No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	10
Total			10

CDLXXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	4 th , 12 th	10	10%
2	Mid-term exam	8 th	20	20%

3	Final theory	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Assignment	1 st -14 th	10	10%
2	Oral exam	15 th	10	10%
3	Final practical exam	15 th	10	10%
Total			30	30%

CDLXXIII. Learning Resources:

63- Required Textbook(s) (maximum two)

- 1- James Hupp, Edward Ellis and Myron Tucker, 2013, Contemporary Oral and Maxillofacial Surgery, 6th edition . Sisevier
- 2- Lars Andersson, Karl-Erik Kahnberg and M. Anthony Pogrel, 2010, Oral and Maxillofacial Surgery. Wiely Blackwell

63- Essential References

- 4- Peterson L, Ellis E, Hupp J, Tucker M., 2008, Contemporary Oral and Maxillofacial Surgery. 5th Edition

64- Electronic Materials and Web Sites, etc.

- 37- www.joms.org

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral Medicine (2)

Course No.()

2021/2022



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Prepared by:

Dr.

Reviewed by:

Dr.

Quality Assurance

Dean:

CCXIV. Course Identification and General Information:						
1	Course Title:	Oral Medicine (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Oral Medicine (1)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

CCXV. Course Description:
This This course is to train students to identify most common primary and secondary lesions affecting oral and para-oral structures of hard and soft tissues and perform oral and extra oral examination and diagnosis by taking history, clinical examination, and other diagnostic tests.

CCXVI. Outcomes of the Course
1. The student would be proficient in describing the etiology, pathophysiology, principles of diagnosis and management of common orofacial disorders.
2. the student would be proficient in formulating a differential diagnosis and investigations plan and frame the treatment strategy.
3. The student would develop communication skills and ability to explain the disease process to the patient and to obtain a informed consent from the patient.

CCXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A1,2,4,,6b1,2,3,c2,3,4,6	a1	Demonstrate an understanding of the etiology pathobiology and clinical presentation of diseases of the oral and peri-oral tissues
	A1,2,4,,6b1,2,3,c2,3,4,6	a2	Understanding the different types of red and white lesions.
	A1,2,4,,6b1,2,3,c2,3,4,6	a3	Understanding the different types of ulcers and visculobullous lesions.
	A1,2,4,,6b1,2,3,c2,3,4,6	A4	Understanding the different types of normal variation in patients.
	A1,2,4,,6b1,2,3,c2,3,4,6	a 5	Understanding the different types of pigmented lesions of oral mucosa.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			Exam
a1-	Demonstrate an understanding of the etiology pathobiology and clinical presentation of diseases of the oral and peri-oral tissues	exercise Debate	Homework
a2-	Understanding the different types of red and white lesions.		
A3	Understanding the different types of ulcers and visculobullous lesions.	Lectures exercise Debate	Exam Homework
A4	Understanding the different types of normal variation in patients.	Lectures exercise Debate	Exam Homework

a5	Understanding the different types of pigmented lesions of oral mucosa.	Lectures exercise Debate	Exam Homework
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(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A2,4,6,b1,3,4	B1	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.
	A2,4,6,b1,3,4	B2	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
b1-	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.		
b2-	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1	C1,2,5	c1-	Choose the appropriate diagnostic and

			age, behavior capabilities, stage of dental growth/development and chief complaints.
C2	C1,2, 5,6	c2-	Request special investigations needed to confirm the clinical, working or tentative diagnosis.
C3	C7	c3-	Select indicated clinical examination for specific oral lesion
C4	C 5,7	c4-	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations
C5	C1,2, 5,6,7	c5-	Assemble and link the data obtained from the patient's history and clinical examination to develop the differential diagnosis of patients chief complaint.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			Exam
c1-	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief complaints.	exercise Debate	Homework
c2-	Request special investigations needed to confirm the clinical, working or tentative diagnosis.	Lectures exercise Debate	Exam Homework
c3-	Select indicated clinical examination for specific oral lesion	Lectures exercise Debate	Exam Homework
c4-	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations	Lectures exercise Debate	Exam Homework

c5-	Assemble and link the data obtained from the patient's history and clinical examination to develop the differential diagnosis of patients chief complaint	Lectures	Exam
		exercise	Homework
		Debate	

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D2	d1	Use internet and multimedia.
D2-	D3,4	d2	Manage time and resources

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
d1-	Use internet and multimedia.		
d2-	Manage time and resources		

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Variants of Normal and Common Benign Conditions in oral cavity	A1,4, b1,2, C1,2, 2, 4, 5	<ul style="list-style-type: none"> • Physiologic Pigmentation • Fordyce Granules • Gingival Grafts • Lingual Tonsil 	2	4

			<ul style="list-style-type: none"> • Geographic Tongue • Median Rhomboid Glossitis • Fibroma • Inflammatory Papillary • Hyperplasia • Tori and Exostoses • Ankyloglossia and Prominent Frenula 		
	Ulcerative, vesicular and bullous lesions	A1, 2,b1,2, 3,C1,2, 3,4, 5	<ul style="list-style-type: none"> • Acute multiple ulcers. • Recurrening oral ulcers. • Chronic multiple ulcers. • Single ulcer 	5	10
2	Mid-Term Exam	A1,2, 3, 5,b1,2		1	2
3	Red and white lesions of the oral mucosa	A1, 2, 3,b1,2, C1,2, 3,4, 5	<ul style="list-style-type: none"> • Hereditary white lesions. • Reactive white lesions. • Infecious white lesions. • Idiopathic leukoplakia. • Erythroplakia. • Oral lichen planus. • Lupus erythromatosus. • Developmental white lesions. 	4	8
	Pigmented lesions of oral mucosa	A1,2,3, 5,b1,2, C1,2, 3,4, 5	<ul style="list-style-type: none"> • Blue/purple vascular lesions. • Brown melanotic lesions. • Brown heme-associated lesions. • Gray/black lesions. 	3	6
6	Final Exam	A1,2,3, 5,b1,2,C 1,2, 3,4, 5		1	2

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Taking patient history	A1,2,,3,4, 5,b1,2,c1,2,3,4, 5,d2	1st,2 nd	6
2	Clinical examination	c1,2,3,4, 5,d2	3 rd to 6 th	6
3	Taking intra-oral biopsy	A1,2,,3,4, 5, c1,2,3,4, 5.	4 th 5 th	3
4	Lab investigations	A1,2,,3,4, 5,b1,2,c1,2,3,4, 5,d2	5 th 6 th	3
5	Take examples of differential diagnosis	A1,2,,3,4, 5, c1,2,3,4, 5	8 th to 14 th	21
6	Practical Exam	A1,2,,3,4, 5,b1,2,c1,2,3,4, 5,d2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CCLIV. Teaching Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CCLV. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the instructor	10	a1, a2, a3,4, 5,b1,2,c1,2,3, 5, d1, d2
Total			10	

CCLVI. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Mid tem exam	4 th	20	20%	a1a2,a3
2	Final tem exame	14th	40	40%	a1,2,3,4, 5,
3	Attending and assignment	1st t-14th	10	10%	a1, a2, a3,4, 5, d1, d2
Total			70	70%	
Assessment of Practical Part					
1	Taking patient history	1st,2nd	6	6%	A1,2,3,c1,2,3,4, 5
2	Clinical examination	3rd - 6th	6	6%	A1,2,3,c1,2,3,4, 5
3	Taking intra-oral biopsy	4th ,5th	6	6%	A1,2,3,c1,2,3,4, 5
4	Lab investigations	5th 6th	6	6%	A1,2,3,c1,2,3,4, 5
5	Take examples of differential diagnosis	8th -14th	6	6%	A1,2,3,c1,2,3,4, 5
Total			30	30%	

CCLVII. Learning Resources:	
150-	Required Textbook(s) (maximum two)
	30- Norman K. Wood - Differential Diagnosis of Oral and Maxillofacial Lesions: 5th (fifth) Edition Hardcover – October 15, 1997
151-	Essential References
	33- .Purkait, Swapan Kumar. Essentials of Oral Pathology. 3rd ed. Replika: Jaypee Brothers Medical Publishers, 2011. 34- Cawson R. A. and Odell E. W. Cawson's Essentials of Oral Pathology and Oral Medicine. 8th ed. Edinburgh: Churchill Livingstone, 2008..
152-	Electronic Materials and Web Sites, etc.
	Websites: Open e-learning

CCLVIII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.

	A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

الجامعة الوطنية
The National University

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan of Oral Medicine (2)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:									
Name of Faculty Member:	Dr.Manal Mohammed Al-Hajri			Office Hours					
Location& Telephone No.:	00967779212007								
E-mail:	dent.manal@yahoo.com			SAT	SUN	MON	TUE	WED	THU



CDLXXIV.Course Identification and General Information:						
1	Course Title:	Oral Medicine (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4th Level / 2 nd Semester				
5	Prerequisites:	Oral Medicine (1)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

CDLXXV. Course Description:

This course is to train students to identify most common primary and secondary lesions affecting oral and para-oral structures of hard and soft tissues and perform oral and extra oral examination and diagnosis by taking history, clinical examination, and other diagnostic tests.

CDLXXVI. Outcomes of the Course

1. The student would be proficient in describing the etiology, pathophysiology, principles of diagnosis and management of common orofacial disorders.
2. the student would be proficient in formulating a differential diagnosis and investigations plan and frame the treatment strategy.
3. The student would develop communication skills and ability to explain the disease process to the patient and to obtain a informed consent from the patient.

CDLXXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1	Demonstrate an understanding of the etiology pathobiology and clinical presentation of diseases of the oral and peri-oral tissues
a2	Understanding the different types of red and white lesions.
A3	Understanding the different types of ulcers and visculobullous lesions.
	Understanding the different types of normal variation in patients.
	Understanding the different types of pigmented lesions of oral mucosa.

(B) Intellectual Skills

After participating in the course, students would be able to:

B1	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis
B2	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

(C) Professional and Practical Skills

After participating in the course, students would be able to:	
c1	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief complaints.
C2	Request special investigations needed to confirm the clinical, working or tentative diagnosis.
C3	Select indicated clinical examination for specific oral lesion
C4	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations
c5	Assemble and link the data obtained from the patient's history and clinical examination to develop the differential diagnosis of patients chief complaint.

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1	Use internet and multimedia.
d2	Manage time and resources

CDLXXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Variants of Normal and Common Benign Conditions in oral cavity	<ul style="list-style-type: none"> • Physiologic Pigmentation • Fordyce Granules • Gingival Grafts • Lingual Tonsil • Fissured Tongue • Geographic Tongue • Median Rhomboid Glossitis • Fibroma • Inflammatory Papillary • Hyperplasia • Tori and Exostoses • Ankyloglossia and Prominent • Frenula 	2	4
2	Ulcerative, vesicular and bullous lesions	<ul style="list-style-type: none"> • Acute multiple ulcers. • Recurrening oral ulcers. • Chronic multiple ulcers. 	5	10

		<ul style="list-style-type: none"> • Single ulcer. 		
3	Midterm Exam	<ul style="list-style-type: none"> • 	1	2
	Red and white lesions of the oral mucosa	<ul style="list-style-type: none"> • Hereditary white lesions. • Reactive white lesions. • Infectious white lesions. • Idiopathic leukoplakia. • Erythroplakia. • Oral lichen planus. • Lupus erythromatosus. • Developmental white lesions 	4	8
4	Pigmented lesions of oral mucosa.	<ul style="list-style-type: none"> • Blue/purple vascular lesions. • Brown melanotic lesions. • Brown heme-associated lesions. • Gray/black lesions. 	3	6
5	Final Exam	<ul style="list-style-type: none"> • 	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Taking patient history	1 st , 2 nd	6
2	Clinical examination	3 rd to 6 th	6
3	Taking intra-oral biopsy	4 th 5 th	3
4	Lab investigations	5 th 6 th	3
5	Take examples of differential diagnosis	8 th to 14 th	21
6	Practical Exam	15 th	3
Number of Weeks / Units per Semester		15	45

CDLXXIX. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CDLXXX. Assessment Methods of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CDLXXXI. Assignments:

No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

CDLXXXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exame	14th	40	40%
1	Mid tem exam	4th	20	20%
3	Attending and assignment	1st to 14th	10	10%
Total			70	70%
Assessment of Practical Part				
1	Taking patient history	1st, 2 nd	6	6%
2	Clinical examination	3 rd to 6 th	6	6%
	Taking intra-oral biopsy	4 th 5 th	6	6%
	Lab investigations	5 th 6 th	6	6%
	Take examples of differential diagnosis	8 th to 14 th	6	6%
Total			30	30%

CDLXXXIII. Learning Resources:

64. Required Textbook(s) (maximum two)

	65- Norman K. Wood and Paul W. Goaz : Differential diagnosis of oral and maxillofacial lesions,(5th Ed).
66- Essential References	
	17- Purkait, Swapan Kumar. Essentials of Oral Pathology. 3rd ed. Replika: Jaypee Brothers Medical Publishers, 2011. 18- Cawson R. A. and Odell E. W. Cawson's Essentials of Oral Pathology and Oral Medicine. 8th ed. Edinburgh: Churchill Livingstone, 2008.
67- Electronic Materials and Web Sites, etc.	
	Open e-learning

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



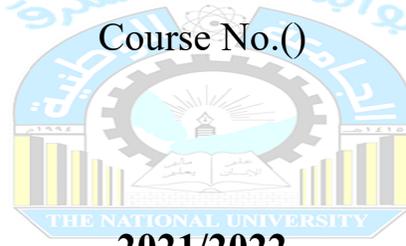
Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Clinical Removable Prosthodontics (2)

Course No.()



2021/2022

الجامعة الوطنية
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Prepared by:

Dr. Abbas M. Al-kebsi

Reviewed by:

Dr.

Quality Assurance

Dean:

CXIX. Course Identification and General Information:						
1	Course Title:	Clinical Removable Prosthodontics (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Clinical Removable Prosthodontics (1)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr.Abbas M. Al-kebsi				
12	Date of Approval	2020-2021				

CCXX. Course Description:
<p>This course presents more advanced technique and treatment planning for complex prosthodontic needs. The student will be taught how to manage the problems and special situation with removable prosthodontics geriatric patients and poor foundation as flat and flabby ridges, theory /procedure of Overdentures, Cosmetic RPD, concepts of occlusion, different types of attachment, immediate dentures, implant supported prosthesis, as well as Maxillofacial prosthodontics.</p> <p>During this year students will continue to develop clinical skills presented in previous courses for complete denture and partial denture patients.</p>

CXXI. Outcomes of the Course

1. Dental student with sound knowledge on landmarks in edentulous patients would be able to do all lab procedures to make a conventional complete denture.
2. The candidate would be able to adopt ethical principles in Prosthodontic practice. Professional honesty and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient.

Intended learning outcomes (ILOs) of the course		
(A) Knowledge and Understanding:		
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.		
PILOs in knowledge and understanding		CILOs in knowledge and understanding
After completing this program, students would be able to:		After participating in the course, students would be able to:
A1-	A2	a1- knowledge and understanding the basic principles for the theory and practical related to partial dentures.
A2-	A1	a2- Demonstrate the anatomical land marks of upper and lower arches and choice of materials used and their relation to partial dentures fabrication.
A3-	A3	a3- Demonstrate sound knowledge on the laws and ethics governing dental practice.
A4-	A6	a4- Have knowledge in the applications of other dental disciplines that can assist in prosthodontic treatment.
Teaching and Assessment Methods for Achieving Learning Outcomes		
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:		
CILOs in Knowledge and Understanding		Teaching strategies/methods
After participating in the course, students would be able to:		Methods of assessment
a1-	knowledge and understanding the basic principles for the theory and practical related to partial dentures.	· Lectures · Training · Discussion
a2-	Demonstrate the anatomical land marks of	· Written exam · Practical sessions and exam · Coursework activities

	upper and lower arches and choice of materials used and their relation to partial dentures fabrication.		
a3-	Demonstrate sound knowledge on the laws and ethics governing dental practice.		
a4-	Have knowledge in the applications of other dental disciplines that can assist in prosthodontic treatment.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Assimilate information derived from the history, examination and special investigations to produce a diagnosis then accordingly formulate the appropriate treatment plan
B2-	B2	b2-	Apply critical thinking and evidence-based problem solving whenever it should be needed for patient's care
B3-	B1	b3-	Identify cases that can benefit from other dental specialties intervention.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		. Lectures . Training . Discussion	. Written exam . Practical sessions and exam . Coursework activities
b1-	Assimilate information derived from the history, examination and special investigations to produce a diagnosis then accordingly formulate the appropriate treatment plan		

b2-	Apply critical thinking and evidence-based problem solving whenever it should be needed for patient's care		
b3-	Identify cases that can benefit from other dental specialties intervention.		

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Register a history of the present complaint and medical history and perform an extra-oral and intra-oral examination appropriate to the case presented.
C2-	C3	c2-	Apply infection control and radiation protection according to international standard
C3-	C2	c3-	Diagnose and appropriately refer patients requiring complex treatment procedures to a specialist.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	· Written exam · Practical sessions and exam · Coursework activities
c1-	Register a history of the present complaint and medical history and perform an extra-oral and intra-oral examination appropriate to the case presented.		
c2-	Apply infection control and radiation protection according to international		

	standard		
c3-	Diagnose and appropriately refer patients requiring complex treatment procedures to a specialist.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D7	d1-	Establish communication skills that allow the effective delivery of dental treatment and to identify patient expectations, desires and attitudes.
D2-	D3	d2-	Establish a team work treatment.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	· Practical sessions and exam
d1-	Establish communication skills that allow the effective delivery of dental treatment and to identify patient expectations, desires and attitudes.	Exercise	· Coursework activities
d2-	Establish a team work treatment.	Dialogue and discussion	· Assignments
		Brainstorming	
		Debate	

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Appliances for different	a1, a2,	Oral screen, occlusal devices, Bite	1	2

	applications	b2	guards, Night guards and Mouth guard		
2	Stents and Splints	a1, a2, a3, b1, b2	a. Uses of stents. b. Materials used for stents. c. Type of stents. d- Treatment of jaw fractures. e- Types of splints f- Material used for Maxillofacial Prosthesis	2	4
3	Management of hard and soft tissue	a1, a2, a3, b1, b2	- Management of abused tissues to receive removable prosthodontics - Management of flat ridge (atrophied ridge)	1	2
4	Management of flabby ridge	a1, a2, a3, b1, b2	a. Etiology. b. Treatment of flabby ridge. c. Prosthetic approach: - Impression techniques. - Occlusal arrangement of teeth. d. Etiology of denture fissuratum. e. Treatment of denture fissuratum.	1	2
5	Single complete dentures	a1, a2, a3, b1, b2,b3	- Problems and difficulties for rehabilitation such cases. - Common occlusal disharmonies. - Diagnosis and treatment planning steps for occlusal adjustment. - Methods used to achieve balanced articulation.	1	2
6	Occlusion	a1, a2, a3, b1, b2	Occlusion and Refinement of occlusion for complete denture	1	2
7	Mid-Term Theoretical Exam	a1, a2, a3, b1,		1	2

		b2			
8	Single complete dentures	a1, a2, a3, a4, b1, b2	- Problems and difficulties for rehabilitation such cases. - Common occlusal disharmonies. - Diagnosis and treatment planning steps for occlusal adjustment. - Methods used to achieve balanced articulation.	1	2
9	Overdentures	a1, a2, a3, b1, b2	Definition, types		
10	Dental attachments used for Removable prosthodontics	a1, a2, a3, a4, b1, b2, b3	- Esthetic removable prosthodontics - Other forms of removable prosthodontics - Servicing of removable prosthodontics	2	4
11	Management of geriatric patients	a1, a2, a3, b1, b2	- Definitions and requirements. - Advantages and disadvantages. - Types of immediate dentures.	1	2
12	Immediate dentures	a1, a2, a3, b1, b2	a. Introduction. b. Osseointegration. c. Advantages of dental implants. d. Minimum success criteria. e. Types of dental implant. f. Implant abutment. g. Surgical phase. h. Restorative phase. i. Overdenture attachments. j. Implant supported prosthesis	2	4
13	Final Exam	a1, a2, a3 a4		1	2

		b1, b2, b3			
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Optional Cases: {immediate denture, maxillofacial appliances (like: obturator), overdenture (either implant supported or tooth supported)}.	c1-c3,d1,d2	1 st - 14 th	42
2	Final practical exam	c1-c3,d1,d2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course	
<ul style="list-style-type: none"> - Lectures - Exercise - Debate - Training - Dialogue and discussion - Brainstorming 	
CCLIX. Teaching Strategies of the Course:	
<ul style="list-style-type: none"> - Quizzes - Midterm Exam - Final Written Exam - Oral Exam - Final Practical Exam - Research - Group work 	

CCLX. Assignments:				
No.	Assignments	Week due	Mark	Aligned CILOs (symbols)

1	Clinical work	1 st - 14 th	20	c1-c3,d1,d2
Total			20	

CCLXI. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	4 th - 12 th	10	10%	a1, a2, b1
2	Mid theoretical Exam	8 th	10	10%	a1, a2, a3, b1, b2
3	Final theoretical Exam	16 th	40	40%	a1, a2, a3,a4, b1, b2, b3
Total			60	60%	
Assessment of Practical Part					
1	Assignment	1 st - 14 th	20	20%	c1-c3,d1,d2
2	Final-Practical Exam	15 th	20	20%	c1-c3,d1,d2
Total			40	40%	

CCLXII. Learning Resources:	
153-	Required Textbook(s) (maximum two)
	1. Book of the department, 2010, Removable partial dentures technology, 2nd Ed, Egypt, Cairo University press 2. Carr AB, McGivney GP, Brown DT.2005 McCracken's Removable partial Prosthodontic. 11th EdSt. Louis, C V. Mosby
154-	Essential References
	Arthur O. Rahn, John R. Lvanhoe and Kerin D. Plummer. 2009, Text book of Complete Dentures, 6th edition
9.	Electronic Materials and Web Sites, etc.
	9- http://www.quintpub.com/journals/ijp/index.php

CCLXIII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness:

	class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

الجامعة الوطنية

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Clinical Removable Prosthodontics (2)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CDLXXXIV. Course Identification and General Information:

1	Course Title:	Clinical Removable Prosthodontics (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Clinical Removable Prosthodontics (1)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Abbas M. Al-kebsi				
12	Date of Approval	2020-2021				

CDLXXXV. Course Description:

The students have a full understanding of the sequence of clinical procedures involved in treating completely and partially edentulous cases. The course includes a detail step by step clinical procedures and impression materials and techniques, problems and post insertion care. Different philosophies and rationales concerning patient's examination, impression making, occlusion and jaw relation will be discussed. A special interest will be given to denture insertion, post-insertion follows up and maintenance. The students should treat completely edentulous patients in addition to the partially edentulous cases.

CDLXXXVI. Outcomes of the Course

1. Dental student with sound knowledge on landmarks in edentulous patients would be able to do all lab procedures to make a conventional complete denture.

2. The candidate would be able to adopt ethical principles in Prosthodontic practice. Professional honesty and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient.

CDLXXXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	knowledge and understanding the basic principles for the theory and practical related to partial dentures.
a2-	Demonstrate the anatomical land marks of upper and lower arches and choice of materials used and their relation to partial dentures fabrication.
a3-	Demonstrate sound knowledge on the laws and ethics governing dental practice.
a4-	Have knowledge in the applications of other dental disciplines that can assist in prosthodontic treatment.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Assimilate information derived from the history, examination and special investigations to produce a diagnosis then accordingly formulate the appropriate treatment plan
b2-	Apply critical thinking and evidence-based problem solving whenever it should be needed for patient's care
b3-	Identify cases that can benefit from other dental specialties intervention.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Register a history of the present complaint and medical history and perform an extra-oral and intra-oral examination appropriate to the case presented.
c2-	Apply infection control and radiation protection according to international standard
c3-	Diagnose and appropriately refer patients requiring complex treatment procedures to a specialist.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Establish communication skills that allow the effective delivery of dental treatment and to identify patient expectations, desires and attitudes.
d2-	Establish a team work treatment.

CDLXXXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Appliances for different applications	Oral screen, occlusal devices, Bite guards, Night guards and Mouth guard	1	2
2	Stents and Splints	a. Uses of stents. b. Materials used for stents. c. Type of stents. d- Treatment of jaw fractures. e- Types of splints f- Material used for Maxillofacial Prosthesis	2	4
3	Management of hard and soft tissue	- Management of abused tissues to receive removable prosthodontics - Management of flat ridge (atrophied ridge)	1	2
4	Management of flabby ridge	a. Etiology. b. Treatment of flabby ridge. c. Prosthetic approach: - Impression techniques. - Occlusal arrangement of teeth. d. Etiology of denture fissuratum. e. Treatment of denture fissuratum.	1	2
5	Single complete dentures	- Problems and difficulties for rehabilitation	1	2

		such cases. - Common occlusal disharmonies. - Diagnosis and treatment planning steps for occlusal adjustment. - Methods used to achieve balanced articulation.		
6	Occlusion	Occlusion and Refinement of occlusion for complete denture	1	2
7	Mid-Term Exam		1	2
8	Single complete dentures	- Problems and difficulties for rehabilitation such cases. - Common occlusal disharmonies. - Diagnosis and treatment planning steps for occlusal adjustment. - Methods used to achieve balanced articulation.	1	2
9	Overdentures	Definition, types		
10	Dental attachments used for Removable prosthodontics	- Esthetic removable prosthodontics - Other forms of removable prosthodontics - Servicing of removable prosthodontics	2	4
11	Management of geriatric patients	- Definitions and requirements. - Advantages and disadvantages. - Types of immediate dentures.	1	2
12	Immediate dentures	a. Introduction. b. Osseointegration. c. Advantages of dental implants. d. Minimum success criteria. e. Types of dental implant. f. Implant abutment. g. Surgical phase. h. Restorative phase.	2	4

		i. Overdenture attachments. j. Implant supported prosthesis		
13	Final Exam		1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<i>Optional Cases:</i> {immediate denture, maxillofacial appliances (like: obturator), overdenture (either implant supported or tooth supported)}.	1 st - 14 th	42
2	Final practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

CDLXXXIX. Teaching strategies of the course

- Lectures
- Exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming



CDXC. Assessment Methods of the Course:

- Quizzes
- Midterm Exam
- Final Written Exam
- Oral Exam
- Final Practical Exam
- Research
- Group work

CDXCI. Assignments:

No.	Assignments	Week due	Mark
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1	Practical work	1 st - 14 th	20
Total			20

CDXCII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	4 th - 12 th	10	10%
2	Mid theoretical Exam	8 th	10	10%
3	Final theoretical Exam	16 th	40	40%
Total			60	60%
Assessment of Practical Part				
1	Assignment	1 st - 14 th	20	20%
2	Final-Practical Exam	15 th	20	20%
Total			40	40%

CDXCIII. Learning Resources:

65- Required Textbook(s) (maximum two)	
	1. Book of the department, 2010, Removable partial dentures technology, 2nd Ed, Egypt, Cairo University press
	2. . Carr AB, McGivney GP, Brown DT.2005 McCracken's Removable partial Prosthodontic. 11th EdSt. Louis, C V. Mosby
68- Essential References	
	Arthur O. Rahn, John R. Lvanhoe and Kerin D. Plummer. 2009, Text book of Complete Dentures, 6th edition
69- Electronic Materials and Web Sites, etc.	
	10- http://www.quintpub.com/journals/ijp/index.php

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
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	A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

الجامعة الوطنية

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Specification of Clinical Operative Dentistry (2)

Course No.()

2021/2022



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Prepared by:

Reviewed by:

Quality Assurance

Dean:

Dr. Ibrahim Z. Al-Shami

Dr.

CXXIII.						
CXXIV. Course Identification and General Information:						
1	Course Title:	Clinical Operative Dentistry (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	--	3	--	3
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Clinical Operative Dentistry (2)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CXXV. Course Description:	
<p>In this course the students will be trained to restore the teeth with advanced restorative materials and technique within the concept of adhesive cavity design, prepare and restore compound & complex cavities with different restorative material and technique, diagnose and manage carious and non-carious lesions, manage discolored teeth, know the basic principles of minimal intervention dentistry concepts as and when required, manage hypersensitive teeth, prepare cavities in fractured anterior teeth and restore the form, function & esthetics with composite resin material on patients and know the recent trends in the field of operative dentistry regarding restorative materials and technology.</p>	

XXVI. Outcomes of the Course

1. Students would be able to describe etiology, pathophysiology, diagnosis and management of common restorative situations, that will include contemporary management of dental caries, non-carious lesions and hypersensitivity.
2. Students would be able to take proper chair side history, examine the patient and perform medical and dental diagnostic procedures; as well as perform relevant tests and interpret them to come to a reasonable diagnosis about the dental condition
3. Perform all levels of restorative work including Aesthetic procedures and treatment of complicated restorative procedures



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XXVII. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A6	a1-	Discuss the concept of adhesive dentistry, adhesion mechanisms, each indication, advantages and withdraws.
A2-	A4	a2-	Describe the management techniques for discolored teeth.
A3-	A5	a3-	Utilize minimal intervention dentistry concepts as and when required in patients
A4-	A6	a4-	Recognize new advancements in the field of operative dentistry and be able to evaluate their potential for clinical use
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lecture Demonstrations Supervision Instruction	Written Exams, Oral discussion Quizzes
a1-	Discuss the concept of adhesive dentistry, adhesion mechanisms, each indication, advantages and withdraws.		
a2-	Describe the management techniques for discolored teeth.		
a3-	Utilize minimal intervention dentistry concepts as and when required in patients		
a4-	Recognize new advancements in the field of operative dentistry and be able to evaluate their potential for clinical use		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B2	b1-	Solve the complaint of postoperative hypersensitivity and pain after a recent operative procedure, with proper diagnosis of the etiology.
B2-	B3	b2-	Determining and identifying the aesthetic requirements of patients and the possibility of resolving their concerns
B3-	B5	b3-	Evaluating and treating patients with caries or other dental non-cariou pathologies and being able to use all the material required for restoring the shape, function and aesthetics of the tooth in patients of all ages

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Solve the complaint of postoperative hypersensitivity and pain after a recent operative procedure, with proper diagnosis of the etiology.	Lectures Demonstrations Case presentation	Written Exams, Oral discussion Quizzes
b2-	Determining and identifying the aesthetic requirements of patients and the possibility of resolving their concerns		
b3-	Evaluating and treating patients with caries or other dental non-cariou pathologies and being able to use all the material required for restoring the shape, function and aesthetics of the tooth in patients of all ages		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C7	c1-	Manipulate efficiently the esthetic restorative materials within the concept of adhesive cavity design.
C2-	C1	c2-	Formulate treatment plan to manage badly broken down vital and none vital teeth and Patient complaint professionally
C3-	C4	c3-	Apply conservative concept through restorative procedures.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations Supervision Instruction	Direct observation Oral discussion Practical Exams Semester work
c1	Manipulate efficiently the esthetic restorative materials within the concept of adhesive cavity design.		
c1	Formulate treatment plan to manage badly broken down vital and none vital teeth and Patient complaint professionally		
c3	Apply conservative concept through restorative procedures.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills	CILOs in general and transferable skills

		able to:
D1-	D3	d1- Communicate with dental assistants and colleagues easily
D2-	D7, D4	d2- Able to provide the treatment details to patient /build up good dentist- patient relationship and provide the treatment best way possible to prescribed time limits.
D3-	D2	d3- Communicate & share practice & knowledge with the related specialties and get acquainted with evidence based dentistry.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
d1-	Communicate with dental assistants and colleagues easily	Practical Sessions Supervision Instruction	Semester work (Practical Requirements) Observation Continuous Assessment
d2-	Able to provide the treatment details to patient /build up good dentist- patient relationship and provide the treatment best way possible to prescribed time limits.		
d3-	Communicate & share practice & knowledge with the related specialties and get acquainted with evidence based dentistry.		

III. Course Content:

I – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Adhesion in Restorative	a1, a4, b1, c1, d3	– Development, Classification of bonding system,	1 week	2

	Dentistry		– Adhesion strategies and technique.		
2	Applied composite resins	a4, b2, c1, c3, d2	– Clinical aspects of Composite Resin material	1 week	2
3	Restoration of Endodontically treated teeth	a4, b3, c2, d2, d3	– Management of destructed none vital teeth – Tooth preparation – retention methods	1 week	2
4	Bonded amalgam restoration	a1, a4, b1, c2, d2	– Practical Aspects of Amalgam Retention – Pins vs Bonded Restorations – Amalgam Bonding Procedure	1 week	2
5	Concepts of Minimal invasive dentistry	a3, a4, b2, c3, d2	– Minimal Preparation and caries management for Posterior teeth *Non invasive *Micro invasive *Minimally invasive – ART, PPR	2 weeks	4
6	Dentin Hyper-sensitivity and Post Restorative Pain	a1, a4, b1, c1, d2	– Etiology – Diagnosis – Management of hypersensitive teeth	1 week	2
7	Midterm Examination	a1, a3, a4, b1, b2, b3	– MCQs and essay questions	1	2
8	Management of non-carious cervical lesion	a1, a3, b3, c3, d2	– Definition of NCCL; – cervical erosion, abrasion and abfraction. – Etiological causes – Clinical features of NCCL – Treatment strategies: – Type of restorative materials	1 week	2

			<ul style="list-style-type: none"> - Restoration of Cervical lesions: - (non-esthetic & esthetic restorative methods). 		
9	Cracked tooth syndrome	a1, a3, b3, c3, d2	<ul style="list-style-type: none"> - Definition - Etiology - Treatment 	1 week	2
10	Management of discolored teeth	a2, a4, b1, b2, c3, d2	<ul style="list-style-type: none"> - Discoloration & Bleaching - Different method of bleaching (bleaching-laminate- Micro abrasion). - Esthetic consideration 	2 weeks	4
11	Anterior esthetic restorations	a1, a3, b2, c1, c3, d2, d3	<ul style="list-style-type: none"> - Direct composite veneer - different clinical application - Porcelain Veneers: <ul style="list-style-type: none"> • Indications and contra indications • Clinical technique • Delivery and cementation • Finishing and polishing 	2 weeks	4
12	Recent Advances in operative dentistry	a4, b2, b3, d2, d3	<ul style="list-style-type: none"> - New restorative materials and equipment's - Laser application in operative dentistry - CAD CAM Restorations 	1 week	2
13	Final Theoretical Exam	a1, a2, a3, a4, b1, b2, b3	<ul style="list-style-type: none"> - MCQs and essay questions 	1week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Compound & complex cavity preparation and restoration using direct restorations (Amalgam and Composite) 	b3, c1, c2, c3, d1, d2	1 st to 14 th	3 Hours per week

2	– Minimal intervention dentistry (preventive resin restorations)	b3, c1, c3, d1, d2	1 st to 14 th	3 Hours per week
3	– Preparation and restoration of class IV (silicone keys)	b2, c1, c2, c3, d2, d3	1 st to 14 th	3 Hours per week
4	– Treating defective restorations and Restoring Complex cavity: – pin - retained amalgam restoration – Tooth build up with post system	c1, c2, d2, d3	1 st to 14 th	3 Hours per week
5	– Full resin-based composite coverage of tooth (direct composite veneers)	b2, c1, c2, c3, d2, d3	1 st to 14 th	3 Hours per week
6	– Bleaching of discolored teeth	b1, c1, c2, c3, d2, d3	1 st to 14 th	3 Hours per week
7	– Final Practical Exam	b1, b2, b3, c1, c2, c3, d1, d2, d3	15 th	3Hours
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- Demonstrations
- Case presentation
- Practical Sessions (evaluation on the clinical work)
- Clinical demonstrations
- Case Presentation
- Self-learning
- Complete supervision and instruction on each clinical case

CCLXIV. Assessment Strategies of the Course:

- Written Exam
- Quizzes
- Practical Exam
- Oral discussion
- Direct observation: continuous assessment on the practical work

– Assessment of clinical cases and their completion and follow up

CCLXV. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester practical work: - Clinical Cases and Requirements	Week 2 to week 14	20	b1, b2, b3, c1, c2, c3, d1, d2, d3
Total			20	

CCLXVI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	Week 6	5	5 %	a1, a3, a4, b1, b2, b2
2	Midterm Theoretical Exam	Week 8	20	20 %	a1, a3, a4, b1, b2, b3
3	Final Theoretical Exam	Week 16	40	40 %	a1, a3, a4, b1, b2, b3
Total			65	65%	

Assessment of Practical Part

1	Assignments	Week 2 to week 14	20	20 %	b1, b2, b3, c1, c2, c3, d1, d2, d3
2	Final Practical Exam	Week 15	15	15 %	b1, b2, b3, c1, c2, c3, d1, d2, d3
Total			35	35%	

CCLXVII. Learning Resources:

155- Required Textbook(s) (maximum two)

- 31- Harold Heymann, Edward Swift, Andre Ritter, 2019: Sturdevant's Art and Science of Operative Dentistry, 7th Edition, Mosby, USA.
- 32- Avijit Banerjee, Timothy F. Watson, 2011: Pickard's Manual of Operative Dentistry, 9th Edition, Oxford, England.

156- Essential References

	<p>35- NishaGarg, AmitGarg, 2015: Textbook of Operative Dentistry. 3rd Edition, JP Medical Ltd, India.</p> <p>36- Peter Jacobsen, 2008: Restorative Dentistry: An Integrated Approach, 2nd Edition, Wiley-Blackwell, USA.</p> <p>37- Ramya Raghu, Raghu Srinivasan, 2017: CLINICAL OPERATIVE DENTISTRY PRINCIPLES AND PRACTICE, 2nd Edition, Emmess, India..</p>
157-	Electronic Materials and Web Sites, etc.
	<p>1-Journal of dentistry https://www.journals.elsevier.com › journal-of-dentistry</p> <p>2- Operative Dentistry Journal https://www.meridian.allenpress.com/operative-dentistry</p> <p>3- Dental Materials Journal https://www.researchgate.net</p> <p>4- Digital Restorative Dentistry https://www.springer.com/gp/book</p>

CCLXVIII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the



	Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry



الجامعة الوطنية

Course Plan (Syllabus) of Clinical Operative Dentistry (2)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

CDXCIV. Course Identification and General Information:						
1	Course Title:	Clinical Operative Dentistry (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	--	3	--	3
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Clinical Operative Dentistry (2)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CDXCV. Course Description:	
<p>In this course the students will be trained to restore the teeth with advanced restorative materials and technique within the concept of adhesive cavity design, prepare and restore compound & complex cavities with different restorative material and technique, diagnose and manage carious and non-carious lesions, manage discolored teeth, know the basic principles of minimal</p>	

intervention dentistry concepts as and when required, manage hypersensitive teeth, prepare cavities in fractured anterior teeth and restore the form, function & esthetics with composite resin material on patients and know the recent trends in the field of operative dentistry regarding restorative materials and technology.

CDXCVI. Outcomes of the Course

1. Students would be able to describe etiology, pathophysiology, diagnosis and management of common restorative situations, that will include contemporary management of dental caries, non-carious lesions and hypersensitivity.
2. Students would be able to take proper chair side history, examine the patient and perform medical and dental diagnostic procedures; as well as perform relevant tests and interpret them to come to a reasonable diagnosis about the dental condition
3. Perform all levels of restorative work including Aesthetic procedures and treatment of complicated restorative procedures

CDXCVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Discuss the concept of adhesive dentistry, adhesion mechanisms, each indication, advantages and withdraws.
a2-	Describe the management techniques for discolored teeth.
a3-	Utilize minimal intervention dentistry concepts as and when required in patients
a4-	Recognize new advancements in the field of operative dentistry and be able to evaluate their potential for clinical use

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Solve the complaint of postoperative hypersensitivity and pain after a recent operative procedure, with proper diagnosis of the etiology.
b2-	Determining and identifying the aesthetic requirements of patients and the possibility of resolving their concerns
b3-	Evaluating and treating patients with caries or other dental non-carious pathologies and being able to use all the material required for restoring the shape, function and aesthetics

	of the tooth in patients of all ages
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(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Manipulate efficiently the esthetic restorative materials within the concept of adhesive cavity design.
c2-	Formulate treatment plan to manage badly broken down vital and none vital teeth and Patient complaint professionally
c3-	Apply conservative concept through restorative procedures.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Communicate with dental assistants and colleagues easily
d2-	Able to provide the treatment details to patient /build up good dentist- patient relationship and provide the treatment best way possible to prescribed time limits.
d3-	Communicate & share practice & knowledge with the related specialties and get acquainted with evidence based dentistry.

CDXCVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Adhesion in Restorative Dentistry	<ul style="list-style-type: none"> – Development, Classification of bonding system, – Generations, – Adhesion strategies and technique. 	1 week	2
2	Applied composite resins	<ul style="list-style-type: none"> – Clinical aspects of Composite Resin material 	1 week	2
3	Restoration of Endodontically treated teeth	<ul style="list-style-type: none"> – Management of destructed none vital teeth – Tooth preparation 	1 week	2

4	Bonded amalgam restoration	<ul style="list-style-type: none"> - Practical Aspects of Amalgam Retention - Pins vs Bonded Restorations - Amalgam Bonding Procedure 	1 week	2
5	Concepts of Minimal invasive dentistry	<ul style="list-style-type: none"> - Minimal Preparation and caries management for Posterior teeth *Non invasive *Micro invasive *Minimally invasive - ART, PPR 	2 week s	4
6	Dentin Hyper-sensitivity and Post Restorative Pain	<ul style="list-style-type: none"> - Etiology - Diagnosis - Management of hypersensitive teeth 	1 week	2
7	Midterm Examination	<ul style="list-style-type: none"> - MCOs and essay questions 	1	2
8	Management of non-carious cervical lesion	<ul style="list-style-type: none"> - Definition of NCCL; - cervical erosion, abrasion and abfraction. - Etiological causes - Clinical features of NCCL - Treatment strategies: - Type of restorative materials - Restoration of Cervical lesions: - (non-esthetic & esthetic restorative methods). 	1 week	2
9	Cracked tooth syndrome	<ul style="list-style-type: none"> - Definition - Etiology - Treatment 	1 week	2
10	Management of discolored teeth	<ul style="list-style-type: none"> - Discoloration & Bleaching - Different method of bleaching (bleaching- laminate- Micro abrasion). - Esthetic consideration 	2 week s	4
11		<ul style="list-style-type: none"> - Direct composite veneer - different clinical application 	2 week	4

	Anterior esthetic restorations	<ul style="list-style-type: none"> • Indications and contra indications • Clinical technique • Delivery and cementation • Finishing and polishing 	s	
12	Recent Advances in operative dentistry	<ul style="list-style-type: none"> - New restorative materials and equipment's - Laser application in operative dentistry - CAD CAM Restorations 	1 week	2
13	Final Theoretical Exam	- MCQs and essay questions	1week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Orientation to the dental clinic, dental units, its accessories and hand pieces. - Patient preparation, Dental chair and operating positions, - infection control and sterilization. 	2 nd to 14 th	3 Hours per week
2	<ul style="list-style-type: none"> - Patient assessment: examination, diagnosis and treatment planning - Clinic and patient records system - Control of oral fluids & rubber dam application (Demonstration and Practicing) 	2 nd to 14 th	3 Hours per week
3	Practicing simple cavity prep. & restoration with direct restorations (Amalgam and Composite) for different classes.	2 nd to 14 th	3 Hours per week
4	Practicing compound cavity prep. & restoration with direct restorations (Amalgam and Composite) for different classes	2 nd to 14 th	3 Hours per week
5	Management of Deep - carious lesions (Direct and indirect pulp capping)	2 nd to 14 th	3 Hours per week
6	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

CDXCIX. Teaching strategies of the course

- Lectures
- Demonstrations
- Case presentation
- Practical Sessions (evaluation on the clinical work)
- Clinical demonstrations
- Case Presentation
- Self-learning
- Complete supervision and instruction on each clinical case

D. Assessment Methods of the Course:

- Written Exam
- Quizzes
- Practical Exam
- Oral discussion
- Direct observation: continuous assessment on the practical work
- Assessment of clinical cases and their completion and follow up

DI. Assignments:

No.	Assignments	Week due	Mark
1	Semester practical work: - Clinical Cases and Requirements	Week 2 to week 14	20
Total			20

DII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	Week 7	5	5 %
2	Midterm Theoretical Exam	Week 9	20	20 %

3	Final Theoretical Exam	Week 16	40	40 %
Total			65	65%
Assessment of Practical Part				
1	Assignments	Week 2 to week 14	20	20 %
2	Final Practical Exam	Week 15	15	15 %
Total			35	35%

DIII. Learning Resources:

66- Required Textbook(s) (maximum two)

- 3- Harold Heymann, Edward Swift, Andre Ritter, 2019: Sturdevant's Art and Science of Operative Dentistry, 7th Edition, Mosby, USA.
- 4- Avijit Banerjee, Timothy F. Watson, 2011: Pickard's Manual of Operative Dentistry, 9th Edition, Oxford, England.

70- Essential References

- 5- NishaGarg, AmitGarg, 2015: Textbook of Operative Dentistry. 3rd Edition, JP Medical Ltd, India.
- 6- Peter Jacobsen, 2008: Restorative Dentistry: An Integrated Approach, 2nd Edition, Wiley-Blackwell, USA.
- 7- Ramya Raghu, Raghu Srinivasan, 2017: CLINICAL OPERATIVE DENTISTRY PRINCIPLES AND PRACTICE, 2nd Edition, Emmess, India..

8- Electronic Materials and Web Sites, etc.

- Journal of dentistry
- 38- <https://www.journals.elsevier.com › journal-of-dentistry>
- Operative Dentistry Journal
- 39- <https://www.meridian.allenpress.com/operative-dentistry>
- Dental Materials Journal
- 40- <https://www.researchgate.net>
- Digital Restorative Dentistry
- 41- <https://www.springer.com/gp/book>

XII. Course Policies:

- 1 **Class Attendance:**
 Class Attendance is mandatory. A student is considered absent and shall be banned from

	taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Clinical Fixed Prosthodontics (2)

Course No.()

2021/2022



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Prepared by:

Dr.Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:



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XIX. Course Identification and General Information:						
1	Course Title:	Clinical Fixed Prosthodontics (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Clinical Fixed Prosthodontics (1)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CXXX. Course Description:	
<p>This is the second clinical fixed prosthodontic course for Fourth- year dental students. It is a continuation of the previous courses aims to provide the student with more advanced topics in diagnosis and treatment planning for patient in different conditions of FPD, focusing on the clinical procedures and skills related to the stage of guidance and discipline in the science of fixed restoration, which deal with porcelain laminate veneers, management of periodontally compromised cases, educate how to overcome some problems encountered in clinical and laboratory work in fixed prosthodontics.</p> <p>The dental implants and esthetic principles, shade selection, management of extensively damaged teeth, interaction between fixed prosthodontics and other specialties in dentistry are also included in this course.</p>	

XXXI. Outcomes of the Course

1. Dental graduate with knowledge on prosthetics needs of patients, fabrication of all prosthodontic modes of treatment
2. Dental graduate who is able to diagnose, motivate and treat patients who are partially and completely edentulous (including geriatric patients) with complete and partial dentures
3. Dental graduate skilled enough to identify cases requiring specialist prosthodontic treatment needs and refer them for further follow up

XXXII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A2		a1-	Identify various failure and post insertion problems in Crown & Bridge and predict the repair solution for different manifestation
A4		a2-	Describe the importance of aesthetics and shade selections for restorations in FPD's

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Demonstrations Supervision Instruction	Written Exams, Oral discussion Quizzes Practical examinations
a1-	Identify various failure and post insertion problems in Crown & Bridge and predict the repair solution for different manifestation		
a2-	Describe the importance of aesthetics and shade selections for restorations in FPD's		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:	
PILOs in intellectual skills	CILOs of intellectual skills
After completing this program, students would be able to:	
B1	b1- Determining the concept of occlusion in fixed partial denture and the proper management for abnormal tooth positions
B5	b2- Enumerate various type of materials, advantage, disadvantage, indication & contraindication of various laminates & veneers

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:		
CILOs in intellectual skills	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		
b1- Determining the concept of occlusion in fixed partial denture and the proper management for abnormal tooth positions	Lectures Demonstrations Case presentation Practical Sessions Self-learning	Written Exam Practical Exams Oral Exams
b2- Enumerate various type of materials, advantage, disadvantage, indication & contraindication of various laminates & veneers		

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(C) Professional and Practical Skills	
Alignment of CILOs to PILOs in professional and practical skills	
PILOs in professional and practical skills	CILOs in professional and practical skills
After completing this program, students would be able to:	
C1	c1- Apply correct diagnosis and treatment plan of partially edentulous patients in different challenging and compromised situations of FPD
C7	c2- Perform teeth preparation for different abutments conditions

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:		
CILOs in professional and practical skills	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		
c1	Practical Sessions Demonstrations Supervision Instruction	Direct observation Oral discussion Practical Exams Assignments (Semester work and Practical Requirements)
c1		
Apply correct diagnosis and treatment plan of partially edentulous patients in different challenging and compromised situations of FPD		
Perform teeth preparation for different abutments conditions		

(D) General and Transferable Skills	
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills	
PILOs in general and transferable skills	CILOs in general and transferable skills
After completing this program, students would be able to:	
D3	d1- Communicate and work effectively and respectfully with patients, clinical staff and colleagues in a team work.
D7	d2- Communicate with E-learning, self-teaching and recent education technology
D4	d3- Manage time, set priorities and work to prescribed time limits.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:		
CILOs in general and transferable skills	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		
d1- Communicate and work effectively and respectfully with patients, clinical staff and colleagues in a team work.	Practical Sessions Supervision Instruction	Assignments (Semester work and Practical Requirements)
d2- Communicate with E-learning, self-teaching and recent education technology		

d3-	Manage time, set priorities and work to prescribed time limits.		Observation Continuous Assessment
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III. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Advanced diagnosis and treatment planning	a1, a2, b1, b2, c1, d2	<ul style="list-style-type: none"> – Factors affecting the selection of material and design – Destruction of tooth structure – Esthetics – Plaque control – Advanced diagnosis tools – treatment planning 	1 week	2
2	Occlusion in fixed partial denture	a1, b1, c1, c2, d2	<ul style="list-style-type: none"> – Occlusal interferences – Organization of occlusion – Molar dislocation – Condylar guidance – Anterior guidance – Steps in the fabrication of custom anterior guidance table 	1 week	2
3	Esthetic considerations and Shade selection	a1, a2, b2, c1, c2, d2	<ul style="list-style-type: none"> – Definition – Colour dimensions – Procedures and techniques for shade selection – Esthetic considerations 	2 weeks	4
4	Managing abnormal tooth positions	a1, b1, c1, c2, d2	<ul style="list-style-type: none"> – abnormal tooth positions – Management 	1 week	2
5	Porcelain Laminate Veneer	a2, b1, b2,	<ul style="list-style-type: none"> – Veneers and Laminates – Definition – Types and material 	1 week	2

		d1, d2	<ul style="list-style-type: none"> - Indications, Contra-indications - Advantages and Disadvantages - Clinical and laboratory procedures and techniques 		
6	CAD/CAM Restorations	a1, a2, b1, b2, c1, d1, d2	<ul style="list-style-type: none"> - Introduction to CAD/CAM - Advantages and disadvantages - Indications and contraindications - Different available systems - Zirconia Ceramic materials - Steps in the preparation 	1 week	2
7	Mid-Term Theoretical Exam	a1, a2, b1, b2, c1, d2	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
8	Periodontal consideration in Fixed Partial Prosthodontics treatment	a1, a2, b1, b2, c1, d2	<ul style="list-style-type: none"> - Periodontal prosthetic consideration: - The relation of periodontium to natural teeth - Effect of the FPs on periodontal health - Bone resorption - Aesthetic crown lengthening - Aesthetic surgical corrections 	1 week	2
9	Post-insertion Problems and Failures, prevention and management	a1, b1, b2, c1, d1, d2	<ul style="list-style-type: none"> - Crown & Bridge Failure - Repair - Post-operative Care 	1 week	2
10	Management of extensively damaged abutment	a1, b1, b2, c1, c2, d1, d2	<ul style="list-style-type: none"> - Preparation and Restoring for severely debilitated vital teeth 	1 week	2
11		a1,	<ul style="list-style-type: none"> - Basic principles, 	1	2

	prosthesis	b1, b2, c1, c2, d1, d2	for implants. – Choosing between implants and Bridges – Designs of dental implants – Clinical and Laboratory Procedures – Complication		
12	Interaction between Fixed Prosthodontics and other specialties in dentistry	a1, a2, b1, b2, c1, c2, d1, d2	– Operative dentistry, Endodontics, Periodontics Orthodontics, Pedodontics and Removable Prosthodontics	1 week	2
13	Immediate replacement prosthesis	a1, a2, b1, b2, c1, c2, d1, d2	– Immediate replacement FPD	1 week	2
14	Recent advances in fixed prosthodontics	a1, a2, b1, b2, c1, c2, d1, d2	– Current materials and systems, – New treatment options and techniques/ equipment's used in FPD.	1 week	2
15	Final Theoretical Exam	a1, a2, b1, b2, c1, d1, d2	– MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Patient assessment: examination, diagnosis and treatment planning - Radiographs - Primary impression - Practicing the clinical procedures and steps of bridge preparation and construction for ceramic fused to metal bridge on anterior and posterior teeth: - Tooth preparation procedures - Soft tissue management and definitive impressions - Provisional restorations - Final insertion and cementation - Practicing Custom made post crown construction. 	a1, a2, b1, b2, c1, c2, d1, d2, d3	1 st to 14 th	42
2	<ul style="list-style-type: none"> - Final Practical Examination 	a2, b1, c1, c2, d1, d2, d3	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lecture
- Clinical Demonstrations
- Supervision (on each clinical case)
- Instruction (on each clinical case)
- Case presentation (Clinical)
- Practical Sessions (evaluation on the clinical work)

- Self-learning

CCLXIX. Assignments Strategies of the Course:

- Final Written Theoretical Exam
- Mid-Term Written Theoretical Exam
- Quizzes
- Final Practical Exam
- Oral Exam and discussion
- Assignments
- Direct observation: continuous assessment on the practical work
- Assessment of clinical cases and their completion and follow up

CCLXX. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester practical work: - Clinical Cases and Practical Requirements.	1 st to 14 th	10	a2, b1, c1, c2, d1, d2, d3
Total				

CCLXXI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes	6 th and 12 th	10	10%	a1, a2, b1, b2, c1, d2
2	Mid-Term Theoretical Exam	8 th	20	20%	a1, a2, b1, b2, c1, d2
3	Final Theoretical Exam	16 th	40	40%	a1, a2, b1, b2, c1, d1, d2
Total			70	70%	
Assessment of Practical Part					
1	Assignments	1 st to	10	10%	a2, b1, c1, c2, d1, d2,

		14 th			d3
2	Final Practical Exam (including Oral discussion)	15 th	20	20%	a2, b1, c1, c2, d1, d2, d3
	Total		30	30%	

CCLXXII. Learning Resources:

158- Required Textbook(s) (maximum two)

- 1- Shillingburg,H,T,etal, :Fundamentals of Fixed Prosthodontics, Last Edition. Quintessence.
- 2- Rosenstiel SF et al., 2105: Contemporary Fixed Prosthodontics 4th Edition, Fujimoto

159- Essential References

- 1 - Shillingburg.H.T.atel, : Fundamental of Tooth Preparation for Cast Metal and Porcelain.
- 2 - Smith et al.: Planning and Making Crown and Bridges Last Edition.

160- Electronic Materials and Web Sites, etc.

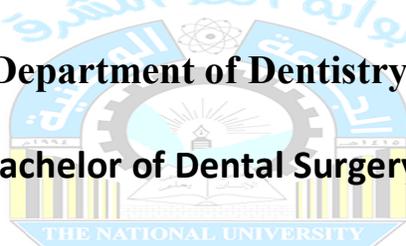
- 1- The British Society of Prosthodontics
http://www.bsspd.org/For*patients/fixed*prosthodontics.aspx
- 2- European Prosthodontic Association (EPA)
<http://www.epadental.org/patients/fixed-prosthodontics>

CCLXXIII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.

5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery



THE NATIONAL UNIVERSITY

Course Plan (Syllabus) of Clinical Fixed Prosthodontics (2)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

DIV. Course Identification and General Information:

1	Course Title:	Clinical Fixed Prosthodontics (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Clinical Fixed Prosthodontics (1)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

DV. Course Description:

This is the second clinical fixed prosthodontic course for Fourth- year dental students. It is a continuation of the previous courses aims to provide the student with more advanced topics in diagnosis and treatment planning for patient in different conditions of FPD, focusing on the clinical procedures and skills related to the stage of guidance and discipline in the science of fixed restoration, which deal with porcelain laminate veneers, management of periodontally compromised cases, educate how to overcome some problems encountered in clinical and laboratory work in fixed prosthodontics.

The dental implants and esthetic principles, shade selection, management of extensively damaged teeth, interaction between fixed prosthodontics and other specialties in dentistry are also included in this course.

DVI. Outcomes of the Course

1. Dental graduate with knowledge on prosthetics needs of patients, fabrication of all prosthodontic modes of treatment
2. Dental graduate who is able to diagnose, motivate and treat patients who are partially and completely edentulous (including geriatric patients) with complete and partial dentures
3. Dental graduate skilled enough to identify cases requiring specialist prosthodontic treatment needs and refer them for further follow up

DVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Identify various failure and post insertion problems in Crown & Bridge and predict the repair solution for different manifestation |
| a2- | Describe the importance of aesthetics and shade selections for restorations in FPD's |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Determining the concept of occlusion in fixed partial denture and the proper management for abnormal tooth positions |
| b2- | Enumerate various type of materials, advantage, disadvantage, indication & contraindication of various laminates & veneers |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| c1- | Apply correct diagnosis and treatment plan of partially edentulous patients in different challenging and compromised situations of FPD |
| c2- | Perform teeth preparation for different abutments conditions |

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| d1- | Communicate and work effectively and respectful with patients, clinical staff and colleagues in a team work. |
| d2- | Communicate with E-learning, self-teaching and recent education technology |

d3- Manage time, set priorities and work to prescribed time limits.

DVIII. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Advanced diagnosis and treatment planning	<ul style="list-style-type: none"> – Factors affecting the selection of material and design – Destruction of tooth structure – Esthetics – Plaque control – Advanced diagnosis tools – treatment planning 	1 week	2
2	Occlusion in fixed partial denture	<ul style="list-style-type: none"> – Occlusal interferences – Organization of occlusion – Molar dislocation – Condylar guidance – Anterior guidance – Steps in the fabrication of custom anterior guidance table 	1 week	2
3	Esthetic considerations and Shade selection	<ul style="list-style-type: none"> – Definition – Colour dimensions – Procedures and techniques for shade selection – Esthetic considerations 	2 weeks	4
4	Managing abnormal tooth positions	<ul style="list-style-type: none"> – abnormal tooth positions – Management 	1 week	2
5	Porcelain Laminate Veneer	<ul style="list-style-type: none"> – Veneers and Laminates – Definition – Types and material – Indications, Contra-indications – Advantages and Disadvantages – Clinical and laboratory procedures and 	1 week	2

6	CAD/CAM Restorations	<ul style="list-style-type: none"> - Introduction to CAD/CAM - Advantages and disadvantages - Indications and contraindications - Different available systems - Zirconia Ceramic materials - Steps in the preparation 	1 week	2
7	Mid-Term Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1 week	2
8	Periodontal consideration in Fixed Partial Prosthodontics treatment	<ul style="list-style-type: none"> - Periodontal prosthetic consideration: <ul style="list-style-type: none"> - The relation of periodontium to natural teeth - Effect of the FPs on periodontal health - Bone resorption - Aesthetic crown lengthening - Aesthetic surgical corrections 	1 week	2
9	Post-insertion Problems and Failures, prevention and management	<ul style="list-style-type: none"> - Crown & Bridge Failure Repair - Post-operative Care 	1 week	2
10	Management of extensively damaged abutment	<ul style="list-style-type: none"> - Preparation and Restoring for severely debilitated vital teeth 	1 week	2
11	Implant-supported fixed prosthesis	<ul style="list-style-type: none"> - Basic principles, - indications, contraindications for implants. - Choosing between implants and Bridges - Designs of dental implants - Clinical and Laboratory Procedures - Complication 	1 week	2
12	Interaction between Fixed Prosthodontics and other specialties in dentistry	<ul style="list-style-type: none"> - Operative dentistry, Endodontics, Periodontics Orthodontics, Pedodontics and Removable Prosthodontics 	1 week	2
13	Immediate replacement	<ul style="list-style-type: none"> - Immediate replacement FPD 	1	2

	prosthesis		week	
14	Recent advances in fixed prosthodontics	<ul style="list-style-type: none"> – Current materials and systems, – New treatment options and techniques/ equipment's used in FPD. 	1 week	2
15	Final Theoretical Exam	– MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> – Patient assessment: examination, diagnosis and treatment planning - Radiographs - Primary impression – Practicing the clinical procedures and steps of bridge preparation and construction for ceramic fused to metal bridge on anterior and posterior teeth: - Tooth preparation procedures - Soft tissue management and definitive impressions - Provisional restorations - Final insertion and cementation – Practicing Custom made post crown construction. 	1 st to 14 th	42
2	– Final Practical Examination	15 th	3
Number of Weeks / Units per Semester		15	45

DIX. Teaching strategies of the course

- Lecture
- Clinical Demonstrations
- Supervision (on each clinical case)

- Instruction (on each clinical case)
- Case presentation (Clinical)
- Practical Sessions (evaluation on the clinical work)
- Self-learning

DX. Assessment Methods of the Course:

- Final Written Theoretical Exam
- Mid-Term Written Theoretical Exam
- Quizzes
- Final Practical Exam
- Oral Exam and discussion
- Assignments
- Direct observation: continuous assessment on the practical work
- Assessment of clinical cases and their completion and follow up

DXI. Assignments:

No.	Assignments	Week due	Mark
1	Semester practical work: - Clinical Cases and Practical Requirements.	1 st to 14 th	10
Total			10

DXII. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quizzes	6 th , 12 th	10	10%

2	Mid-Term Theoretical Exam	8 th	20	20%
3	Final Theoretical Exam	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Assignments	1 st , 14 th	10	10%
2	Final Practical Exam (including Oral discussion)	15 th	20	20%
Total			30	30%

DXIII. Learning Resources:

67- Required Textbook(s) (maximum two)

- 1- Shillingburg,H,T,etal, :Fundamentals of Fixed Prosthodontics, Last Edition. Quintessence.
- 2- Rosenstiel SF et al., 2105: Contemporary Fixed Prosthodontics 4th Edition, Fujimoto

2- Essential References

- 1 - Shillingburg.H.T.atel, : Fundamental of Tooth Preparation for Cast Metal and Porcelain.
- 2 - Smith et al.: Planning and Making Crown and Bridges Last Edition.

3- Electronic Materials and Web Sites, etc.

- 1- The British Society of Prosthodontics
http://www.bsspd.org/For*patients/fixed*prosthodontics.aspx
- 2- European Prosthodontic Association (EPA)
<http://www.epadental.org/patients/fixed-prosthodontics>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.

3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
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7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Clinical Endodontic (2)

Course No.()



2021/2022



This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:



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XIV. Course Identification and General Information:						
1	Course Title:	Clinical Endodontic (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Clinical Endodontic (1)				
6	Co -requisite:	Clinical Operative Dentistry (2)&periodontics 2				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

XXXV. Course Description:	
<p>This is the second clinical Endodontics courses provided for the fourth year dental students during the second semester, the course aims to provide the students with advanced theoretical topics and practical skills of Endodontics, with emphasis on the correlation between Endo-Perio Relationship in treatment planning and patient treatment, the management considerations for theiatrogenic events and medically complex endodontic patients, treatment of teeth with anatomical variations, endodontic prognoses, complications and endodontic surgery will be also discussed. The practical clinical part includes Root canal treatment in posterior teeth, molars and premolars (Access cavity, root canal preparation, instrumentation and obturation).</p>	

XXVI. Outcomes of the Course

1. To educate and impart clinical skill to students which will help them in providing quality restorative treatment and basic endodontic procedures.
2. As a graduate, the dentist would exhibit professional behaviour, basic skills to carry out range of dental procedures in general dental practice independently with consistency and accuracy.
3. To instill the importance of life-long learning and updating the knowledge in the field of restorative dentistry and endodontics.

XXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1		a1-	Describe teeth anatomical variations, and recognize the management of teeth with immature apices and anatomical variations
A2		a2-	Recognize the management of tooth discoloration of non-vital teeth and iatrogenic endodontic events.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe teeth anatomical variations, and recognize the management of teeth with immature apices and anatomical variations	Lectures Discussion Practical Sessions Demonstrations	Written Exam Oral Exam Quizzes
a2-	Recognize the management of tooth discoloration of non-vital teeth and iatrogenic endodontic events.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:	
PILOs in intellectual skills	CILOs of intellectual skills
After completing this program, students would be able to:	After participating in the course, students would be able to:
B1	b1- Recognize the interrelationships of endodontics and periodontics in treatment planning and patient treatment
B2	b2- Recognize the management considerations for the medically complex endodontic patient.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:		
CILOs in intellectual skills	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	Lectures Discussion Problem-solving Practical Sessions	Written Exam Oral Exam Quizzes
b1- Recognize the interrelationships of endodontics and periodontics in treatment planning and patient treatment		
b2- Recognize the management considerations for the medically complex endodontic patient.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills	
PILOs in professional and practical skills	CILOs in professional and practical skills
After completing this program, students would be able to:	After participating in the course, students would be able to:
C2	c1- Provide practical clinical Root canal treatment in anterior teeth and premolars (Access cavity, root canal preparation, instrumentation and obturation) on patients using different clinical diagnostic tools
C2	c2- Detect pathological conditions related to the endodontics practice and making decisions

			related to patient's health conditions
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations Problem-solving	Oral examination Observation Practical examinations
c1	Provide practical clinical Root canal treatment in anterior teeth and premolars (Access cavity, root canal preparation, instrumentation and obturation) on patients using different clinical diagnostic tools		
c2	Detect pathological conditions related to the endodontics practice and making decisions related to patient's health conditions		



(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D3	d1-	Create appropriate professional communication skills with the patients and staff and encourage teamwork skills
	D4	d2-	Recognize how to Manage time, set priorities and work to prescribed time limits.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment

d1-	Create appropriate professional communication skills with the patients and staff and encourage teamwork skills	Discussion	Assignments Practical examinations Observation
d2-	Recognize how to Manage time, set priorities and work to prescribed time limits.		

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Endo-Perio Relationship	a1,b1, d1, d2	<ul style="list-style-type: none"> – Influence of pulpal pathologic condition on the periodontium. – Influence of periodontal inflammation on the pulp. – Differential diagnosis. – Treatment alternatives 	2	4
2	Prognosis of Root Canal Therapy	a1, a2, d2	<ul style="list-style-type: none"> – Importance of recall. – Modalities used to determine success and failure. – Factors determine success and failure. – Causes that may lead to failure. 	1	2
3	Endodontic Therapy in Teeth with Anatomical Variations	a1,b1, d1, d2	<ul style="list-style-type: none"> – Definitions – Classification – Management: single and double curved root canals. 	3	6
4	Endodontic Surgery	a2, b1	<ul style="list-style-type: none"> – Indications for periradicular surgery – Periradicular surgery – Postoperative care 	1	2
5	Mid-Term Theoretical Exam	a1, a2,	<ul style="list-style-type: none"> – MCQs and essay questions 	1	2

		d1, d2			
6	Complication related to endodontic treatment	a2, b1	<ul style="list-style-type: none"> - Causes of tooth discoloration. - Contraindications to bleaching. - Methods of bleaching discolored teeth: internal bleaching, veneering 	2	4
7	Managing Iatrogenic Endodontic Events	a2, b2, d2	<ul style="list-style-type: none"> - Definitions - Broken instruments and its management - Management of sodium hypochlorite extrusion - Management of ledge formation - Management of perforations - Management of root canal filling materials extrusion 	2	4
8	Management Considerations for the Medically Complex Endodontic Patient	a2, b1, b2	<ul style="list-style-type: none"> - Systemic health assessment of the endodontic patient - Management considerations for the common medical findings that may influence endodontic treatment planning: <ul style="list-style-type: none"> • Allergies, Pregnancy, Cardiovascular disease, Hypertension, Diabetes, Viral Infections, Anticoagulant therapy and bleeding disorders, Pulmonary disorders, Renal disease and dialysis, Oral cancer, Liver disease, organ transplantation, (ARONJ) 	2	4
9	Advanced endodontics	a2, b1, b2	<ul style="list-style-type: none"> - Current topics in endodontics: <ul style="list-style-type: none"> • Mechanical preparation. • Ultrasonic irrigation. • Radiographic methods. • Thermoplasticized obturation (materials and mechanism) 	1	2

10	Final Theoretical Exam	a1, a2, b1, b2, d1, d2	- MCQs and essay questions	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - History, examination, diagnosis, treatment plan and patents record (Case sheets) ▪ Root canal treatment of maxillary and mandibular premolars. (using hand technique) ▪ Root canal treatment of maxillary molars. (using hand technique) ▪ Root canal treatment of mandibular molars. (using hand technique) ▪ Demonstration and practice: Root canal treatment of single canal tooth (using rotary technique) 	b1, b2, c1, c2, d1,d2	1 st -14 th	28
2	Final Practical Exam	b1, b2, c1, c2, d1, d2	15 th	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course

- Lectures
- Discussions
- Demonstrations
- Brainstorming
- Practical Sessions
- Problem-solving
- Self-Learning

CCLXXIV. Assignments Strategies of the Course:

- Written Exam
- Oral Exam
- Quizzes
- Practical Exam
- Assignments
- Observation

CCLXXV. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Practical Requirements and Clinical work during the Practical Sessions	1 st - 14 th	20	b1, b2, c1,c2, d1, d2
Total			20	

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CCLXXVI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quizzes 1 & 2	6 th , 12 th	10	10 %	a1, a2, b1, b2, c1, c2, d1, d2
2	Mid-Term Theoretical Exam	9 th	20	20 %	a1, a2, b1, d1, d2
3	Final Theoretical Exam	16 th	40	40 %	a1, a2, b1, b2, d1, d2
Total			70	70%	
Assessment of Practical Part					
	Assignments	1 st to 14 th	20	20 %	b1, b2, c1, c2, d1, d2

2	Final Practical Exam	15 th	10	10 %	b1, b2, c1,c2, d1, d2
Total			30	30%	

CCLXXVII. Learning Resources:

161- Required Textbook(s) (maximum two)

- 1- NishaGarg, Amit Garg.,2019: Textbook of Endodontics, 4th Edition, Jaypee Brothers Medical Publishers (P) Ltd, India
- 2- B. Suresh Chandra, V. Gopikrishna, 2014: Grossman's Endodontic Practice, 13th Edition, Wolters Kluwer, India

162- Essential References

- 38- Ilan R; John I I. 2019: Ingles Endodontics, 7th Edition, Raleigh, North Carolina, PMPH USA
- 39- Torabinejad et al., 2016: Endodontics. Principles and Practice, 6th Edition., Elsevier, China.

163- Electronic Materials and Web Sites, etc.

- 37- American Association of endodontists:
www.aae.org
- 38- Journal of Endodontics
<https://www.jendodon.com/>
- 39- International Endodontic Journal
- 40- <https://onlinelibrary.wiley.com/journal/13652591>

CCLXXVIII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	



	Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of

Endodontics 2 (Clinical)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

DXIV. Course Identification and General Information:						
1	Course Title:	Clinical Endodontic (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	4 th Level / 2 nd Semester				
5	Prerequisites:	Clinical Endodontic (1)				
6	Co –requisite:	Clinical Operative Dentistry (2)&periodontics 2				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (BDS)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

DXV. Course Description:

This is the second clinical Endodontics courses provided for the fourth year dental students during the second semester, the course aims to provide the students with advanced theoretical topics and practical skills of Endodontics, with emphasis on the correlation between Endo-Perio Relationship in treatment planning and patient treatment, the management considerations for

theiatrogenic events and medically complex endodontic patients, treatment of teeth with anatomical variations, endodontic prognoses, complications and endodontic surgery will be also discussed. The practical clinical part includes Root canal treatment in posterior teeth, molars and premolars (Access cavity, root canal preparation, instrumentation and obturation).

DXVI. Outcomes of the Course

1. To educate and impart clinical skill to students which will help them in providing quality restorative treatment and basic endodontic procedures.
2. As a graduate, the dentist would exhibit professional behaviour, basic skills to carry out range of dental procedures in general dental practice independently with consistency and accuracy.
3. To instill the importance of life-long learning and updating the knowledge in the field of restorative dentistry and endodontics.

DXVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Describe teeth anatomical variations, and recognize the management of teeth with immature apices and anatomical variations |
| a2- | Recognize the management of tooth discoloration of non-vital teeth and iatrogenic endodontic events. |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Recognize the interrelationships of endodontics and periodontics in treatment planning and patient treatment |
| b2- | Recognize the management considerations for the medically complex endodontic patient. |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | Provide practical clinical Root canal treatment in anterior teeth and premolars (Access cavity, root canal preparation, instrumentation and obturation) on patients using different clinical diagnostic tools |
| c2- | Detect pathological conditions related to the endodontics practice and making decisions related to patient's health conditions |

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Create appropriate professional communication skills with the patients and staff and encourage teamwork skills
d2-	Recognize how to Manage time, set priorities and work to prescribed time limits.

DXVIII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Endo-Perio Relationship	<ul style="list-style-type: none"> - Influence of pulpal pathologic condition on the periodontium. - Influence of periodontal inflammation on the pulp. - Differential diagnosis. - Treatment alternatives 	2	4
2	Prognosis of Root Canal Therapy	<ul style="list-style-type: none"> - Importance of recall. - Modalities used to determine success and failure. - Factors determine success and failure. - Causes that may lead to failure. 	1	2
3	Endodontic Therapy in Teeth with Anatomical Variations	<ul style="list-style-type: none"> - Definitions - Classification - Management: single and double curved root canals. 	3	6
4	Endodontic Surgery	<ul style="list-style-type: none"> - Indications for periradicular surgery - Periradicular surgery - Postoperative care 	1	2
5	Mid-Term Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1	2
6	Complication related to	<ul style="list-style-type: none"> - Causes of tooth discoloration. 	2	4

	endodontic treatment	<ul style="list-style-type: none"> - Contraindications to bleaching. - Methods of bleaching discolored teeth: internal bleaching, veneering 		
7	Managing Iatrogenic Endodontic Events	<ul style="list-style-type: none"> - Definitions - Broken instruments and its management - Management of sodium hypochlorite extrusion - Management of ledge formation - Management of perforations - Management of root canal filling materials extrusion 	2	4
8	Management Considerations for the Medically Complex Endodontic Patient	<ul style="list-style-type: none"> - Systemic health assessment of the endodontic patient - Management considerations for the common medical findings that may influence endodontic treatment planning: <ul style="list-style-type: none"> • Allergies, Pregnancy, Cardiovascular disease, Hypertension, Diabetes, Viral Infections, Anticoagulant therapy and bleeding disorders, Pulmonary disorders, Renal disease and dialysis, Oral cancer, Liver disease, organ transplantation, (ARONJ) 	2	4
9	Advanced endodontics	<ul style="list-style-type: none"> - Current topics in endodontics: <ul style="list-style-type: none"> • Mechanical preparation. • Ultrasonic irrigation. • Radiographic methods. • Thermoplasticized obturation (materials and mechanism) 	1	2
10	Final Theoretical Exam	<ul style="list-style-type: none"> - MCQs and essay questions 	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - History, examination, diagnosis, treatment plan and patents record (Case sheets) ▪ Root canal treatment of maxillary and mandibular premolars. (using hand technique) ▪ Root canal treatment of maxillary molars. (using hand technique) ▪ Root canal treatment of mandibular molars. (using hand technique) ▪ Demonstration and practice: Root canal treatment of single canal tooth (using rotary technique) 	1 st -14 th	28
2	Final Practical Exam	15 th	2
Number of Weeks / Units per Semester		15	30

DXIX. Teaching strategies of the course

- Lectures
- Discussions
- Demonstrations
- Brainstorming
- Practical Sessions
- Problem-solving
- Self-Learning

VIII. Assignments Strategies of the Course:

- Written Exam
- Oral Exam
- Quizzes
- Practical Exam
- Assignments
- Observation

2- Journal of Endodontics https://www.jendodon.com/
3- International Endodontic Journal https://onlinelibrary.wiley.com/journal/13652591

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Comprehensive Clinical Dentistry (1)

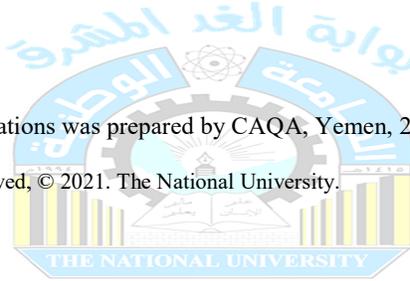
Course No.()

2021/2022



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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

الجامعة الوطنية
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CXIX. Course Identification and General Information:						
1	Course Title:	Comprehensive Clinical Dentistry (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	--	6	--	4
4	Study level/ semester at which this course is offered:	5 th Level / 1 st Semester				
5	Prerequisites:	Clinical Operative Dentistry (2), Clinical Endodontic (2), Clinical Fixed Prosthodontics (2)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

CCXL. Course Description:

This course is based on a problem based approach to provide each student in the fifth year with more opportunities to practice interdisciplinary, comprehensive care to as many patients as possible, it includes training in dental clinics in conservative treatment (operative dentistry, endodontic and fixed prosthodontic).

During this course the student should be able to perform a complete clinical examination, diagnosis and management of patient case including all detailed clinical procedure to focus on the patient's total dental needs rather than a single clinical procedure.

Patient care is carried out under the supervision and teaching of clinical instructors and staff members from the department.

CXLI. Outcomes of the Course

Students would diagnose , plan and execute challenging clinical cases requiring comprehensive management strategies using contemporary materials and techniques in the specialty of conservative dentistry and endodontics.

CXLII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A4	a1-	Recognize and diagnose the conditions of the oral cavity and its related structures, using proper diagnostic tools.
A2-	A1	a2-	Describe the conservative concepts and the clinical steps required to manage destructive teeth

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Recognize and diagnose the conditions of the oral cavity and its related structures, using proper diagnostic tools.	Lecture Demonstrations Supervision Instruction	Written Exams, Oral discussion Quizzes
a2-	Describe the conservative concepts and the clinical steps required to manage destructive teeth		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills

CILOs of intellectual skills

After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Verify the problem oriented treatment planning model and address all the list of dental problems that may face the patient
B2-	B3	b2-	Evaluating the patients' needs and build a comprehensive treatment plan accordantly

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures Demonstrations Case presentation	Written Exams, Oral discussion Quizzes
b1-	Verify the problem oriented treatment planning model and address all the list of dental problems that may face the patient		
b2-	Evaluating the patients' needs and build a comprehensive treatment plan accordantly		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C2	c1-	Perform a proper clinical diagnosis of different tooth disease and developed a formulated comprehensive problem based treatment plan.
C2-	C1	c2-	Provide treatment to each patient so that the oral health is restored to a healthy and functional state.
C3-	C7	c3-	Perform all technical details of various operative steps and procedures to reinforce the pre-clinical knowledge.

Teaching and Assessment Methods for Achieving Learning Outcomes

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations Supervision Instruction	Direct observation Oral discussion Practical Exams Semester work
c1	Perform a proper clinical diagnosis of different tooth disease and developed a formulated comprehensive problem based treatment plan.		
c1	Provide treatment to each patient so that the oral health is restored to a healthy and functional state.		
c3	Perform all technical details of various operative steps and procedures to reinforce the pre-clinical knowledge.		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D2	d1-	Communicate & share practice & knowledge with the related specialties and get acquainted with evidence based dentistry.
D2-	D7, D4	d2-	Able to provide the treatment details to patient /build up good dentist- patient relationship and provide the treatment best way possible to prescribed time limits.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:			
CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Supervision	Semester work (Practical Requirements)
d1-	Communicate & share practice & knowledge with the related specialties and get acquainted with evidence based		

	dentistry.	Instruction	Observation
d2-	Able to provide the treatment details to patient /build up good dentist- patient relationship and provide the treatment best way possible to prescribed time limits.		

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Course introduction	a1, a2, b1, b2	– orientation and Interdisciplinary treatment planning	1	2
2	Medically Compromised Patients	a1, a2, b1, b2	– CVD – CND – Respiratory disorders – Endocrine Disorders – Skeletal disorders – GIT disorders – Bleeding disorders – Tumors	3	6
3	Periodontal diseases	a1, a2, b1, b2	– Examination, Diagnosis & Investigations – Periodontal treatment Protocols – (Biological structures, Preventive measures/ mechanical, chemical & surgical)	3	6
4	Midterm Examination	a1, a2, b1, b2	– MCQs and essay questions	1	2
5	Restorative Dentistry	a1, a2, b1, b2	– Examination, Diagnosis, Investigations & Treatment plan (caries detection,	4	8

			managements of deep caries lesions) – Examination, Diagnosis & investigations in Endodontics Dentistry – Restoration of endodontically treated teeth		
6	Removable Prosthodontic Dentistry	a1, a2, b1, b2	– Examination, Diagnosis, Investigations & Treatment	2	4
7	Review	a1, a2, b1, b2		1	2
8	Final Theoretical Exam	a1, a2, b1, b2	MCQs and essay questions	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Examination, diagnosis & treatment planning	a1, b1, b2, c1,c2,c3,d1,d2	1 st to 14 th	6 per week
2	Amalgam restorations (Class I, II,V)	c1,c2,c3, d1,d2	1 st to 14 th	6 per week
3	Large posterior (Complex)restorations: buildup (amalgam or composite)	c1,c2, c3, d1, d2	1 st to 14 th	6 per week
4	Composite restorations (Class I, II, III, IV, V)	c1,c2,c3,d1,d2	1 st to 14 th	6 per week
5	Large anterior/ posterior buildup (compoite / glass ionomer)	c1,c2,c3, d1,d2	1 st to 14 th	6 per week
6	Class V: RMGI & Composite restorations	c1,c2,c3, d1,d2	1 st to 14 th	6 per week
7	Preventive Resin Restoration PRR	c1,c2,c3, d1,d2	1 st to 14 th	6 per week
8	Endodontic treatment for posterior teeth	c1,c2,c3	1 st to	6 per

		d1,d2	14 th	week
9	Endodontic treatment anterior teeth	c1,c2,c3, d1,d2	1 st to 14 th	6 per week
10	Fixed prosthodontic (crowns)	c1,c2,c3, d1,d2	1 st to 14 th	6 per week
11	Fixed prosthodontic (Brigs)	c1,c2,c3, d1,d2	1 st to 14 th	6 per week
12	Final Practical Examination	c1,c2,c3, d1,d2	15 th	6
Number of Weeks / Units per Semester			15	90

VI. Teaching strategies of the course

- Lectures
- Demonstrations
- Case presentation
- Practical Sessions (evaluation on the clinical work)
- Clinical demonstrations
- Case Presentation
- Self-learning
- Complete supervision and instruction on each clinical case

CCLXXIX. Assessment Strategies of the Course:

- Written Exam
- Quizzes
- Practical Exam
- Oral discussion
- Direct observation: continuous assessment on the practical work
- Assessment of clinical cases and their completion and follow up

CCLXXX. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester practical work: - Clinical Cases and Requirements	1 st to 14 th	40	c1,c2,c3,d1,d2

	Total	40	

CCLXXXI. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Midterm Theoretical Exam	8 th	10	10 %	a1, a2, b1, b2
2	Final Theoretical Exam	16 th	30	30 %	a1, a2, b1, b2
	Total		40	40%	
Assessment of Practical Part					
1	Assignments	1 st to 14 th	40	40%	c1,c2,c3, d1,d2
2	Final Practical Exam	15 th	20	20%	c1,c2,c3, d1,d2
	Total		60	60%	

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CCLXXXII. Learning Resources:	
166-	Required Textbook(s) (maximum two)
	56- Michael Cohen, 2012: Interdisciplinary Treatment Planning: Principles, Design, Implementation, 2 nd ed., Quintessence Publishing Co. 57- Kay E J , Shearer A C , Bridgman A M , Humphris G M, 2005: Integrated Dental Treatment Planning: A case-based approach, 1 st ed., Oxford
167-	Essential References
	1- Essential Dental Handbook: Clinical and Practice Management Advice from the Experts by Robert R. Edwab. 2003. 2- Mabel Slater, 2009: Dental Team Companion: Clinical Practice - 6 (Quintessentials of Dental Practice) 3- Jain Malkin, 2002: Medical and Dental Space Planning: A Comprehensive Guide to Design, Equipment, and Clinical Procedures
3-	Electronic Materials and Web Sites, etc

Websites: 1- Journal of dentistry https://www.journals.elsevier.com › journal-of-dentistry
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CCLXXXIII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

Course Plan (Syllabus) of Comprehensive Clinical Dentistry (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU



DXXIII. Course Identification and General Information:						
1	Course Title:	Comprehensive Clinical Dentistry (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	--	6	--	4
4	Study level/ semester at which this course is offered:	5 th Level / 1 st Semester				
5	Prerequisites:	Clinical Operative Dentistry (2), Clinical Endodontic (2), Clinical Fixed Prosthodontics (2)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).				
8	Language of teaching the course:	English				

9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami
12	Date of Approval	2020-2021

DXXIV. Course Description:

This course is based on a problem based approach to provide each student in the fifth year with more opportunities to practice interdisciplinary, comprehensive care to as many patients as possible, it includes training in dental clinics in conservative treatment (operative dentistry, endodontic and fixed prosthodontic).

During this course the student should be able to perform a complete clinical examination, diagnosis and management of patient case including all detailed clinical procedure to focus on the patient's total dental needs rather than a single clinical procedure.

Patient care is carried out under the supervision and teaching of clinical instructors and staff members from the department.

DXXV. Outcomes of the Course

Students would diagnose , plan and execute challenging clinical cases requiring comprehensive management strategies using contemporary materials and techniques in the specialty of conservative dentistry and endodontics.

DXXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|---|
| a1- | Recognize and diagnose the conditions of the oral cavity and its related structures, using proper diagnostic tools. |
| a2- | Describe the conservative concepts and the clinical steps required to manage destructive teeth |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | Recognize and diagnose the conditions of the oral cavity and its related structures, using proper diagnostic tools. |
|-----|---|

	problems that may face the patient
b2-	Evaluating the patients' needs and build a comprehensive treatment plan accordantly

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Perform a proper clinical diagnosis of different tooth disease and developed a formulated comprehensive problem based treatment plan.
c2-	Provide treatment to each patient so that the oral health is restored to a healthy and functional state.
c3-	Perform all technical details of various operative steps and procedures to reinforce the pre-clinical knowledge.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Communicate & share practice & knowledge with the related specialties and get acquainted with evidence based dentistry.
d2-	Able to provide the treatment details to patient /build up good dentist- patient relationship and provide the treatment best way possible to prescribed time limits.

DXXVII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Course introduction	– orientation and Interdisciplinary treatment planning	1	2
2	Medically Compromised Patients	– CVD – CND – Respiratory disorders – Endocrine Disorders – Skeletal disorders – GIT disorders – Bleeding disorders – Tumors	3	6

3	Periodontal diseases	<ul style="list-style-type: none"> - Examination, Diagnosis & Investigations - Periodontal treatment Protocols - (Biological structures, Preventive measures/ mechanical, chemical & surgical) 	3	6
4	Midterm Examination	<ul style="list-style-type: none"> - MCQs and essay questions 	1	2
5	Restorative Dentistry	<ul style="list-style-type: none"> - Examination, Diagnosis, Investigations & Treatment plan (caries detection, Preventive measures, managements of deep caries lesions) - Examination, Diagnosis & investigations in Endodontics Dentistry - Restoration of endodontically treated teeth 	4	8
6	Removable Prosthodontic Dentistry	<ul style="list-style-type: none"> - Examination, Diagnosis, Investigations & Treatment 	2	4
7	Review		1	2
8	Final Theoretical Exam	MCQs and essay questions	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Examination, diagnosis & treatment planning	1 st to 14 th	6 per week
2	Amalgam restorations (Class I, II,V)	1 st to 14 th	6 per week
3	Large posterior (Complex)restorations: buildup (amalgam or composite)	1 st to 14 th	6 per week
4	Composite restorations (Class I, II, III, IV, V)	1 st to 14 th	6 per week
5	Large anterior/ posterior buildup (compoite / glass ionomer)	1 st to 14 th	6 per week

6	Class V: RMGI & Composite restorations	1 st to 14 th	6 per week
7	Preventive Resin Restoration PRR	1 st to 14 th	6 per week
8	Endodontic treatment for posterior teeth	1 st to 14 th	6 per week
9	Endodontic treatment anterior teeth	1 st to 14 th	6 per week
10	Fixed prosthodontic (crowns)	1 st to 14 th	6 per week
11	Fixed prosthodontic (Brigs)	1 st to 14 th	6 per week
12	Final Practical Examination	15 th	6
Number of Weeks / Units per Semester		15	90

DXXVIII. Teaching strategies of the course

- Lectures
- Demonstrations
- Case presentation
- Practical Sessions (evaluation on the clinical work)
- Clinical demonstrations
- Case Presentation
- Self-learning
- Complete supervision and instruction on each clinical case

DXXIX. Assessment Methods of the Course:

- Written Exam
- Quizzes
- Practical Exam
- Oral discussion
- Direct observation: continuous assessment on the practical work
- Assessment of clinical cases and their completion and follow up

DXXX. Assignments:			
No.	Assignments	Week due	Mark
1	Semester practical work: - Clinical Cases and Requirements	1 st to 14 th	40
Total			40

DXXXI. Schedule of Assessment Tasks for Students During the Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Midterm Theoretical Exam	8 th	10	10 %
2	Final Theoretical Exam	16 th	30	30 %
Total			40	40%
Assessment of Practical Part				
1	Assignments	1 st to 14 th	40	40%
2	Final Practical Exam	15 th	20	20%
Total			60	60%

DXXXII. Learning Resources:	
69- Required Textbook(s) (maximum two)	
	1- Michael Cohen, 2012: Interdisciplinary Treatment Planning: Principles, Design, Implementation, 2 nd ed., Quintessence Publishing Co. 2- Kay E J , Shearer A C , Bridgman A M , Humphris G M, 2005: Integrated Dental Treatment Planning: A case-based approach, 1 st ed., Oxford
71- Essential References	
	1- Essential Dental Handbook: Clinical and Practice Management Advice from the Experts by Robert R. Edwab. 2003. 2- Mabel Slater, 2009: Dental Team Companion: Clinical Practice - 6 (Quintessentials of Dental Practice)

	Design, Equipment, and Clinical Procedures
9- Electronic Materials and Web Sites, etc.	
	<p>Websites:</p> <p>1- Journal of dentistry</p> <p>https://www.journals.elsevier.com › journal-of-dentistry</p>

XII. Course Policies:	
1	<p>Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.</p>
2	<p>Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.</p>
3	<p>Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.</p>
4	<p>Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.</p>
5	<p>Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>
6	<p>Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>
7	<p>Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>



Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral & Maxillofacial surgery (1)

Course No.()



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الجامعة الوطنية
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Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:

XLIV. Course Identification and General Information:						
1	Course Title:	Oral & Maxillofacial surgery (1)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	5 th Level / 1 st Semester				
5	Prerequisites:	Oral surgery (2)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

CXLV. Course Description:	
<p>This course introduces the student to assessment of oral surgery, with the procedures most commonly provided by oral and maxillofacial surgeon and by the end of this course, the student should be able to diagnose and manage the treatment of oral tumors as well as salivary glands diseases.</p>	

XLVI. Outcomes of the Course	
<p>The students would be acquainted with the knowledge and clinical skills in the management of:</p> <ol style="list-style-type: none"> 1. Cysts and tumor of oro facial region: Odontogenic and non-Odontogenic tumors and their management, Giant lesions of jawbone, Fibro osseous lesions of jawbone, Cysts of jaw 2. Oncology: Biopsy, Management of pre-malignant tumors of head and neck region, Benign and Malignant tumors of Head and Neck region, Staging of oral cancer and tumor markers Management of oral cancer, Radial Neck dissection, Modes of spread of tumors, Diagnosis and management of tumors of nasal, paranasal, neck, tongue, cheek, maxilla and mandible Radiation therapy in maxillofacial regions, Lateral neck swellings 	

developmental disturbances, cysts, inflammation and sialolithiasis, Mucocele and Ranula, Tumors of salivary gland and their management, Staging of salivary gland tumors, Parotidectomy

XLVII. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A2	a1-	Identify the principles of differential diagnosis of different oral surgical pathologies.
A2-	A4	a2-	Describe the features, presentation, pathology of different benign and malignant tumors of the oral and maxillofacial area and their surgical and oncological management.
A3-	A6	a3-	Explain the principles of surgical reconstruction and techniques used to correct maxillofacial defects and deformities
A4-	A2	a4-	Describe the clinical signs and symptoms of inflammatory obstructive autoimmune and neoplastic salivary gland diseases diagnostic investigations and its medical and surgical management

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Debate 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written
a1-	Identify the principles of differential diagnosis of different oral surgical pathologies.		

a2-	Describe the features, presentation, pathology of different benign and malignant tumors of the oral and maxillofacial area and their surgical and oncological management.		exam. <ul style="list-style-type: none"> ▪ Final-term written exam. ▪ Oral exam.
a3-	Explain the principles of surgical reconstruction and techniques used to correct maxillofacial defects and deformities		
a4-	Describe the clinical signs and symptoms of inflammatory obstructive autoimmune and neoplastic salivary gland diseases diagnostic investigations and its medical and surgical management		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Interpret, analyze, and correlate clinical laboratory data and special investigations to help formulate a proper relevant treatment plans
B2-	B1	b2-	Apply critical thinking and evidence-based problem solving when providing patient's care.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lecture ▪ Discussion 	<ul style="list-style-type: none"> ▪ Oral exam. ▪ Assignments
b1-	Interpret, analyze, and correlate clinical laboratory data and special investigations to help formulate a proper relevant treatment plans		

b2-	Apply critical thinking and evidence-based problem solving when providing patient's care.		
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(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Correctly record patients history and perform an appropriate physical examination including intraoral, head and neck examination
C2-	C7	c2-	Display competency in managing medical and surgical emergencies that may arise in the outpatient clinic.
C3-	C2	c3-	Perform a clinical examination of the maxillary sinus and assist in relevant surgical procedures.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1-	Correctly record patients history and perform an appropriate physical examination including intraoral, head and neck examination	<ul style="list-style-type: none"> ▪ Demonstration ▪ Exercise ▪ Debate 	<ul style="list-style-type: none"> ▪ Practical exam. ▪ Case based scenario / Problem based learning. ▪ Approved procedures documented in logbook. ▪ Assignments
c2-	Display competency in managing medical and surgical emergencies that may arise in the outpatient clinic.		
c3-	Perform a clinical examination of the maxillary sinus and assist in relevant surgical procedures.		

c4-	Prepare and assist biopsy procedure as incorporated into general practice		
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(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3	d1-	Work in collaboration as a member of an interdisciplinary team.
D2-	D6	d2-	Manage patients with confidence and sympathy.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Training ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d1-	Work in collaboration as a member of an interdisciplinary team.		
d2-	Manage patients with confidence and sympathy.		

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Surgical pathology : Principles of differential Diagnosis and Biopsy	a1, b1	Definition, types , indications, advantages, disadvantages and techniques	1 st	2
2	Surgical pathology : Odontogenic and Nonodontogenic Cvsts	a1,a2	Definition, classification, diagnosis & treatment	2 nd , 3 rd	4

3	Surgical pathology : Odontogenic tumors	a1, a2, b2	examination and assessment of odontogenic tumors benign and malignant tumors of the oral cavity & surgical treatment	4 th ,5 th	4
4	Surgical pathology : Oral cancer	a1,a2,	examination and assessment of non odontogenic tumors benign and malignant tumors of the oral cavity biopsy principles of management & different modalities of treatment	6 th , 7 th	4
5	Mid-Term Exam	a1, a2, b1		8 th	2
6	Management and reconstruction of pathological lesions	a1,a3	Introduction, principles & surgical techniques for soft and hard tissues	9 th , 10 th	4
7	Surgical pathology: Salivary gland disorders	a1,a4, b1- b2	Embryology, anatomy and physiology of salivary glands, Diagnostic modalities of salivary glands, Salivary gland swellings , Sialolithiasis, Traumatic salivary gland injuries &Complications of salivary gland surgery	11 th ,12 th · 13 th	6
8	Surgical pathology: maxillary sinus disorders	a1,	Anatomy, physiology, diseases and lesions of dental origin, oro-antral communications and fistula & surgical management.	14 th , 15 th	4
9	Final Theoretical Exam	a1-a4, b1-b2		16 th	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	-Infection Control in Surgical Practice - Preoperative health status evaluation - Exodontia techniques - Principles of Surgery - Medical Emergencies in Dental Clinic	c1-c3, d1,d2	14 th	42
2	Practical exam	c1-c3,	15 th	3

Number of Weeks / Units per Semester	15	45
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VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

CCLXXXIV. Assessment Methods of the Course:

- a. Activities(periodical exams) as short answers, mcq questions, true and false,complete and define)
- b. Submission of requirements (10 case of closed extraction with the selected anesthetic technique)
- c. Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- d. Final written exam (mcq questions, complete, short essay, enumerate, and define)
- e. Practical exam(will be carried in the clinic by case administration of local anesthesia and perform painless closed tooth extraction)
- f. Oral exam (will be performed by internal and external examiner through free discussion).

CCLXXXV. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	10	c1-c3, d1,d2
Total			10	

CCLXXXVI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	4 th , 12 th	10	10%	a1, a3
2	Mid-term exam	8 th	20	20%	a1, a2, b1
3	Final theory	16 th	40	40%	a1-a4, b1-b2

Total		70	70%		
Assessment of Practical Part					
1	Assignment	1 st -14 th	10	10%	c1-c3, d1,d2
2	Oral exam	15 th	10	10%	a1-a4,b1-b2
3	Final practical exam	15 th	10	10%	c1-c3, d1,d2
Total		30	30%		

CCLXXXVII. Learning Resources:	
168-	Required Textbook(s) (maximum two)
	7- James Hupp, Edward Ellis and Myron Tucker, 2013, Contemporary Oral and Maxillofacial Surgery, 6th edition . Slsevier 8- Lars Andersson, Karl-ErikKahnberg and M. Anthony Pogrel, 2010, Oral and Maxillofacial Surgery. WielyBlackwell
169-	Essential References
	5- Peterson L, Ellis E, Hupp J, Tucker M., 2008, Contemporary Oral and Maxillofacial Surgery. 5th Edition
170-	Electronic Materials and Web Sites, etc.
	www.joms.org

CCLXXXVIII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism:

	Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Oral & Maxillofacial surgery (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

DXXXIII. Course Identification and General Information:						
1	Course Title:	Oral & Maxillofacial surgery (1)				
2	Course Number & Code:					
3	Credit hours:	C.H			Total	
		Th.	Pr.	Tr.		Seminar.
		2		3		3

4	Study level/ semester at which this course is offered:	5 th Level / 1 st Semester
5	Prerequisites:	Oral surgery (2)
6	Co –requisite:	None
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Dr. Sam Da'er
12	Date of Approval	2020-2021

DXXXIV. Course Description:

This course introduces the student to assessment of oral surgery, with the procedures most commonly provided by oral and maxillofacial surgeon and by the end of this course, the student should be able to diagnose and manage the treatment of oral tumors as well as salivary glands diseases.

DXXXV. Outcomes of the Course

The students would be acquainted with the knowledge and clinical skills in the management of

1. Cysts and tumor of oro facial region: Odontogenic and non-Odontogenic tumors and their management, Giant lesions of jawbone, Fibro osseous lesions of jawbone, Cysts of jaw
2. Oncology: Biopsy, Management of pre-malignant tumors of head and neck region, Benign and Malignant tumors of Head and Neck region, Staging of oral cancer and tumor markers Management of oral cancer, Radial Neck dissection, Modes of spread of tumors, Diagnosis and management of tumors of nasal, paranasal, neck, tongue, cheek, maxilla and mandible Radiation therapy in maxillofacial regions, Lateral neck swellings
3. Salivary gland: Sialography, Salivary fistula and management diseases of salivary gland - developmental disturbances, cysts, inflammation and sialolithiasis, Mucocele and Ranula, Tumors of salivary gland and their management, Staging of salivary gland tumors, Parotidectomy

DXXXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

a1-	Identify the principles of differential diagnosis of different oral surgical pathologies.
a2-	Describe the features, presentation, pathology of different benign and malignant tumors of the oral and maxillofacial area and their surgical and oncological management.
a3-	Explain the principles of surgical reconstruction and techniques used to correct maxillofacial defects and deformities
a4-	Describe the clinical signs and symptoms of inflammatory obstructive autoimmune and neoplastic salivary gland diseases diagnostic investigations and its medical and surgical management

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Interpret, analyze, and correlate clinical laboratory data and special investigations to help formulate a proper relevant treatment plans
b2-	Apply critical thinking and evidence-based problem solving when providing patient's care.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Correctly record patients history and perform an appropriate physical examination including intraoral, head and neck examination
c2-	Display competency in managing medical and surgical emergencies that may arise in the outpatient clinic.
c3-	Perform a clinical examination of the maxillary sinus and assist in relevant surgical procedures.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Work in collaboration as a member of an interdisciplinary team.
d2-	Manage patients with confidence and sympathy.

DXXXVII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Surgical pathology : Principles of differential Diagnosis and Biopsy	Definition, types , indications, advantages, disadvantages and techniques	1 st	2
2	Surgical pathology : Odontogenic and Nonodontogenic Cysts	Definition, classification, diagnosis & treatment	2 nd , 3 rd	4
3	Surgical pathology : Odontogenic tumors	examination and assessment of odontogenic tumors benign and malignant tumors of the oral cavity & surgical treatment	4 th , 5 th	4
4	Surgical pathology : Oral cancer	examination and assessment of non odontogenic tumors benign and malignant tumors of the oral cavity biopsy principles of management & different modalities of treatment	6 th , 7 th	4
5	Mid-Term Theoretical Exam		8 th	2
6	Management and reconstruction of pathological lesions	Introduction, principles & surgical techniques for soft and hard tissues	9 th , 10 th	4
7	Surgical pathology: Salivary gland disorders	Embryology, anatomy and physiology of salivary glands, Diagnostic modalities of salivary glands, Salivary gland swellings , Sialolithiasis, Traumatic salivary gland injuries & Complications of salivary gland surgery	11 th , 12 th , 13 th	6
8	Surgical pathology: maxillary sinus disorders	Anatomy, physiology, diseases and lesions of dental origin, oro-antral communications and fistula & surgical management.	14 th , 15 th	4
9	Final Theoretical Exam		16 th	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Infection Control in Surgical Practice - Preoperative health status evaluation - Exodontia techniques - Principles of Surgery 	1 st -14 th	42

	- Medical Emergencies in Dental Clinic		
2	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

DXXXVIII. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

DXXXIX. Assessment Methods of the Course:

- a. Activities (periodical exams) as short answers, mcq questions, true and false, complete and define)
- b. Submission of requirements (10 case of closed extraction with the selected anesthetic technique)
- c. Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- d. Final written exam (mcq questions, complete, short essay, enumerate, and define)
- e. Practical exam (will be carried in the clinic by case administration of local anesthesia and perform painless closed tooth extraction)
- f. Oral exam (will be performed by internal and external examiner through free discussion).

DXL. Assignments:

No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	10
Total			10

DXLI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment

2	Mid-term exam	8 th	20	20%
3	Final theory	16 th	40	40%
Total			70	70%
Assessment of Practical Part				
1	Assignment	1 st -14 th	10	10%
2	Oral exam	15 th	10	10%
3	Final practical exam	15 th	10	10%
Total			30	30%

DXLII. Learning Resources:

70- Required Textbook(s) (maximum two)

- 3- James Hupp, Edward Ellis and Myron Tucker, 2013, Contemporary Oral and Maxillofacial Surgery, 6th edition . Slsevier
- 4- Lars Andersson, Karl-Erik Kahnberg and M. Anthony Pogrel, 2010, Oral and Maxillofacial Surgery. Wiely Blackwell

72- Essential References

- 6- Peterson L, Ellis E, Hupp J, Tucker M., 2008, Contemporary Oral and Maxillofacial Surgery. 5th Edition

73- Electronic Materials and Web Sites, etc.

- 42- www.joms.org

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform

	Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery



Course Specification of Oral Medicine (3)

Course No.()

2021/2022



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Prepared by:

Dr. Manal Mohammed Al-Hajri

Reviewed by:

Dr.

Quality Assurance

Dean:

XLIX. Course Identification and General Information:						
1	Course Title:	Oral Medicine (3)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3	3	
4	Study level/ semester at which this course is offered:	5th Level / 1 st Semester				
5	Prerequisites:	Oral Medicine (3)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

CCL. Course Description:

This course is to train students to identify most common primary and secondary lesions affecting oral and para-oral structures of hard and soft tissues and perform oral and extra oral examination and diagnosis by taking history, clinical examination, and other diagnostic tests and provide the basic knowledge of oral medicine, relationship of oral diseases and systemic diseases, and oral health.

CCLI. Outcomes of the Course

1. Generate graduates that demonstrate the necessary knowledge, skills and attitude in Oral & Maxillofacial Diagnosis, Diagnostic procedures and medical management of such disorders.
2. Create confident and competent Dental professionals who can accomplish and execute clinical deftness in the diagnosis and management of Orofacial disorders.

CCLII. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1,2,4,,6b1,2,3,c2,3,4,6	a1-	Demonstrate an understanding of the etiology pathobiology and clinical presentation of diseases of the oral and peri-oral tissues
A2-	A1,2,4,,6b1,2,3,c2,3,4,6	a2-	Understanding the different types of tongue and lips diseases.
A3-	A1,2,4,,6b1,2,3,c2,3,4,6	a3-	Understanding the different types of taste disorders.
A4-	A1,2,4,,6b1,2,3,c2,3,4,6	a4-	Understanding the relationship of oral diseases and cardiovascular diseases.
A5-	A1,2,4,,6b1,2,3,c2,3,4,6	a5-	Understanding the relationship of oral diseases and hematological disorders.
A6-	A1,2,4,,6b1,2,3,c2,3,4,6	a6-	Understanding the relationship of oral diseases and bleeding and clotting disorders.
A7-	A1,2,4,,6b1,2,3,c2,3,4,6	a7-	Understanding the relationship of oral diseases and renal diseases.
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
a1-	Demonstrate an understanding of the etiology pathobiology and clinical presentation of diseases of the oral and peri-oral tissues	exercise Debate	Homework

a2-	Understanding the different types of tongue and lips diseases.		
a3-	Understanding the different types of taste disorders.		
a4-	Understanding the relationship of oral diseases and cardiovascular diseases.		
a5-	Understanding the relationship of oral diseases and hematological disorders.		
a6-	Understanding the relationship of oral diseases and bleeding and clotting disorders.		
a7-	Understanding the relationship of oral diseases and renal diseases.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	A2,4,6,b1,3,4	b1-	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.
B2-	A2,4,6,b1,3,4	b2-	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.	Lectures exercise	Exam Homework

b2-	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.	Debate	
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(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1,2,5	c1-	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief complaints.
C2-	C1,2, 5,6	c2-	Request special investigations needed to confirm the clinical, working or tentative diagnosis.
C3-	C7	c3-	Select indicated clinical examination for specific oral lesion
C4-	C 5,7	c4-	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations
C5-	C1,2, 5,6,7	c5-	Assemble and link the data obtained from the patient's history and clinical examination to develop the differential diagnosis of patients chief complaint.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
c1-	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief	exercise Debate	Homework

	complaints.		
c2-	Request special investigations needed to confirm the clinical, working or tentative diagnosis.		
c3-	Select indicated clinical examination for specific oral lesion		
c4-	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations		
c5-	Assemble and link the data obtained from the patient's history and clinical examination to develop the differential diagnosis of patients chief complaint		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D2	d1-	Use internet and multimedia.
D2-	D3,4	d2-	Manage time and resources

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam
d1-	Use internet and multimedia.		Homework
d2-	Manage time and resources		

III. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Diseases of tongue and lips.	A1,2,3, 5,C1,2, 3,4, 5	Etiology , classification, diagnosis and treatment	2	4
2	Taste disorders.	A1,2,3, 5,C1,2, 3,4, 5	Etiology , classification, diagnosis and treatment	1	2
3	Diseases of cardiovascular system.	A1,4, 5,6,C1,2, 3,4, 5	<ul style="list-style-type: none"> • Hypertion. • Coronary artery diseases • Valvular heart diseases. • Heart failure. • Arrhythmia. • Permanent pacemakers 	2	4
4	Renal diseases.	A1,4 5,6,7,C1,2, 3,4, 5	<ul style="list-style-type: none"> • Pathophysiology • Clinical features. • Oral manifestations. • Dental management. 	2	4
5	Mid-Term Exam	a1 a2, a3		1	2
6	Hematological disorders.	A1,4 5,6,7,C1,2, 3,4, 5	<ul style="list-style-type: none"> • Process of hematopoiesis • Red blood cell disorders. • White blood cell disorders. 	4	8
7	Bleeding and clotting disorders.	A1,4 5,6,7,C1,2, 3,4, 5	<ul style="list-style-type: none"> • Pathophysiology • Classification • Identification of patients • Mangment • Prognosis • Oral health considerations. 	3	6
8	Final Exam	a1,2,3,4, 5,	•	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Taking patient history	A1,2,,3,4, 5,6,7 c1,2,3,4, 5	1st,2 nd	6
2	Clinical examination	B1,2,C1,2,3,4, 5	3 rd to 6 th	12
3	Taking intra-oral biopsy	B1,2,c1,2,3,4, 5	4 th 5 th	6
4	Lab investigations	B1,2,C1,2,3,4, 5	5 th 6 th	6
5	Take examples of differential diagnosis	B1,2,C1,2,3,4, 5	8 th to 14 th	21
6	Practical exam	A1,2,,3,4, 5,6,7, B1,2,C1,2,3,4, 5, c1,2,3,4, 5	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CCLXXXIX. Assignments Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CCXC. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the	10	

			a1, a2, a3,4, 5,6,7, d1, d2
Total		10	

CCXCI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Mid tem exam	4th	20	20%	a1a2,a3
2	Final tem exam	14th	40	40%	a1,2,3,4, 5,
3	Attending and assignment	1st -14th	10	10%	a1, a2, a3,4, 5, d1, d2
Total			70	70%	
Assessment of Practical Part					
1	Taking patient history	1st,2nd	6	6%	A1,2,,3,4, 5,6,7 c1,2,3,4, 5
2	Clinical examination	3rd - 6th	6	6%	B1,2,C1,2,3,4, 5
3	Taking intra-oral biopsy	4th 5th	6	6%	B1,2,c1,2,3,4, 5
4	Lab investigations	5th 6th	6	6%	B1,2,C1,2,3,4, 5
	Take examples of differential diagnosis	8th - 14th	6	6%	B1,2,C1,2,3,4, 5
Total			30	30%	

CCXCII. Learning Resources:

171- Required Textbook(s) (maximum two)	
	33- Norman K. Wood - Differential Diagnosis of Oral and Maxillofacial Lesions: 5th (fifth) Edition Hardcover – October 15, 1997
172- Essential References	
	40- .Purkait, Swapan Kumar. Essentials of Oral Pathology. 3rd ed. Replika: Jaypee Brothers M Publishers, 2011.
	41- Cawson R. A. and Odell E. W. Cawson's Essentials of Oral Pathology and Oral Medicine. 8 Edinburgh: Churchill Livingstone, 2008..
173- Electronic Materials and Web Sites, etc.	
	Websites: Open e-learning

CCXCIII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan of Oral Medicine (3)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:	Dr.Manal Mohammed Al-Hajri	Office Hours					
Location & Telephone No.:	00967779212007						
E-mail:	dent.manal@yahoo.com	SAT	SUN	MON	TUE	WED	THU

2021/2022

DXLIII. Course Identification and General Information:

1	Course Title:	Oral Medicine (3)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is offered:	5th Level / 1 st Semester				
5	Prerequisites:	Oral Medicine (2)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

DXLIV. Course Description:

This course is to train students to identify most common primary and secondary lesions affecting oral and para-oral structures of hard and soft tissues and perform oral and extra oral examination and diagnosis by taking history, clinical examination, and other diagnostic tests and provide the basic knowledge of oral medicine, relationship of oral diseases and systemic diseases, and oral health.

DXLV. Outcomes of the Course

1. Generate graduates that demonstrate the necessary knowledge, skills and attitude in Oral & Maxillofacial Diagnosis, Diagnostic procedures and medical management of such disorders.

2. Create confident and competent Dental professionals who can accomplish and execute clinical deftness in the diagnosis and management of Orofacial disorders.

DXLVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1	Demonstrate an understanding of the etiology pathobiology and clinical presentation of diseases of the oral and peri-oral tissues
a2	Understanding the different types of tongue and lips diseases.
a3	Understanding the different types of taste disorders.
a4	Understanding the relationship of oral diseases and cardiovascular diseases.
a5	Understanding the relationship of oral diseases and hematological disorders.
a6	Understanding the relationship of oral diseases and bleeding and clotting disorders.
a7	Understanding the relationship of oral diseases and renal diseases.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis
b2	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief complaints.
c2	Request special investigations needed to confirm the clinical, working or tentative diagnosis.
c3	Select indicated clinical examination for specific oral lesion
c4	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations
c5	Assemble and link the data obtained from the patient's history and clinical examination to develop

the differential diagnosis of patients chief complaint.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1 Use internet and multimedia.

d2 Manage time and resources

DXLVII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Diseases of tongue and lips.	Etiology , classification, diagnosis and treatment	2	4
2	Taste disorders	Etiology , classification, diagnosis and treatment	1	2
3	Diseases of cardiovascular system.	<ul style="list-style-type: none"> • Hypertion. • Coronary artery diseases • Valvular heart diseases. • Heart failure. • Arrhythmia. • Permanent pacemakers 	2	4
4	Renal diseases	<ul style="list-style-type: none"> • Pathophysiology • Clinical features. • Oral manifestations. • Dental management. 	2	4
5	Midterm exam	•	1	2
6	Hematological disorders.	<ul style="list-style-type: none"> • Process of hematopoiesis • Red blood cell disorders. • White blood cell disorders. 	4	8
7	Bleeding and clotting disorders.	<ul style="list-style-type: none"> • Pathophysiology • Classification • Identification of patients • Mangment • Prognosis 	3	6
8	Final exam	•	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Taking patient history	1st,2 nd	6
2	Clinical examination	3 rd to 6 th	12
3	Taking intra-oral biopsy	4 th 5 th	6
4	Lab investigations	5 th 6 th	6
5	Take examples of differential diagnosis	8 th to 14 th	21
6	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

DXLVIII. Teaching strategies of the course	
<ul style="list-style-type: none"> - Lectures - exercise - Debate - Training - Dialogue and discussion - Brainstorming 	
DXLIX. Assessment Methods of the Course:	
<ul style="list-style-type: none"> - Mid tem exam - Final tem exam - Practical exam - Attending and assignments 	

DL. Assignments:			
No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

DLI. Schedule of Assessment Tasks for Students During the Semester				
Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exam	14th	40	40%
1	Mid tem exam	4th	20	20%
3	Attending and assignment	1st - 14th	10	10%
Total			70	70%
Assessment of Practical Part				
1	Taking patient history	1st, 2 nd	6	6%
2	Clinical examination	3 rd - 6 th	6	6%
	Taking intra-oral biopsy	4 th 5 th	6	6%
	Lab investigations	5 th 6 th	6	6%
	Take examples of differential diagnosis	8 th - 14 th	6	6%
Total			30	30%

DLII. Learning Resources:	
71- Required Textbook(s) (maximum two)	
	74- Norman K. Wood and Paul W. Goaz : Differential diagnosis of oral and maxillofacial lesions, (5th Ed).
75- Essential References	
	19- Purkait, Swapan Kumar. Essentials of Oral Pathology. 3rd ed. Replika: Jaypee Brothers Medical Publishers, 2011. 20- Cawson R. A. and Odell E. W. Cawson's Essentials of Oral Pathology and Oral Medicine. 8th ed. Edinburgh: Churchill Livingstone, 2008.
76- Electronic Materials and Web Sites, etc.	
	Open e-learning

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.

3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

الجامعة الوطنية
Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Orthodontics (3)

Course No.()



2021/2022



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Prepared by:

Reviewed by:

Quality Assurance

Dean:

Dr. Ghamdan Abdullah Al-Harazi

Dr.



الجامعة الوطنية
NU

CLIV. Course Identification and General Information:						
1	Course Title:	Orthodontics (3)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		2	3	
4	Study level/ semester at which this course is offered:	5 th Level / 1 st Semester				
5	Prerequisites:	Orthodontics (2)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Ghamdan Abdullah Al-Harazi				
12	Date of Approval	2020-2021				

CCLV. Course Description:	
<p>This is a clinical course of orthodontics, in which the students will know the management of different malocclusions and the role of GP in the interdisciplinary management of cleft lip and palate. Student will present seminars about different topics determined by the instructor. The clinical part will covers diagnosis, radiological and clinical examinations of selected cases, orthodontic study models, photographs and cephalometric evaluation, preparation of treatment plans with limited treatment of orthodontic problems encountered in the general practice.</p>	

CLVI. Outcomes of the Course	
1.	Diagnostic procedures and treatment planning in orthodontics
<p>Under this, the students would learn about Stages of child development, Theories of psychological development, Management of child in orthodontic treatment, Management of handicapped child, Motivation and Psychological problems related to malocclusion / orthodontics, Adolescent psychology, Behavioral psychology and communication.</p>	
2.	Cephalometrics
<p>Under this the student would learn about. Instrumentation. Image processing. Tracing and analysis of errors</p>	

and applications, Radiation hygiene, Advanced Cephalometrics techniques, Comprehensive review of literature, Video imaging principles and application

Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Identify the principles and fundamentals of clinical orthodontics
A2-	A2	a2-	Recognize malocclusions etiology, examination and management
A3-	A2	a3-	Understand the etiology of cleft lip and palate and the role of GP in the interdisciplinary team of cleft lip and palate treatment within rules and ethics of government

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Identify the principles and fundamentals of clinical orthodontics	<ul style="list-style-type: none"> ▪ Lectures ▪ Group Discussion ▪ Exercises ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Coursework activity ▪ Exams
a2-	Recognize malocclusions etiology, examination and management		
a3-	Understand the etiology of cleft lip and palate and the role of GP in the interdisciplinary team of cleft lip and palate treatment within rules and ethics of government		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B5	b1-	Select orthodontic materials according to the appliance design
B2-	B3	b2-	outline a treatment plan according to patient's need attending the undergraduate clinics

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Lab sessions and training 	<ul style="list-style-type: none"> ▪ Coursework activity ▪ Exams
b1-	Select orthodontic materials according to the appliance design		
b2-	outline a treatment plan according to patient's need attending the undergraduate clinics		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C3	c1-	Apply infection control protocols during clinics
C2-	C1,C4	c2-	Identify patient's chief complaint, appearance and attitude, obtain and interpret medical, social and dental history, conduct clinical and radiographic examination, and distinguish between normal and pathological hard and soft tissue abnormalities of the orofacial area and create a treatment plan
C3-	C5	c3-	Plan when, how and where to refer patients according to clinical assessment

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Lab Sessions and training 	<ul style="list-style-type: none"> ▪ Coursework activities ▪ Exam ▪ Practical session
c1-	Apply infection control protocols during clinics		
c2-	Identify patient's chief complaint, appearance and attitude, obtain and interpret medical, social and dental history, conduct clinical and radiographic examination, and distinguish between normal and pathological hard and soft tissue abnormalities of the orofacial area and create a treatment plan		
c3-	Plan when, how and where to refer patients according to clinical assessment		

(D) General and Transferable Skills			
Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills			
PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D2	d1-	Use the latest technology for presenting and collecting data.
D2-	D4	d2-	Manage time and resources.
D3-	D5	d3-	Maintain full and accurate clinical records

Teaching and Assessment Methods for Achieving Learning Outcomes		
Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:		
CILOs in general and transferable skills	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	<ul style="list-style-type: none"> ▪ Lab Sessions 	<ul style="list-style-type: none"> ▪ Coursework
d1- Use the latest technology for presenting		

	and collecting data.	<ul style="list-style-type: none"> ▪ Exercises 	activities <ul style="list-style-type: none"> ▪ Practical sessions
d2-	Manage time and resources.		
d3-	Maintain full and accurate clinical records		

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Class I malocclusion	a1,a2,b1,b2,d1,d2	<ul style="list-style-type: none"> • Etiology • Skeletal, occlusal and soft tissues features • Assessment and diagnosis • Treatment options • Open bite, and cross bite treatment – Stability and relapse 	1,2	4
2	Class II malocclusion division 1 & 2	a1,a2,b1,b2,d1,d2	<ul style="list-style-type: none"> • Etiology • Skeletal, occlusal and soft tissues features • Assessment and diagnosis • Treatment options • deep bite – Stability and relapse 	3,4	4
3	Class III malocclusion	a3,b2,d1,d2	<ul style="list-style-type: none"> • Etiology • Skeletal, occlusal and soft tissues features • Assessment and diagnosis • Treatment options – Stability and relapse 	5,6	4
4	Management of cleft lip and palate	a1,a2,a3,b1,b2,d1,d2,d3	<ul style="list-style-type: none"> • Definition • Etiology • Classification • Management – Interdisciplinary treatment of cleft lip and palate and the role of GP in the team 	7	2
5	Midterm	a1,a2,a3,b1,b2,d1,d2,d3	<ul style="list-style-type: none"> • Written exam 	8	2
6	Seminars	a1,a2,a3,b1,b2,d1,d2	Topics will be determined by the instructor	9-13	10

7	Review	a1,a2,a3,b 1,b2,d2	– Previous topics	14-15	4
8	Final Exam	a1,a2,a3,b 1,b2,d1,d2, d3	– MCQs	16	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Introduction to orthodontic clinic	c1-c3, d1,d2,d3	1 st	2
2	<ul style="list-style-type: none"> Examination and diagnosis of cases Orthodontic charting Study models Photographic, models, radiographic analysis Treatment plan Appliance insertion and monitoring 	c1-c3, d1,d2,d3	2 nd -14 th	26
3	Practical exam	c1-c3, d1,d2,d3	15 th	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course

- Lectures
- Group discussions
- Exercises
- Brainstorming
- Lab sessions

CCXCIV. Teaching Strategies of the Course:

- Midterm exam
- Requirements
- Practical exam
- Final MCQ exam
- Oral exam

CCXCV. Assignments:				
No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	20	c1-c3, d1,d2,d3
2	Seminars	9 th -13 th	10	a1,a2,a3,b1,b2,d1,d2,d3
Total			30	

CCXCVI. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Midterm written exam	8 th	10	10%	a1,a2,a3,b1,b2,d1,d2,d3
2	Final exam	16 th	40	40%	a1,a2,a3,b1,b2,d1,d2,d3
Total			50	50%	
Assessment of Practical Part					
1	Requirements	1 st -14 th	30	30%	a1,a2,a3,b1,b2, c1-c3,d1,d2,d3
2	Practical Exam	15 th	10	10%	c1-c3, d1,d2,d3
3	Oral Exam	15 th	10	10%	a1-a3, b1-b2,d1,d2
Total			40	40%	

CCXCVII. Learning Resources:	
174-	Required Textbook(s) (maximum two)
	34- Proffit W., Fields H., Larson B., Sarver D. 2018. Contemporary Orthodontics.6thed. Mosby, USA.
175-	Essential References
	10. Graber L., Vanarsdall R., Vig K., Huang G. 2016. Orthodontics current principles and techniques. 6th ed. Mosby, USA.
11.	Electronic Materials and Web Sites, etc.
	58- https://www.ajodo.org/

CCXCVIII. Course Policies:	
1	Class Attendance:

	Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Orthodontics (3)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU



DLIII. Course Identification and General Information:						
1	Course Title:	Orthodontics (3)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		2		3
4	Study level/ semester at which this course is offered:	5 th Level / 1 st Semester				
5	Prerequisites:	Orthodontics (2)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				

		Department of Dentistry
11	Prepared by:	Dr. Ghamdan Abdullah Al-Harazi
12	Date of Approval	2020-2021

DLIV. Course Description:

This is a clinical course of orthodontics, in which the students will know the management of different malocclusions and the role of GP in the interdisciplinary management of cleft lip and palate. Student will present seminars about different topics determined by the instructor. The clinical part will covers diagnosis, radiological and clinical examinations of selected cases, orthodontic study models, photographs and cephalometric evaluation, preparation of treatment plans with limited treatment of orthodontic problems encountered in the general practice.

DLV. Outcomes of the Course

1. Diagnostic procedures and treatment planning in orthodontics

Under this, the students would learn about Stages of child development, Theories of psychological development, Management of child in orthodontic treatment, Management of handicapped child, Motivation and Psychological problems related to malocclusion / orthodontics, Adolescent psychology, Behavioral psychology and communication.

2. Cephalometrics

Under this the student would learn about, Instrumentation, Image processing, Tracing and analysis of errors and applications, Radiation hygiene, Advanced Cephalometrics techniques, Comprehensive review of literature, Video imaging principles and application

DLVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Select the most appropriate appliance for a patient with malocclusion that can general practitioner perform within the governmental rules and ethics
a2-	Understand the orthodontics movements and biomechanics
a3-	Identify the orthodontic appliances classifications according to evidence based dentistry

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Interpret study models for space analysis and creation
-----	--

b2-	Design and select the suitable orthodontic appliances using different materials and instruments
b3-	Recommend the proper extraoral anchorage

(C) Professional and Practical Skills

After participating in the course, students would be able to:	
c1-	Identify patient's chief complaint, appearance and attitude, obtain and interpret medical, social and dental history, conduct clinical and radiographic examination, and distinguish between normal and pathological hard and soft tissue abnormalities of the orofacial area and create a treatment plan
c2-	Apply infection control protocols during lab sessions
c3-	Perform fabrication of orthodontic appliances including wires bending, soldering and welding and acrylic base

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1-	Use the latest technology for presenting and collecting data.
d2-	Manage time and resources.
d3-	Maintain full and accurate clinical records

DLVII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Fundamentals of orthodontics	<ul style="list-style-type: none"> • Definition and terminology • Aims of orthodontics – scope of orthodontics 	1	2
2	Craniofacial growth and development	<ul style="list-style-type: none"> • Postnatal growth <ul style="list-style-type: none"> • Growth pattern and variability • Nature of skeletal growth • Growth in craniofacial complex – Theories of growth control 	2,3	4
3	Development of occlusion	<ul style="list-style-type: none"> • Ideal VS. normal occlusion • Tooth development 	4	2

		– Stages of occlusal development		
4	Malocclusion	<ul style="list-style-type: none"> • Etiology of malocclusion • Classification of malocclusion • Factors that has role in malocclusion: <ul style="list-style-type: none"> - Skeletal - Soft tissue – Local factors 	5,6	4
5	Midterm Exam	– Written exam	7	2
6	Orthodontic Materials and instruments	<ul style="list-style-type: none"> • Materials used in orthodontics • Instruments used in orthodontics 	8	2
7	Interceptive treatment	<ul style="list-style-type: none"> • Principles of interceptive orthodontics • Components of removable appliance • The most appropriate removable appliances for different malocclusions • Indications for fabrication of orthodontic appliances. • Procedures for fabrication of orthodontic appliances <ul style="list-style-type: none"> - Manipulation of orthodontics wires and acrylics – Characters of different wires and acrylic 	9,10, 11	6
8	Cephalometric identification and analysis	<ul style="list-style-type: none"> • Definition • Indications • Cephalometric points and lines • Cephalometric analysis – Tracing and interpretation 	12,13	4
9	Review	– Previous topics	14,15	4
10	Final Exam	– MCQs	16	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Wire bending Zigzag, square Adam's Labial bow z-spring	1-14	28
2	Practical exam	15 th	2

Number of Weeks / Units per Semester	15	30
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DLVIII. Teaching strategies of the course

- Lectures
- Group discussions
- Exercises
- Brainstorming
- Lab sessions

DLIX. Assessment Methods of the Course:

- Midterm exam
- Requirements
- Practical exam
- Final MCQ exam
- Oral exam

DLX. Assignments:

No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	20
	Seminars	9 th -13 th	10
Total			30

DLXI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Midterm written exam	8 th	10	10%
2	Final exam	16 th	40	40%
Total			50	50%
Assessment of Practical Part				
1	Requirements	1 st -14 th	30	30%
2	Final Lab Exam	15 th	10	10%
3	Oral Exam	15 th	10	10%

	Total	50	50%
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DLXII. Learning Resources:	
72- Required Textbook(s) (maximum two)	
	77- Proffit W., Fields H., Larson B., Sarver D. 2018. Contemporary Orthodontics.6th ed. Mosby, USA.
78- Essential References	
	21- Graber L., Vanarsdall R., Vig K., Huang G. 2016. Orthodontics current principles and techniques. 6th ed. Mosby, USA.
79- Electronic Materials and Web Sites, etc.	
	59- https://www.ajodo.org/

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam



assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery



Course Specification of Pedodontics (2)

Course No. (----)

2021/2022



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Prepared by:

Dr. Ahmed Obeayah

Reviewed by:

Dr.

Quality Assurance

Dean:

VIII. Course Identification and General Information:						
1	Course Title:	Pedodontics (2)				
2	Course Number & Code:	----				
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	--	3	--	3
4	Study level/ semester at which this course is offered:	5 th Level / 1 st Semester				
5	Prerequisites:	Pedodontics (1)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Credit Hour System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. AhmedObeayah				
12	Date of Approval	2021- 2022				

CLIX. Course Description:	
<p>This three-credit hour course consists of two parts; theory and clinical work. The theoretical part is designed to provide Dental students with basic knowledge related to Pediatric Dentistry. This course discusses the different aspects of diagnosis and management of dental problems in pre-school age children. Principles of behavior management and anxiety control to deal with children are a major emphasis of this course. The practical part provides students with the skills to apply the comprehensive dental care to manage all dental needs of the assigned child patient. Children with age range of 1 to 14 years are usually seen and treated by the students in this course.</p>	

CCLX. Outcomes of the Course

1. Student should be competent to treat dental diseases which are occurring in child patient. Student should be able to manage to repair and restore the lost / tooth structure to maintain harmony between both hard and soft tissues of the oral cavity.
2. Student should be able to manage the disabled children effectively and efficiently, tailored to the needs of individual requirement and conditions.
3. Student should be able to acquire skills in managing efficiency life threatening condition with emphasis on basic life support measure.
4. Student should be able to develop an attitude to adopt ethical principles in all aspects of Paediatric dental practice along with professional honesty and integrity.

CCLXI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Realize and understand biological mechanisms of oral health protection, understand and use methods for diagnosis and exclusion of risks for diseases appearance.
A2-	A5	a2-	Identify the prevention of medical emergencies in dental clinics.
A3-	A5	a3-	Describe preventive measures for traumatic injuries

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		
a1-	Realize and understand biological	<ul style="list-style-type: none"> ▪ Lectures ▪ class participation

	understand and use methods for diagnosis and exclusion of risks for diseases appearance.	<ul style="list-style-type: none"> ▪ Debate Discussions 	<ul style="list-style-type: none"> ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam. ▪ Assignments
a2-	Identify the prevention of medical emergencies in dental clinics.		
a3-	Describe preventive measures for traumatic injuries		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Differentiate the various levels of prevention of dental diseases
B2-	B3	b2-	Discuss diet modifications needed for various cases

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Differentiate the various levels of prevention of dental diseases	<ul style="list-style-type: none"> ▪ Lecture ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam. ▪ Assignments
b2-	Discuss diet modifications needed for various cases		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	

C1	C1	c1-	Apply the basic steps of examination of pediatric dental patient and Formulate a contingent treatment plan for a pediatric dental patient
C2	C2	c2-	Perform successful vial pulpotomy for primary teeth
C3	C2	c3-	Prepare stainless steel crown for full coverage of primary teeth

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1	Apply the basic steps of examination of pediatric dental patient and Formulate a contingent treatment plan for a pediatric dental patient	<ul style="list-style-type: none"> ▪ Lectures ▪ Demonstration ▪ Debate ▪ Exercise 	<ul style="list-style-type: none"> ▪ Case based scenario / Problem based learning. ▪ Assignments ▪ Practical exam
c1	Perform successful vial pulpotomy for primary teeth		
c3	Prepare stainless steel crown for full coverage of primary teeth		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1	D3	d1-	Associate in group activities to develop baseline understanding and implementation of teamwork performance strategies.
D2	D4	d2-	Manage time and resources.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		
d1- Associate in group activities to develop baseline understanding and implementation of teamwork performance strategies.	<ul style="list-style-type: none"> ▪ Lectures ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d2- Manage time and resources.		

XII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Minor Oral Surgery in Children	a1	Minor oral surgery in children and Common pathological condition in children	1	2
2	Pharmacological Management of children	a2,b1	Definition, Oral sedation, Intramuscular sedation, Submucosal sedation and Intravenous sedation	1	2
3	Management of children with N2O Inhalation and G.A	a1,a2	Definition, Indication, Contraindication, Advantages, Disadvantages, Objectives, Techniques, Differences between conscious sedation and general anesthesia	1	2
4	Dental trauma : Part (1)	a3,b1	Terminologies and definitions, Predisposing and risk factors, Etiology, Epidemiology (Primary), Epidemiology (Permanent), Ellis and Davey Classification and WHO Classification, Reaction of tooth to trauma, Effects on development of permanent teeth, Examination and	2	4

			Apexogenesis and Apexification Crown- Root Fracture, Root Fracture, Luxation injuries, Avulsion Fracture of crown, and Management of dental trauma in primary teeth.		
5	Gingivitis and Periodontal Disease in Children -1	a2	Normal gingiva and periodontium, Simple gingivitis, Acute gingival disease and Chronic nonspecific gingivitis, Early-Onset Periodontitis, Prepubertal Periodontitis, Localized, Early-Onset Periodontitis, Generalized Early onset and Periodontitis	2	4
6	Midterm exam	a1,a2,a3, b1		1	2
7	Oral pathology-periodontal diseases in children and adolescents.	a2,a3,b1	Definition, examination, classification and treatment plan	1	2
8	Dental Management of Disabled Children	a3,b2	Down syndrome (Trisomy 21 syndrome), Learning disabilities, Fragile-x, Foetal alcohol syndrome, Autism, Cerebral palsy, Spina bifida and latex allergy, Respiratory diseases, Hearing loss and Visual impairment	2	2
9	Dental Management of Medically Compromised Patient	a3,b2	Hemophilia, Viral hepatitis, Sickle cell anemia, Acquired immunodeficiency syndrome, Heart Disease, Thalassemia and Platelet Disorders, Syncope, Allergy, Asthma, Hyperventilation, Airway obstruction and Seizures, LA overdose reactions, Thyroid gland dysfunction, Adrenal crisis, Insulin shock & Diabetic ketoacidosis	2	4
10	Treatment of Deep Caries, Vital Pulp Exposure. and Pulpless	a1,b1	Diagnostic aids in the selection of teeth for Vital pulp therapy, Evaluation of treatment prognosis	2	4

	Teeth		the deep carious lesion and Vital pulp exposure and Vital pulp therapy techniques, Nonvital pulp therapy technique, Various pulp capping materials and Failures after vital pulp therapy		
11	Final Theoretical Exam	a1,a2,a3, b1,b2		1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Recording case history, clinical examination, radiographs, diagnosis & treatment planning in children	c1-c3, d1,d2	1 st -2 nd	6
2	- Administration of Local anesthetic techniques - Cavity preparation and restoration in primary and permanent dentition (class I, II, III, IV, V) - Simple extractions of primary teeth	c1-c3, d1,d2	3 rd -14 th	36
3	Final practical exam	c1-c3, d1,d2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- Debate
- Dialogue and discussion
- Exercise
- Brainstorming
- Self-independent learning (problem based learning)

CCXCIX. Assessment Strategies of the Course:

- Activities and Quiz

- Assignments
- Midterm exam
- Practical exam
- Oral exam
- Final exam

CCC. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	10	c1-c3, d1,d2
Total			10	

CCCI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Activities and Quiz	4 th	10%	10%	a1,a2,b1
2	Midterm exam	7 th	20%	20%	a1,a2,a3,b1
3	Final theory	16 th	40%	40%	a1,a2,a3,b1,b2
TOTAL			70%	70%	

Assessment of Practical Part

1	Assignments	1 st -14 th	10%	10%	c1-c3, d1,d2
2	Practical exam	15 th	10%	10%	c1-c3, d1,d2
3	Oral exam	15 th	10%	10%	a1,a2,a3,b1,b2
Total			30	30%	

X. Learning Resources:

176- Required Textbook(s) (maximum two)

1-Jeffrey A. Dean,2015:McDonald and Avery's Dentistry for the Child and Adolescent 10th Edition, Mosby

177- Essential References

- 1- Amr M. Moursi ,2020: Clinical Cases in Pediatric Dentistry (Clinical Cases (Dentistry)) 2nd Edition,Wiley-Blackwell
- 2- Arthur Nowak ,2018:Pediatric Dentistry: Infancy through Adolescence 6th Edition,Saunders

178- Electronic Materials and Web Sites, etc.

<https://www.iadad.org/publications/journals/journal-of-dentistry-for-children/>

XI. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Pedodontics (2)

Course No. (.....)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:	-----						
E-mail:	--@--.--	SAT	SUN	MON	TUE	WED	THU

الجامعة الوطنية
2021/2022

DLXIII. Course Identification and General Information:						
1	Course Title:	Pedodontics (2)				
2	Course Number & Code:	----				
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		3	2	2	--	3
4	Study level/ semester at which this course is offered:	5 th Level / 1 st Semester				
5	Prerequisites:	Pedodontics (1)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				

9	Study System:	Credit Hour System
10	Location of teaching the course:	Faculty of Medicine and Health Sciences Department of Dentistry
11	Prepared by:	Dr. Ahmed Obeyah
12	Date of Approval	2021

DLXIV. Course Description:

This three-credit hour course consists of two parts; theory and clinical work. The theoretical part is designed to provide Dental students with basic knowledge related to Pediatric Dentistry. This course discusses the different aspects of diagnosis and management of dental problems in pre-school age children. Principles of behavior management and anxiety control to deal with children are a major emphasis of this course. The practical part provides students with the skills to apply the comprehensive dental care to manage all dental needs of the assigned child patient. Children with age range of 1 to 14 years are usually seen and treated by the students in this course.

DLXV. Outcomes of the Course

1. Student should be competent to treat dental diseases which are occurring in child patient. Student should be able to manage to repair and restore the lost / tooth structure to maintain harmony between both hard and soft tissues of the oral cavity.
2. Student should be able to manage the disabled children effectively and efficiently, tailored to the needs of individual requirement and conditions.
3. Student should be able to acquire skills in managing efficiency life threatening condition with emphasis on basic life support measure.
4. Student should be able to develop an attitude to adopt ethical principles in all aspects of Paediatric dental practice along with professional honesty and integrity.

DLXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

a1-	Realize and understand biological mechanisms of oral health protection, understand and use methods for diagnosis and exclusion of risks for diseases appearance.
a2-	Identify the prevention of medical emergencies in dental clinics.
a3-	Describe preventive measures for traumatic injuries

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Differentiate the various levels of prevention of dental diseases
b2-	Discuss diet modifications needed for various cases

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Apply the basic steps of examination of pediatric dental patient and Formulate a contingent treatment plan for a pediatric dental patient
c2-	Perform successful vial pulpotomy for primary teeth
c3-	Prepare stainless steel crown for full coverage of primary teeth

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Associate in group activities to develop baseline understanding and implementation of teamwork performance strategies.
d2-	Manage time and resources.

DLXVII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Minor Oral Surgery in Children	Minor oral surgery in children and Common pathological condition in children	1	2

2	Pharmacological Management of children	Definition, Oral sedation, Intramuscular sedation, Submucosal sedation and Intra-venous sedation	1	2
3	Management of children with N2O Inhalation and G.A	Definition, Indication, Contraindication, Advantages, Disadvantages, Objectives, Techniques, Differences between conscious sedation and general anesthesia	1	2
4	Dental trauma : Part (1)	Terminologies and definitions, Predisposing and risk factors, Etiology, Epidemiology (Primary), Epidemiology (Permanent), Ellis and Davey Classification and WHO Classification, Reaction of tooth to trauma, Effects on development of permanent teeth, Examination and Diagnosis, Ellis classification, Apexogenesis and Apexification Crown- Root Fracture, Root Fracture, Luxation injuries, Avulsion Fracture of crown, and Management of dental trauma in primary teeth.	2	4
5	Gingivitis and Periodontal Disease in Children -1	Normal gingiva and periodontium, Simple gingivitis, Acute gingival disease and Chronic nonspecific gingivitis, Early-Onset Periodontitis, Prepubertal Periodontitis, Localized, Early-Onset Periodontitis, Generalized Early onset and Periodontitis	2	4
6	Midterm exam		1	2
7	Oral pathology- periodontal diseases in children and adolescents.	Definition, examination, classification and treatment plan	1	2
8	Dental Management		2	2

	of Disabled Children	syndrome), Learning disabilities, Fragile-x, Foetal alcohol syndrome, Autism, Cerebral palsy, Spina bifida and latex allergy, Respiratory diseases, Hearing loss and Visual impairment		
9	Dental Management of Medically Compromised Patient	Hemophilia, Viral hepatitis, Sickle cell anemia, Acquired immunodeficiency syndrome, Heart Disease, Thalassemia and Platelet Disorders, Syncope, Allergy, Asthma, Hyperventilation, Airway obstruction and Seizures, LA overdose reactions, Thyroid gland dysfunction, Adrenal crisis, Insulin shock & Diabetic ketoacidosis	2	4
10	Treatment of Deep Caries, Vital Pulp Exposure, and Pulpless Teeth	Diagnostic aids in the selection of teeth for Vital pulp therapy, Evaluation of treatment prognosis before Pulp therapy, Treatment of the deep carious lesion and Vital pulp exposure and Vital pulp therapy techniques, Nonvital pulp therapy technique, Various pulp capping materials and Failures after vital pulp therapy	2	4
11	Final Theoretical Exam		1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Recording case history, clinical examination, radiographs, diagnosis & treatment planning in children	1 st -2 nd	6
2	- Administration of Local anesthetic techniques - Cavity preparation and restoration in primary and permanent dentition (class I, II, III, IV, V) - Simple extractions of primary teeth	3 rd -14 th	36

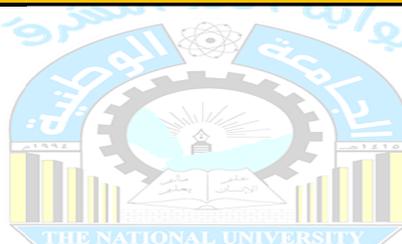
3	Final practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

DLXVIII. Teaching strategies of the course

Lectures
 Debate
 Dialogue and discussion
 Exercise
 Brainstorming
 Self-independent learning (problem based learning)

DLXIX. Assessment Methods of the Course:

- a- Activities and Quiz
- b- Assignments
- c- Midterm exam
- d- Practical exam
- e- Oral exam
- f- Final exam



DLXX. Assignments:

No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	10
Total			10

DLXXI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Activities and Quiz	4 th	10%	10%
2	Midterm exam	7 th	20%	20%
3	Final theory	16 th	40%	40%

TOTAL		70%	70%
Assessment of Practical Part			
1	Assignments	1 st -14 th	10%
2	Practical exam	15 th	10%
3	Oral exam	15 th	10%
Total		30	30%

DLXXII. Learning Resources:	
73- Required Textbook(s) (maximum two)	
	1-Jeffrey A. Dean,2015:McDonald and Avery's Dentistry for the Child and Adolescent 10th Edition, Mosby
80- Essential References	
	1- Amr M. Moursi ,2020: Clinical Cases in Pediatric Dentistry (Clinical Cases (Dentistry)) 2nd Edition,Wiley-Blackwell 2- Arthur Nowak ,2018:Pediatric Dentistry: Infancy through Adolescence 6th Edition,Saunders
3- Electronic Materials and Web Sites, etc.	
	https://www.aapd.org/publications/journals/journal-of-dentistry-for-children/

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Periodontology (3)

Course No.()

2021/2022



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Prepared by:

Dr. Manal Mohammed Al-Hajri

Reviewed by:

Dr.

Quality Assurance

Dean:

XLIII. Course Identification and General Information:						
1	Course Title:	Periodontology (3)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	1			3
4	Study level/ semester at which this course is offered:	5 th Level / 1 st Semester				
5	Prerequisites:	Periodontology 2				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

XLIV. Course Description:
 The course is advanced clinical periodontics course focuses on objectives of periodontal therapy, treatment planning & non-surgical periodontal therapy.

- CLXV. Outcomes of the Course**
1. Should have an updated knowledge on the recent advancements and be able to modify their treatment accordingly.
 2. Develop knowledge skill and the science of oral implantology. Should be aware of the various designs and placement of oral implants and follow up of implant restorations.

CLXVI. Intended learning outcomes (ILOs) of the course

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1,2B3,4,5,c1,2		a1- Classification of periodontal disease according to latest international classification	
A1,2B3,4,5,c1,2		a2- Patterns of attachment loss and their prognostic and treatment implications	
A1,2,B1,2,3,4,5,c1,2,3,4,5,6		a3- Treatment strategies and how they meet periodontal health goals	
A1,2,B3,4,5,c1,2,3,4,5,6		A4 The drugs commonly used in periodontology and their side effects and drug interactions	
A1,2,B3,4,5,c1,2,3,4,5,6		a5 Using anti-microbial therapy in the management of plaque related disease	
A1,2,B3,4,5,c1,2,3,4,5,6		A6 Occlusion and relating findings to the condition of the teeth and periodontal tissues	
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
a1-	Classification of periodontal disease according to latest international classification	exercise Debate	Homework
a2-	Patterns of attachment loss and their prognostic and treatment implications		
a3-	Treatment strategies and how they meet periodontal health goals		
A4	The drugs commonly used in	Lectures	Exam

	drug interactions	exercise Debate	Homework
a5	Using anti-microbial therapy in the management of plaque related disease	Lectures exercise Debate	Exam Homework

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A1,2,B1,2,3,4,5,c1,2,3,4,5,6	b1-	Assess and weigh the benefits and side effects of commonly prescribed medications taken by the patient on periodontal management.
	A1,2,B1,2,3,4,5,c1,2,3,4,5,6	b2-	Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment.
	A1,2,B1,2,3,4,5,c1,2,3,4,5,6	B3	Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
b1-	Assess and weigh the benefits and side effects of commonly prescribed medications taken by the patient on periodontal management.	exercise Debate	Homework
b2-	Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment		

B3	Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.	Lectures exercise Debate	Exam Homework
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(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	C1,2,3,4,6	c1-	The graduate must be competentat:
	C1,2,3,4,6	C2	Managing of any periodontal emergencies including acute conditions which may present in dental practice
	C1,2,3,4,6	C3	Taking the medical history as part of the diagnostic process.
	B1,2,3,4,5,c1,2,3,4,5,6	C4	Examining the periodontium, establishing a diagnosis and prognosis and applying treatment plan.
	B1,2,3,4,5,c1,2,3,4,5,6	c5	Supragingival and subgingival scaling and root debridement, using both powered and manual instrumentation and in stain removal and prophylaxis.
	B1,2,3,4,5,c1,2,3,4,5,6	C6	Performing a range of clinical procedures which are within the scope of general dentistry, including: a). Applications of preventive procedures. b). Application of different local anesthetic techniques. c). Diagnosis of commonly encountered oral lesions.

			radiographs.
	B1,2,3,4,5,c1,2,3,4,5,6	C7	Applying current infection control guidelines.
	B1,2,3,4,5,c1,2,3,4,5,6	C8	Evaluating and monitoring the outcome of treatment using specific indices.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
c1	The graduate must be competent at: Managing of any periodontal emergencies including acute conditions which may present in dental practice	exercise Debate	Homework
C2	Taking the medical history as part of the diagnostic process.	Lectures exercise Debate	Exam Homework
C3	Examining the periodontium, establishing a diagnosis and prognosis and applying treatment plan.	Lectures exercise Debate	Exam Homework
C4	Oral hygiene instruction and motivation which consider one of the most critical and difficult elements of long-term success in periodontal therapy.	Lectures exercise Debate	Exam Homework
	Supragingival and subgingival scaling and root debridement, using both powered and manual instrumentation and in stain removal and prophylaxis.	Lectures exercise Debate	Exam Homework
	Performing a range of clinical procedures which are within the scope of general dentistry, including:	Lectures exercise	Exam Homework

	a). Applications of preventive procedures. b). Application of different local anesthetic techniques. c). Diagnosis of commonly encountered oral lesions. d). Performance of the necessary radiographs.	Debate	
	Applying current infection control guidelines.	Lectures exercise Debate	Exam Homework
	Evaluating and monitoring the outcome of treatment using specific indices.	Lectures exercise Debate	Exam Homework

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	D1,2,3,4, 5,6,7,8	d1-	Work in collaboration as a member of an interdisciplinary team.
	D1,2,3,4, 5,6,7,8	d2-	A adapt to continuous, self-development and long life learning to remain update with advancement in periodontal practice
	D1,2,3,4, 5,6,7,8	D3	Communicate effectively in multicultural work environment using verbal and non - verbal means.
	D1,2,3,4, 5,6,7,8	D4	Manage time, set priorities and work to prescribed time limits.
	D1,2,3,4, 5,6,7,8	d5	Make decisions based on sound ethical, moral and scientific principles.

D1,2,3,4, 5,6,7,8	D6 Establish a patient–dentist relationship that allows the effective delivery of periodontal treatment and to identify patient's expectations, desires and attitudes when considering treatment planning.
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Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
d1-	Work in collaboration as a member of an interdisciplinary team.	exercise	Homework
d2-	A adapt to continuous, self-development and long life learning to remain update with advancement in periodontal practice	Debate	
	Communicate effectively in multicultural work environment using verbal and non - verbal means.	Lectures exercise Debate	Exam Homework
	Manage time, set priorities and work to prescribed time limits.	Lectures exercise Debate	Exam Homework
	Make decisions based on sound ethical, moral and scientific principles.	Lectures exercise Debate	Exam Homework
	Establish a patient–dentist relationship that allows the effective delivery of periodontal treatment and to identify patient's expectations, desires and attitudes when considering treatment planning.	Lectures exercise Debate	Exam Homework

II. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Diagnosis, Prognosis, and Treatment Plan	A1,2,3,B2,C2,3,4	<ul style="list-style-type: none"> Clinical Diagnosis Radiographic Aids in the Diagnosis of Periodontal Disease,. Risk Assessment Determination of Prognosis Advanced Diagnostic Techniques The Treatment Plan Rationale for Periodontal Treatment Periodontal Therapy in the Female Patient (Puberty, Menses, Pregnancy, and Menopause). Periodontal Treatment of Medically Compromised Patients. Periodontal Treatment for Older Adults, Treatment of Refractory Periodontitis, Aggressive Periodontitis, Necrotizing Ulcerative Periodontitis, and Periodontitis Associated with Systemic Diseases. 	4	8
2	Mid-Term Exam	A1,2,3 B2 C2		1	2

		3,4			
3	Periodontal Instrumentation	A3,B2, 3,C1,2, 3,4, 5,6, 7, 8	<ul style="list-style-type: none"> • The Periodontal Instrumentarium • Manual Instrumentation • Sonic and Ultrasonic Instrumentation • Supragingival and Subgingival Irrigation • Treatment of Periodontal Emergencies • Treatment of Acute Gingival Disease • Treatment of the Periodontal Abscess 	4	8
4	Phase, I Periodontal Therapy	A3,B2, 3,C1,2, 3,4, 5,6, 7, 8	<ul style="list-style-type: none"> • Scaling and Root Planing • Phase I Periodontal Therapy • Plaque Control for the Periodontal Patient • Chemotherapeutic Agents in the Treatment of Periodontal Diseases. • Periodontal Management of HIV Infected patients • Occlusal Evaluation and Therapy in the • Management of Periodontal Diseas • The Role of Orthodontics as an Adjunct to Periodontal Therapy 	6	12
5	Final Exam	A3,B2, 3,C1,2, 3,4, 5,6, 7, 8	•	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of	Contact Hours
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1	Fill the case sheet for 4th level students and perform all periodontal measurement.	A1,2,b2,3,c1,2,3,7,8,d1,2,3,4,5,6	All weeks	2
2	Instruct & motivate patients about all possible Oral hygiene procedures.	A5,b2,c4,7	All weeks	2
3	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	B3,c3,7,8	All weeks	2
4	Make the correct diagnosis and proper treatment plan	A1,a2,a3,b2,3,c2,3,7,8,d1,3,4,6.	All weeks	2
5	Identify the instruments for manual root planning and polishing	A3,b3,c3,5,6,7,8	All weeks	2
6	Using of manual instruments for scaling , root planning and polishing.	A3,b3,c3,5,6,7,8	All weeks	2
7	Using ultrasonic scaling and polishing.	A3,b3,c3,5,6,7,8	8th to 14 week	2
8	Sharpening of currets and scalers by using sharpening stones.	A3,b3,c3,5,6,7,8	8th	2
9	Closed gingival depredment at least 8cases	B1,2,3c1,2,3,4, 5,6,7,8	8th to 14	12
10	Final Exam		15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

CCCII. Teaching Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

CCCIII. Assignments:				
No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the instructor	10	a1, a2, a3,4, 5,6, b1,b2, d1, d2,4,3
Total			10	

CCCIV. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Mid tem exam	6 th	20	20%	a1 a2, a3,4, 5,6,
2	Final tem exam	14th	40	40%	a1a2a3a4,b1,2,3
4	Attending and assignment	1st to 14th	10	10%	a1, a2, a3,4, 5,6, b1,b2, d1, d2,4,3
Total			70	70%	
Assessment of Practical Part					
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	All weeks	4	4%	A1,2,b2,3,c1,2,3,7,8,d1,2,3,4, 5,6
2	Instruct & motivate patients about all possible Oral hygiene procedures.	All weeks	3	3%	A5,b2,c4,7
3	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	All weeks	3	3%	B3,c3,7,8

4	Make the correct diagnosis and proper treatment plan	All weeks	3	3%	A1,a2,a3,b2,3,c2,3,7,8,d1,3,4,6.
	Identify the instruments for manual root planning and polishing	All weeks	3	3%	A3,b3,c3,5,6,7,8
6	Using of manual instruments for scaling , root planning and polishing.	All weeks	4	4%	A3,b3,c3,5,6,7,8
7	Using ultrasonic scaling and polishing.	8th to 14 week	4	4%	A3,b3,c3,5,6,7,8
8	Sharpening of currets and scalersby using sharpening stones.	8 th	3	3%	A3,b3,c3,5,6,7,8
9	Closed gingival depredment at least 8cases	8 th to 14	3	3%	B1,2,3c1,2,3,4, 5,6,7,8
Total			30	30%	

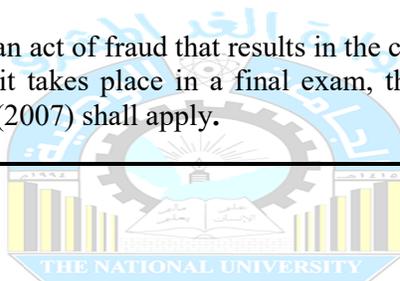


الجامعة الوطنية

CCCV. Learning Resources:	
179-	Required Textbook(s) (maximum two)
	35- 1.Jan Lindhe Clinical Periodontology and Implant Dentistry , 4th edition.
180-	Essential References
	42- .Carranza's Clinical Periodontology edition, 13th Edition.
181-	Electronic Materials and Web Sites, etc.
	41- Periodontology journals

CCCVI. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.

	No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



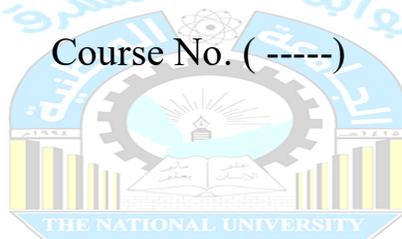


Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Periodontology 3) of Course No. (-----)



I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:	Dr.Manal Mohammed Al-Hajri	Office Hours					
Location & Telephone No.:	00967779212007						
E-mail:	dent.manal@yahoo.com	SAT	SUN	MON	TUE	WED	THU

2021/2022

DLXXIII. Course Identification and General Information:						
1	Course Title:	Periodontology 3				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3			3
4	Study level/ semester at which this course is offered:	5 th Level / 1 st Semester				

5	Prerequisites:	Periodontology 2
6	Co –requisite:	None
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery
8	Language of teaching the course:	English
9	Study System:	Semester based System
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry
11	Prepared by:	Dr. Manal Mohammed Al-Hajri
12	Date of Approval	2020-2021

DLXXIV. Course Description:

This course is to train students to understand different types of gingivitis and periodontitis.

To perform a comprehensive periodontal examination, collect clinical data and document the patient's dental and medical status. Conduct consultations with other medical and dental specialists and demonstrate the ability to effectively communicate in both written and verbal models. Identify the instruments for manual scaling and polishing.

DLXXV. Outcomes of the Course

1. Should have an updated knowledge on the recent advancements and be able to modify their treatment accordingly.
2. Develop knowledge skill and the science of oral implantology. Should be aware of the various designs and placement of oral implants and follow up of implant restorations.

DLXXVI. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1	Classification of periodontal disease according to latest international classification
a2	Patterns of attachment loss and their prognostic and treatment implications
a3	Treatment strategies and how they meet periodontal health goals
a4	The drugs commonly used in periodontology and their side effects and drug interactions
a	Using anti-microbial therapy in the management of plaque related disease
a6	Occlusion and relating findings to the condition of the teeth and periodontal tissues

(B) Intellectual Skills

After participating in the course, students would be able to:	
b1-	patient on periodontal management.
b2-	Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment.
B3	Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.

(C) Professional and Practical Skills

After participating in the course, students would be able to:	
c1	Managing of anyperiodontalemergenciesincluding acute conditions which may present in dental practice
C2	Taking the medical history as part of the diagnostic process.
C3	Examining the periodontium, establishing a diagnosis and prognosis and applying treatment plan.
C4	Oral hygiene instruction and motivation which consider one of the most critical and difficult elements of long-term success in periodontal therapy.
	Supragingival and subgingival scaling and root debridement, using both powered and manual instrumentation and in stain removal and prophylaxis.
C6	Performing a range of clinical procedures which are within the scope of general dentistry, including: a). Applications of preventive procedures. b). Application of different local anesthetic techniques. c). Diagnosis of commonly encountered oral lesions. d). Performance of the necessary radiographs.
C7	Applying current infection control guidelies.
C8	Evaluating and monitoring the outcome of treatment using specific indices.

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1	Work in collaboration as a member of an interdisciplinary team.
d2	A adapt to continuous, self-development and long life learning to remain update with advancement in periodontal practice

D3	Communicate effectively in multicultural work environment using verbal and non-verbal means.
D4	Manage time, set priorities and work to prescribed time limits.
	Make decisions based on sound ethical, moral and scientific principles.
D6	Establish a patient–dentist relationship that allows the effective delivery of periodontal treatment and to identify patient’s expectations, desires and attitudes when considering treatment planning.

DLXXVII. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Diagnosis, Prognosis, and Treatment Plan	<ul style="list-style-type: none"> Clinical Diagnosis Radiographic Aids in the Diagnosis of Periodontal Disease,. Risk Assessment Determination of Prognosis Advanced Diagnostic Techniques The Treatment Plan Rationale for Periodontal Treatment Periodontal Therapy in the Female Patient (Puberty, Menses, Pregnancy, and Menopause). Periodontal Treatment of Medically Compromised Patients. Periodontal Treatment for Older Adults, Treatment of Refractory Periodontitis, Aggressive Periodontitis, Necrotizing Ulcerative Periodontitis, and Periodontitis Associated with Systemic Diseases 	4	8
2	Periodontal Instrumentation	<ul style="list-style-type: none"> Manual Instrumentation Sonic and Ultrasonic Instrumentation Supragingival and Subgingival Irrigation Treatment of Periodontal Emergencies Treatment of Acute Gingival Disease Treatment of the Periodontal Abscess 	4	8
3	Midterm Exam	•	1	2
4	Phase, I Periodontal Therapy	<ul style="list-style-type: none"> Scaling and Root Planing Phase I Periodontal Therapy Plaque Control for the Periodontal Patient Chemotherapeutic Agents in the Treatment of Periodontal Diseases. 	6	12

		<ul style="list-style-type: none"> Periodontal Management of HIV Infected patients Occlusal Evaluation and Therapy in the Management of Periodontal Diseases The Role of Orthodontics as an Adjunct to Periodontal Therapy 		
5	Final Exam	<ul style="list-style-type: none"> 	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	All weeks	3
2	Instruct & motivate patients about all possible Oral hygiene procedures.	All weeks	3
3	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	All weeks	3
4	Make the correct diagnosis and proper treatment plan	All weeks	3
	Identify the instruments for manual root planning and polishing	All weeks	3
6	Using of manual instruments for scaling , root planning and polishing.	All weeks	3
7	Using ultrasonic scaling and polishing.	8 th to 14 week	3
8	Sharpening of currets and scalers by using sharpening stones.	8 th	3
9	Closed gingival depredment at least 8cases	8 th to 14	3
10	Practical Exam	15 th	3
Number of Weeks / Units per Semester		15	45

DLXXVIII. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

DLXXIX. Assessment Methods of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

DLXXX. Assignments:

No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

DLXXXI. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exam	14th	40	40%
1	Mid tem exam	4th	20	30%
3	Attending and assignment	1st to 14th	10	20%
Total			70	70%

Assessment of Practical Part

1	Fill the case sheet for 4th level students and perform all periodontal measurement.	All weeks	2	2%
2	Instruct & motivate patients about all possible Oral hygiene procedures.	All weeks	2	2%
	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	All weeks	2	2%
	Make the correct diagnosis and proper treatment plan	All weeks	2	2%
	Identify the instruments for manual root planning and polishing	All weeks	2	2%

	Using of manual instruments for scaling , root planning and polishing.	All weeks	2	2%
	Using ultrasonic scaling and polishing.	8 th to 14 week	2	2%
	Sharpening of currets and scalers by using sharpening stones.	8 th	2	2%
	Closed gingival depredment at least 8cases	8 th to 14	12	12%
	Total		30	30%

DLXXXII. Learning Resources:

74- Required Textbook(s) (maximum two)

81- Jan Lindhe Clinical Periodontology and Implant Dentistry , 4th edition.

82- Essential References

22- Carranza's Clinical Periodontology edition, 13th Edition.

83- Electronic Materials and Web Sites, etc.

43- Periodontology journals

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plaoiarism:

	Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Comprehensive Clinical Dentistry (2)

Course No.()

2021/2022



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Prepared by:

Dr.Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

I. Course Identification and General Information:						
1	Course Title:	Comprehensive Clinical Dentistry (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	6			4
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Comprehensive Clinical Dentistry (2)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

II. Course Description:	
<p>This course is a continuation of Comprehensive Clinic Practice I. Students are assigned patients to provide comprehensive dental care in a general dentistry practice clinical setting. During this course the student should be able to perform a complete clinical examination, diagnosis and management of patient case including all detailed clinical procedure in conservative treatment (operative dentistry, endodontic, periodontology and fixed prosthodontic). Patient care is carried out under the supervision and teaching of clinical instructors and staff members from the department.</p>	

III. Outcomes of the Course

Students would be able to take proper chair side history, examine the patient and perform medical and dental diagnostic procedures as well as perform relevant tests and interpret them to come to a reasonable diagnosis about the dental condition

- Plan and execute challenging clinical cases requiring comprehensive management strategies using contemporary materials and techniques
- Exhibit professional behavior, basic skills to carry out range of dental procedures in general dental practice independently with consistency and accuracy.
- Perform all levels of restorative work including Aesthetic procedures and treatment of complicated restorative procedures.

IV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A4	a1-	Recognize and diagnose the conditions of the oral cavity and its related structures, using proper diagnostic tools.
	A2	a2-	Demonstrate the ability to arrange the treatment plan in a logical manner, and a functionally acceptable arrangement
	A1	a3-	Describe the conservative concepts and the clinical steps required to manage destructive teeth

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	Practical Sessions	Direct observation

a1-	Recognize and diagnose the conditions of the oral cavity and its related structures, using proper diagnostic tools.	Demonstrations Discussions	Oral Assessment Practical Exams Semester work
a2-	Demonstrate the ability to arrange the treatment plan in a logical manner, and a functionally acceptable arrangement		
a3-	Describe the conservative concepts and the clinical steps required to manage destructive teeth		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1		b1-	Verify the problem oriented treatment planning model and address all the list of dental problems that may face the patient
B3		b2-	Evaluating the patients' needs and build a comprehensive treatment plan accordantly
B2		b3-	Determining and identifying biological and mechanical principles in dental repair to improve tooth function and improve oral health and esthetics.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations Discussions	Direct observation Oral Assessment Practical Exams Semester work
b1-	Verify the problem oriented treatment planning model and address all the list of dental problems that may face the patient		
b2-	Evaluating the patients' needs and build a comprehensive treatment plan accordantly		

	Determining and identifying biological and mechanical principles in dental repair to improve tooth function and improve oral health and esthetics.		
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(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C2		c1-	Perform a proper clinical diagnosis of different tooth disease and developed a formulated comprehensive problem based treatment plan.
C1		c2-	perform appropriate preventive and esthetic restorative treatment options based on clinical and radiographic findings when indicated
C7		c3-	Perform all technical details of various treatment steps and procedures to reinforce the pre-clinical knowledge.
C4		c4-	Enhance the different skills of oral and dental treatment.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations	Direct observation
c1	Perform a proper clinical diagnosis of		

	different tooth disease and developed a formulated comprehensive problem based treatment plan.	Discussions	Oral Assessment Practical Exams Semester work
c1	perform appropriate preventive and esthetic restorative treatment options based on clinical and radiographic findings when indicated		
c3	Perform all technical details of various treatment steps and procedures to reinforce the pre-clinical knowledge.		
c4-	Enhance the different skills of oral and dental treatment.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1		d1-	Adapt to continuous, self-development and long life learning to remain update with advancement in esthetic dentistry
D8		d2-	Analyze and resolve patients problems Using advanced information technologies and techniques to enrich and diversify professional experience.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations Discussions	Practical Requirements. Observation Continuous Assessment
d1-	Adapt to continuous, self-development and long life learning to remain update with advancement in esthetic dentistry		
d2-	Analyze and resolve patients problems		

	Using advanced information technologies and techniques to enrich and diversify professional experience.		
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V. Course Content: None					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Fixed Prosthodontic Dentistry	a1,a2,b2,d1,d2	- Examination, Diagnosis & Investigation - Cementation & post insertion problems in fixed Prosthodontics	3week	4
2	Endodontic lecture	a1,a2,b2,d1,d2	New trend in obturation techniques&New endodontic instrumentation tech	2 week	4
3	Prosthodontics lecture	a1,a2,b2,d1,d2	- Various treatment options in Removable Prosthodontic Dentistry - Troubleshootings in Removable Prosthodontics	3 week	6
4	Periodontics lecture	a1,a2,b2,d1,d2	Scientific writing or presentation of a case report	2week	6
5	Oral surgery lecture	a1,a2,b2,d1,d2	TMD treatment planning, treatment and management	3 week	6
6	Oral Medicine lecture	a1,a2,b2,d1,d2	- Radiographic Interpretation of Maxillofacial pathology - Radiation hazards and protection in dentistry - Differential diagnosis and management of head and neck swellings	3 week	4
7	Final Theoretical Exam	a1,a2,b2,C1,c2,c3,c4,d1,d2	- MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of	Contact Hours

			Weeks	
1	Examination, diagnosis & treatment planning	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
2	Anterior composite restoration, class IV and classIII angle build up, Diastema closure, shaping and contouring of teeth.	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
3	Laminate veneers, direct and indirect composite veneers. Ceramic Veneers	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
4	Direct Posterior Amalgam and composite restorations	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
5	Bleaching (vital and non-vital)	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
6	Demonstration and practicing of post and core for anterior teeth	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
7	Scaling and Root Planning	a1,a2,b2,C1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
8	Gingivectomy	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
9	Fixed prosthodonticAnterior/posterior (Crowns &Brigs)	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
10	Crown lengthening	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
11	Large posterior (Complex) restorations: buildup (amalgam or composite)	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
12	Endodontic treatment for anterior and posterior teeth	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
13	Final Practical Examination	a1,a2,a3,b1,b2,b3,c1,c2,c3,c4,d1,d2	15 th	6
Number of Weeks / Units per Semester			15	90

VI. Teaching strategies of the course

- Practical Sessions
- Demonstrations
- Discussions
- Case Presentation
- Instructions

VII. Teaching Strategies of the Course:

- Practical Examination (Comprehensive clinical exam)
- Semester work (Practical Requirements)
- Oral Assessment
- Direct observation

VIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester practical work: - Clinical Cases, -Requirements - Case presentation	1 st to 14 th	50	c1,c2,c3,c4,d1,d2
Total			50	

IX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Final Theoretical Exam	Week 16	50	50%	a1,a2, b1,b2, c1,c2,c3, d1,d2
Total			50	50%	
Assessment of Practical Part					

		14 th			
2	Final Practical Exam and Oral Assessment	15 th	20	20%	a1,a2,a3,b1,b2,b3,c1,c2,c3,c4,d1,d2
Total			50	50%	

X. Learning Resources:

1- Required Textbook(s) (maximum two)

- 1- Michael Cohen, 2012: Interdisciplinary Treatment Planning: Principles, Design, Implementation, 2nd ed., Quintessence Publishing Co.
- 2- Kay E J , Shearer A C , Bridgman A M , Humphris G M, 2005: Integrated Dental Treatment Planning: A case-based approach, 1st ed., Oxford

2- Essential References

- 1- Essential Dental Handbook: Clinical and Practice Management Advice from the Experts by Robert R. Edwab. 2003.
- 2- Mabel Slater, 2009: Dental Team Companion: Clinical Practice - 6 (Quintessentials of Dental Practice)
- 3- Jain Malkin, 2002: Medical and Dental Space Planning: A Comprehensive Guide to Design, Equipment, and Clinical Procedures

3- Electronic Materials and Web Sites, etc.

- 1- Journal of dentistry
<https://www.journals.elsevier.com › journal-of-dentistry>

XI. Course Policies:

- 1 **Class Attendance:**
 Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
- 2 **Tardiness:**
 A student will be considered late if he/she is not in class after 10 minutes of the start time of class.

	No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of
Comprehensive Dentistry 2

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

II. Course Identification and General Information:

1	Course Title:	Comprehensive dentistry 2				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	6			4
4	Study level/ semester at which this course is offered:	5 th Level / 10 th Semester				
5	Prerequisites:	Comprehensive dentistry I				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

III. Course Description:

This course is a continuation of Comprehensive Clinic Practice I. Students are assigned patients to provide comprehensive dental care in a general dentistry practice clinical setting.

During this course the student should be able to perform a complete clinical examination, diagnosis a management of patient case including all detailed clinical procedure in conservative treatment (opera dentistry, endodontic, periodontology and fixed prosthodontic). Patient care is carried out under the supervision and teaching of clinical instructors and staff members from the department.

IV. Outcomes of the Course

Students would be able to take proper chair side history, examine the patient and perform medical and dental diagnostic procedures as well as perform relevant tests and interpret them to come to a reasonable diagnosis about the dental condition

- Plan and execute challenging clinical cases requiring comprehensive management strategies using contemporary materials and techniques
- Exhibit professional behavior, basic skills to carry out range of dental procedures in general dental practice independently with consistency and accuracy.
- Perform all levels of restorative work including Aesthetic procedures and treatment of complicated restorative procedures.

V. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Recognize and diagnose the conditions of the oral cavity and its related structures, using proper diagnostic tools. |
| a2- | Demonstrate the ability to arrange the treatment plan in a logical manner, and a functionally acceptable arrangement |
| a3- | Describe the conservative concepts and the clinical steps required to manage destructive teeth |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Verify the problem oriented treatment planning model and address all the list of dental problems that may face the patient |
| b2- | Evaluating the patients' needs and build a comprehensive treatment plan accordantly |
| b3- | Determining and identifying biological and mechanical principles in dental repair to improve tooth function and improve oral health and esthetics. |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | Perform a proper clinical diagnosis of different tooth disease and developed a formulated comprehensive problem based treatment plan. |
| c2- | perform appropriate preventive and esthetic restorative treatment options based on clinical and radiographic findings when indicated |

c3-	Perform all technical details of various treatment steps and procedures to reinforce the pre-clinical knowledge.
c4-	Enhance the different skills of oral and dental treatment.

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1-	Adapt to continuous, self-development and long life learning to remain update with advancement in esthetic dentistry
d2-	Analyze and resolve patients problems Using advanced information technologies and techniques to enrich and diversify professional experience.

VI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Fixed Prosthodontic Dentistry	- Examination, Diagnosis & Investigation - Cementation & post insertion problems in fixed Prosthodontics	3 week	4
2	Endodontic lecture	New trend in obturation techniques&New endodontic instrumentation tech	2 week	4
3	Prosthodontics lecture	- Various treatment options in Removable Prosthodontic Dentistry - Troubleshootings in Removable Prosthodontics	3 week	6
4	Periodontics lecture	Scientific writing or presentation of a case report	2 week	6
5	Oral surgery lecture	TMD treatment planning, treatment and management	3 week	6
6	Oral Medicine lecture	- Radiographic Interpretation of Maxillofacial pathology - Radiation hazards and protection in dentistry - Differential diagnosis and management of head and neck swellings	3 week	4
7	Final Theoretical Exam	- MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Examination, diagnosis & treatment planning	1 st to 14 th	6 per week
2	Anterior composite restoration, class IV and class III angle build up, Diastema closure, shaping and contouring of teeth.	1 st to 14 th	6 per week
3	Laminate veneers, direct and indirect composite veneers. Ceramic Veneers	1 st to 14 th	6 per week
4	Direct Posterior Amalgam and composite restorations	1 st to 14 th	6 per week
5	Bleaching (vital and non-vital)	1 st to 14 th	6 per week
6	Demonstration and practicing of post and core for anterior teeth	1 st to 14 th	6 per week
7	Scaling and Root Planning	1 st to 14 th	6 per week
8	Gingivectomy	1 st to 14 th	6 per week
9	Fixed prosthodontic Anterior/ posterior (Crowns & Brigs)	1 st to 14 th	6 per week
10	Crown lengthening	1 st to 14 th	6 per week
11	Large posterior (Complex) restorations: buildup (amalgam or composite)	1 st to 14 th	6 per week
12	Endodontic treatment for anterior and posterior teeth	1 st to 14 th	6 per week
13	Final Practical Examination	15 th	6
Number of Weeks / Units per Semester		15	90

VII. Teaching strategies of the course

- Practical Sessions
- Demonstrations
- Discussions
- Case Presentation
- Instructions

VIII. Assessment Methods of the Course:

- Practical Examination (Comprehensive clinical exam)
- Semester work (Practical Requirements)
- Oral Assessment
- Direct observation

IX. Assignments:

No.	Assignments	Week due	Mark
1	Semester practical work: - Clinical Cases, -Requirements - Case presentation	1 st to 14 th	50
Total			50

X. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Final Theoretical Exam	Week 16	50	50%
Total			50	50%
Assessment of Practical Part				
1	Assignments	1 st to 14 th	30	30%
2	Final Practical Exam and Oral Assessment	15 th	20	20%
Total			50	50%

XI. Learning Resources:

1. Required Textbook(s) (specify title)

	<p>1- Michael Cohen, 2012: Interdisciplinary Treatment Planning: Principles, Design, Implementation, 2nd ed., Quintessence Publishing Co.</p> <p>2- Kay E J , Shearer A C , Bridgman A M , Humphris G M, 2005: Integrated Dental Treatment Planning: A case-based approach, 1st ed., Oxford</p>
2- Essential References	
	<p>1- . Essential Dental Handbook: Clinical and Practice Management Advice from the Experts by Robert R. Edwab. 2003.</p> <p>2- Mabel Slater, 2009: Dental Team Companion: Clinical Practice - 6 (Quintessentials of Dental Practice)</p> <p>3- Jain Malkin, 2002: Medical and Dental Space Planning: A Comprehensive Guide to Design, Equipment, and Clinical Procedures</p>
3- Electronic Materials and Web Sites, etc.	
	<p>1- Journal of dentistry https://www.journals.elsevier.com/journal-of-dentistry</p>

XII. Course Policies:	
1	<p>Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.</p>
2	<p>Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.</p>
3	<p>Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.</p>
4	<p>Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.</p>
5	<p>Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>
6	<p>Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam,</p>



	Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



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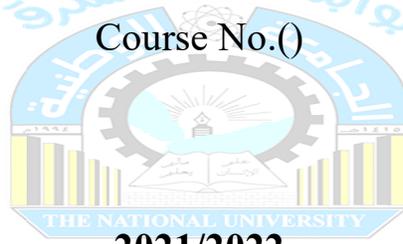
Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral & Maxillofacial surgery (2)

Course No.()



2021/2022

الجامعة الوطنية
NU



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Prepared by:

Dr. Sam Da'er

Reviewed by:

Dr.

Quality Assurance

Dean:

VI. Course Identification and General Information:						
1	Course Title:	Oral & Maxillofacial surgery (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Oral & Maxillofacial surgery (1)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

VII. Course Description:	
<p>This course introduce the student to the basic principles and techniques in oral Surgery, with familiarize the students in the principles of most commonly procedures provided by oral and maxillofacial surgeons in theories and practices. Also manage trauma of the maxillofacial region and temporomandibular joint.</p>	

VIII. Outcomes of the Course	
<p>The students would be acquainted with the knowledge and clinical skills in the management of:</p>	
<p>1. Temporomandibular Joint: Etiology, history signs, symptoms, examination and diagnosis of temporomandibular joint disorders, Ankylosis and management of the same with different treatment modalities, MPDS and management, Condylectomy - different procedures, Various approaches to TMJ, Recurrent dislocations - Etiology and Management</p>	
<p>2. Orthognathic surgery: Diagnosis and treatment planning, Cephalometric analysis, Model surgery, Maxillary and mandibular repositioning procedures, Segmental osteotomies, Management of apertognathia, Genioplasty, Distraction osteogenesis</p>	

Diagnosis and treatment planning Current concepts in the management of cleft lip and palate deformity Knowledge of Naso endoscopy and other diagnostic techniques in the evaluation of speech and hearing Concept of multidisciplinary team management Aesthetic facial surgery: Detailed knowledge of the structures of the face and neck including skin and underlying soft tissue, Diagnosis and treatment planning of deformities and conditions affecting facial skin, Underlying facial muscles, bone. Eyelids external ear Surgical management of post acne scarring, facelift, blepharoplasty, otoplasty, facial bone recontouring, etc Craniofacial surgery: Basic knowledge of developmental anomalies of the face, head and neck, Basic concepts in the diagnosis and planning of various head and neck anomalies including facial clefts, craniosynostosis syndromes, etc. Current concept in the management of Craniofacial anomalies

IX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Identify the applied anatomy and biomechanics of TMJ and muscles of mastication
A2-	A4	a2-	Explain the different TMJ disorders and their conservative and surgical management
A3-	A2	a3-	Identify the etiology, classification, diagnosis and treatment of oral and maxillofacial deformities and trauma.
A4-	A5	a4-	Show an understanding of the relation between nutrition, general health issues, drugs and oral health.
A5-	A5	a5-	Discuss management of hospitalized patients.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding	Teaching	Methods of assessment
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After participating in the course, students would be able to:			
a1-	Identify the applied anatomy and biomechanics of TMJ and muscles of mastication		
a2-	Explain the different TMJ disorders and their conservative and surgical management		
a3-	Identify the etiology, classification, diagnosis and treatment of oral and maxillofacial deformities and trauma.	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate 	<ul style="list-style-type: none"> ▪ Class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam.
a4-	Show an understanding of the relation between nutrition, general health issues, drugs and oral health.		
a5-	Discuss management of hospitalized patients.		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Interpret, analyze, and correlate clinical laboratory data and special investigations to help formulate a proper relevant treatment plans
B2-	B2	b2-	Discuss the advantages and disadvantages of relevant treatment plans with patients
B3-	B2	b3-	Relate between oral health problems, nutrition, general health, drugs and diseases that have an impact on dental care plan.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills	Teaching strategies/methods	Methods of assessment

to:		<ul style="list-style-type: none"> Discussion 	<ul style="list-style-type: none"> Assignments
b1-	Interpret, analyze, and correlate clinical laboratory data and special investigations to help formulate a proper relevant treatment plans		
b2-	Discuss the advantages and disadvantages of relevant treatment plans with patients		
b3-	Relate between oral health problems, nutrition, general health, drugs and diseases that have an impact on dental care plan.		

(C) Professional and Practical Skills			
Alignment of CILOs to PILOs in professional and practical skills			
PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Correctly record patient history and perform an appropriate physical examination including intraoral, head and neck examination with emphasis on the TMJ and its musculature as well as maxillofacial trauma
C2-	C6	c2-	Display competency in managing medical and surgical emergencies that may arise in the outpatient clinic.
C3-	C5	c3-	Consider and recommend the appropriate referral of patients for specialist advice or treatment
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:			
CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> Demonstration Exercise 	<ul style="list-style-type: none"> Practical exam. Case based scenario /
c1-	Correctly record patient history and		

	examination including intraoral, head and neck examination with emphasis on the TMJ and its musculature as well as maxillofacial trauma	<ul style="list-style-type: none"> Debate 	Problem based learning. <ul style="list-style-type: none"> Approved procedures documented in logbook. Assignments
c2-	Display competency in managing medical and surgical emergencies that may arise in the outpatient clinic.		
c3-	Consider and recommend the appropriate referral of patients for specialist advice or treatment		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D2	d1-	Display appropriate attitude when approaching patients
D2-	D7	d2-	Use advanced information technologies in preparation and delivery of topics related to oral and maxillofacial surgery.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> Lectures Training Dialogue and discussion Brainstorming 	<ul style="list-style-type: none"> Exam Homework
d1-	Display appropriate attitude when approaching patients		
d2-	Use advanced information technologies in preparation and delivery of topics related to oral and maxillofacial surgery.		

X. Course Content:

1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Temporomandibular joint disorders	a1, a2	Anatomy of the temporomandibular joint, Evaluation of TMJ, Classification of TMJ Disorders, TMJ problems treatment & TMJ surgery	1 st -3 rd	6
2	Maxillofacial Trauma	a3, b2	Mandible and Midface trauma, introduction, etiology, classification, diagnosis, closed and open management and complication	4 th -7 th	8
3	Midterm Exam	a1-a3, b2		8 th	2
4	Dental implants	a4, b1	Introduction, Types of dental implant, Indication and contraindication, Classification of dental implants, Basic components, Osseointegration, Requirements of successful implant, Treatment planning & Failure of dental implant	9 th	2
5	Cleft lip and palate	a4, b1-b3	Introduction, etiology, classification and surgical management.	10 th -11 th	4
6	Correction of Craniofacial deformity	a4,b1-b3	Diagnosis and treatment planning in determination in specific skeletal deformities and surgical correction	12 th -13 th	4
7	Management of hospitalized patients	a5, b1-b3	Hospitalizing Patients for Dental Care, Deciding on Hospitalization, Day Surgery Facilities , Preoperative Patient Evaluation, Care of Hospitalized Patient, Operating Room Protocols, Dental Surgeon and Assistant Preparation, Postoperative Responsibilities & Management of Postoperative Problems	14 th -15 th	4
8	Final Theoretical Exam	a1-a5, b1-b3		16 th	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	-Infection Control in Surgical Practice - Preoperative health status evaluation - Exodontia techniques - Principles of Surgery - Medical Emergencies in Dental Clinic	c1-c3, d1,d2	14 th	42
2	Practical exam	c1-c3, d1,d2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)



XII. Assessment Methods of the Course:

- a. Activities(periodical exams) as short answers, mcq questions, true and false,complete and define)
- b. Submission of requirements (10 case of closed extraction with the selected anesthetic technique)
- c. Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- d. Final written exam (mcq questions, complete, short essay, enumerate, and define)
- e. Practical exam(will be carried in the clinic by case administration of local anesthesia and perform painless closed tooth extraction)
- f. Oral exam (will be performed by internal and external examiner through free discussion).

XIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	10	c1-c3, d1,d2

XIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Quiz	4 th , 12 th	10	10%	a1, a3
2	Mid-term exam	8 th	20	20%	a1-a3, b2
3	Final theory	16 th	40	40%	a1-a5, b1-b3
Total			70	70%	
Assessment of Practical Part					
1	Assignment	1 st -14 th	10	10%	c1-c3, d1,d2
2	Oral exam	15 th	10	10%	a1-a4,b1-b2
3	Final practical exam	15 th	10	10%	c1-c3, d1,d2
Total			30	30%	

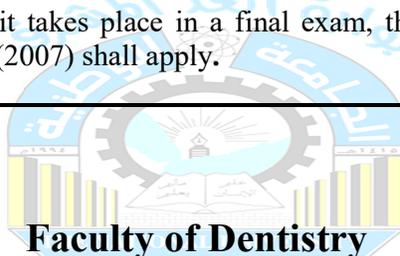
XV. Learning Resources:

4- Required Textbook(s) (maximum two)	
	1- James Hupp, Edward Ellis and Myron Tucker, 2013, <u>Contemporary Oral and Maxillofacial Surgery</u> , 6th edition . Slsevier 2- Lars Andersson, Karl-Erik Kahnberg and M. Anthony Pogrel, 2010, <u>Oral and Maxillofacial Surgery</u> . Wiely Blackwell
5- Essential References	
	1- Peterson L, Ellis E, Hupp J, Tucker M., 2008, Contemporary Oral and Maxillofacial Surgery. 5th Edition
6- Electronic Materials and Web Sites, etc.	
	www.joms.org

XVI. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 20 minutes of the start time, and shall not

	leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Oral & Maxillofacial surgery (1)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

XII. Course Identification and General Information:						
1	Course Title:	Oral & Maxillofacial surgery (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Oral & Maxillofacial surgery (1)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Sam Da'er				
12	Date of Approval	2020-2021				

XIII. Course Description:

This course introduce the student to the basic principles and techniques in oral Surgery, with familiarize the students in the principles of most commonly procedures provided by oral and maxillofacial surgeons in theories and practices. Also manage trauma of the maxillofacial region and temporomandibular joint.

XIV. Outcomes of the Course

The students would be acquainted with the knowledge and clinical skills in the management of:

1. Temporomandibular Joint: Etiology, history signs, symptoms, examination and diagnosis of temporomandibular joint disorders, Ankylosis and management of the same with different treatment modalities, MPDS and management, Condylectomy - different procedures, Various approaches to TMJ, Recurrent dislocations - Etiology and Management
2. Orthognathic surgery: Diagnosis and treatment planning, Cephalometric analysis, Model surgery, Maxillary and mandibular repositioning procedures, Segmental osteotomies, Management of

apertognathia, Genioplasty, Distraction osteogenesis

3. Cleft lip and palate surgery: Detailed knowledge of the development of the face, head and neck, Diagnosis and treatment planning Current concepts in the management of cleft lip and palate deformity Knowledge of Naso endoscopy and other diagnostic techniques in the evaluation of speech and hearing Concept of multidisciplinary team management

4. Aesthetic facial surgery: Detailed knowledge of the structures of the face and neck including skin and underlying soft tissue, Diagnosis and treatment planning of deformities and conditions affecting facial skin, Underlying facial muscles, bone. Eyelids external ear Surgical management of post acne scarring, facelift, blepharoplasty, otoplasty, facial bone recontouring, etc

5. Craniofacial surgery: Basic knowledge of developmental anomalies of the face, head and neck, Basic concepts in the diagnosis and planning of various head and neck anomalies including facial clefts, craniosynostosis syndromes, etc. Current concept in the management of Craniofacial anomalies

XV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Identify the applied anatomy and biomechanics of TMJ and muscles of mastication
a2-	Explain the different TMJ disorders and their conservative and surgical management
a3-	Identify the etiology, classification, diagnosis and treatment of oral and maxillofacial deformities and trauma.
a4-	Show an understanding of the relation between nutrition, general health issues, drugs and oral health.
a5-	Discuss management of hospitalized patients.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Interpret, analyze, and correlate clinical laboratory data and special investigations to help formulate a proper relevant treatment plans
b2-	Discuss the advantages and disadvantages of relevant treatment plans with patients
b3-	Relate between oral health problems, nutrition, general health, drugs and diseases that have an impact on dental care plan.

(C) Professional and Practical Skills

After participating in the course, students would be able to:	
c1-	Correctly record patient history and perform an appropriate physical examination including intraoral, head and neck examination with emphasis on the TMJ and its musculature as well as maxillofacial trauma
c2-	Display competency in managing medical and surgical emergencies that may arise in the outpatient clinic.
c3-	Consider and recommend the appropriate referral of patients for specialist advice or treatment

(D) General and Transferable Skills

After participating in the course, students would be able to:	
d1-	Display appropriate attitude when approaching patients
d2-	Use advanced information technologies in preparation and delivery of topics related to oral and maxillofacial surgery.

XVI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Temporomandibular joint disorders	Anatomy of the temporomandibular joint, Evaluation of TMJ, Classification of TMJ Disorders, TMJ problems treatment & TMJ surgery	1 st -3 rd	6
2	Maxillofacial Trauma	Mandible and Midface trauma, introduction, etiology, classification, diagnosis, closed and open management and complication	4 th - 7 th	8
3	Midterm Exam		8 th	2
4	Dental implants	Introduction, Types of dental implant, Indication and contraindication, Classification of dental implants, Basic components, Osseointegration, Requirements of successful implant, Treatment planning & Failure of dental implant	9 th	2
	Cleft lip and palate		10 th -	4

		surgical management.	11 th	
6	Correction of Craniofacial deformity	Diagnosis and treatment planning in determination in specific skeletal deformities and surgical correction	12 th - 13 th	4
7	Management of hospitalized patients	Hospitalizing Patients for Dental Care, Deciding on Hospitalization, Day Surgery Facilities , Preoperative Patient Evaluation, Care of Hospitalized Patient, Operating Room Protocols, Dental Surgeon and Assistant Preparation, Postoperative Responsibilities & Management of Postoperative Problems	14 th - 15 th	4
8	Final Theoretical Exam		16 th	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Infection Control in Surgical Practice - Preoperative health status evaluation - Exodontia techniques - Principles of Surgery - Medical Emergencies in Dental Clinic 	1 st -14 th	42
2	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

XVII. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming
- Self-independent learning (problem based learning)

XVIII. Assessment Methods of the Course:

- a Activities(neriodical exams) as short answers mca questions true and false complete and define)

- b. Submission of requirements (10 case of closed extraction with the selected anesthetic technique)
- c. Midterm written exam (mcq questions, complete, short essay, enumerate, and define)
- d. Final written exam (mcq questions, complete, short essay, enumerate, and define)
- e. Practical exam(will be carried in the clinic by case administration of local anesthesia and perform painless closed tooth extraction)
- f. Oral exam (will be performed by internal and external examiner through free discussion).

XIX. Assignments:

No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	10
Total			10

XX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Quiz	4 th , 12 th	10	10%
2	Mid-term exam	8 th	20	20%
3	Final theory	16 th	40	40%
Total			70	70%

Assessment of Practical Part

1	Assignment	1 st -14 th	10	10%
2	Oral exam	15 th	10	10%
3	Final practical exam	15 th	10	10%
Total			30	30%

XXI. Learning Resources:

2- Required Textbook(s) (maximum two)

- 1- James Hupp, Edward Ellis and Myron Tucker, 2013, Contemporary Oral and Maxillofacial Surgery, 6th edition . Slsevier
- 2- Lars Andersson, Karl-Erik Kahnberg and M. Anthony Pogrel, 2010, Oral and Maxillofacial Surgery. Wiely Blackwell

4- Essential References

- 2- Peterson L, Ellis E, Hupp J, Tucker M., 2008, Contemporary Oral and Maxillofacial Surgery. 5th Edition

1- www.joms.org

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Comprehensive Clinical Dentistry (2)



Course No.()

2021/2022

الجامعة الوطنية
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This template of course specifications was prepared by CAQA, Yemen, 2017.

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Prepared by:

Dr. Ibrahim Z. Al-Shami

Reviewed by:

Dr.

Quality Assurance

Dean:

XI. Course Identification and General Information:						
1	Course Title:	Comprehensive Clinical Dentistry (2)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	6		4	
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Comprehensive Clinical Dentistry (2)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

XII. Course Description:	
<p>This course is a continuation of Comprehensive Clinic Practice I. Students are assigned patients to provide comprehensive dental care in a general dentistry practice clinical setting. During this course the student should be able to perform a complete clinical examination, diagnosis and management of patient case including all detailed clinical procedure in conservative treatment (operative dentistry, endodontic, periodontology and fixed prosthodontic). Patient care is carried out under the supervision and teaching of clinical instructors and staff members from the department.</p>	

XIII. Outcomes of the Course

Students would be able to take proper chair side history, examine the patient and perform medical and dental diagnostic procedures as well as perform relevant tests and interpret them to come to a reasonable diagnosis about the dental condition

- Plan and execute challenging clinical cases requiring comprehensive management strategies using contemporary materials and techniques
- Exhibit professional behavior, basic skills to carry out range of dental procedures in general dental practice independently with consistency and accuracy.
- Perform all levels of restorative work including Aesthetic procedures and treatment of complicated restorative procedures.

XIV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
	A4	a1-	Recognize and diagnose the conditions of the oral cavity and its related structures, using proper diagnostic tools.
	A2	a2-	Demonstrate the ability to arrange the treatment plan in a logical manner, and a functionally acceptable arrangement
	A1	a3-	Describe the conservative concepts and the clinical steps required to manage destructive teeth

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	Practical Sessions	Direct observation

a1-	Recognize and diagnose the conditions of the oral cavity and its related structures, using proper diagnostic tools.	Demonstrations Discussions	Oral Assessment Practical Exams Semester work
a2-	Demonstrate the ability to arrange the treatment plan in a logical manner, and a functionally acceptable arrangement		
a3-	Describe the conservative concepts and the clinical steps required to manage destructive teeth		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1		b1-	Verify the problem oriented treatment planning model and address all the list of dental problems that may face the patient
B3		b2-	Evaluating the patients' needs and build a comprehensive treatment plan accordantly
B2		b3-	Determining and identifying biological and mechanical principles in dental repair to improve tooth function and improve oral health and esthetics.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations Discussions	Direct observation Oral Assessment Practical Exams Semester work
b1-	Verify the problem oriented treatment planning model and address all the list of dental problems that may face the patient		
b2-	Evaluating the patients' needs and build a comprehensive treatment plan accordantly		

	Determining and identifying biological and mechanical principles in dental repair to improve tooth function and improve oral health and esthetics.		
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(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C2		c1-	Perform a proper clinical diagnosis of different tooth disease and developed a formulated comprehensive problem based treatment plan.
C1		c2-	perform appropriate preventive and esthetic restorative treatment options based on clinical and radiographic findings when indicated
C7		c3-	Perform all technical details of various treatment steps and procedures to reinforce the pre-clinical knowledge.
C4		c4-	Enhance the different skills of oral and dental treatment.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations	Direct observation
c1	Perform a proper clinical diagnosis of		

	different tooth disease and developed a formulated comprehensive problem based treatment plan.	Discussions	Oral Assessment Practical Exams Semester work
c1	perform appropriate preventive and esthetic restorative treatment options based on clinical and radiographic findings when indicated		
c3	Perform all technical details of various treatment steps and procedures to reinforce the pre-clinical knowledge.		
c4-	Enhance the different skills of oral and dental treatment.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1		d1-	Adapt to continuous, self-development and long life learning to remain update with advancement in esthetic dentistry
D8		d2-	Analyze and resolve patients problems Using advanced information technologies and techniques to enrich and diversify professional experience.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Practical Sessions Demonstrations Discussions	Practical Requirements. Observation Continuous Assessment
d1-	Adapt to continuous, self-development and long life learning to remain update with advancement in esthetic dentistry		
d2-	Analyze and resolve patients problems		

	Using advanced information technologies and techniques to enrich and diversify professional experience.		
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KV. Course Content: None					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Fixed Prosthodontic Dentistry	a1,a2,b2,d1,d2	- Examination, Diagnosis & Investigation - Cementation & post insertion problems in fixed Prosthodontics	3week	4
2	Endodontic lecture	a1,a2,b2,d1,d2	New trend in obturation techniques&New endodontic instrumentation tech	2 week	4
3	Prosthodontics lecture	a1,a2,b2,d1,d2	- Various treatment options in Removable Prosthodontic Dentistry - Troubleshootings in Removable Prosthodontics	3 week	6
4	Periodontics lecture	a1,a2,b2,d1,d2	Scientific writing or presentation of a case report	2week	6
5	Oral surgery lecture	a1,a2,b2,d1,d2	TMD treatment planning, treatment and management	3 week	6
6	Oral Medicine lecture	a1,a2,b2,d1,d2	- Radiographic Interpretation of Maxillofacial pathology - Radiation hazards and protection in dentistry - Differential diagnosis and management of head and neck swellings	3 week	4
7	Final Theoretical Exam	a1,a2,b2,C1,c2,c3,c4,d1,d2	- MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of	Contact Hours

			Weeks	
1	Examination, diagnosis & treatment planning	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
2	Anterior composite restoration, class IV and classIII angle build up, Diastema closure, shaping and contouring of teeth.	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
3	Laminate veneers, direct and indirect composite veneers. Ceramic Veneers	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
4	Direct Posterior Amalgam and composite restorations	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
5	Bleaching (vital and non-vital)	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
6	Demonstration and practicing of post and core for anterior teeth	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
7	Scaling and Root Planning	a1,a2,b2,C1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
8	Gingivectomy	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
9	Fixed prosthodonticAnterior/posterior (Crowns &Brigs)	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
10	Crown lengthening	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
11	Large posterior (Complex) restorations: buildup (amalgam or composite)	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
12	Endodontic treatment for anterior and posterior teeth	c1,c2,c3,c4,d1,d2	1 st to 14 th	6 per week
13	Final Practical Examination	a1,a2,a3,b1,b2,b3,c1,c2,c3,c4,d1,d2	15 th	6
Number of Weeks / Units per Semester			15	90

VI. Teaching strategies of the course

- Practical Sessions
- Demonstrations
- Discussions
- Case Presentation
- Instructions

XVII. Teaching Strategies of the Course:

- Practical Examination (Comprehensive clinical exam)
- Semester work (Practical Requirements)
- Oral Assessment
- Direct observation

XVIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Semester practical work: - Clinical Cases, -Requirements - Case presentation	1 st to 14 th	50	c1,c2,c3,c4,d1,d2
Total			50	

XIX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Final Theoretical Exam	Week 16	50	50%	a1,a2, b1,b2, c1,c2,c3, d1,d2
Total			50	50%	

Assessment of Practical Part

1	Assignments	1 st to 14 th	30	30%	c1,c2,c3,c4,d1,d2
---	-------------	--	----	-----	-------------------

2	Final Practical Exam and Oral Assessment	15 th	20	20%	a1,a2,a3,b1,b2,b3,c1,c2,c3,c4,d1,d2
Total			50	50%	

XX. Learning Resources:

7- Required Textbook(s) (maximum two)

- 3- Michael Cohen, 2012: Interdisciplinary Treatment Planning: Principles, Design, Implementation, 2nd ed., Quintessence Publishing Co.
- 4- Kay E J , Shearer A C , Bridgman A M , Humphris G M, 2005: Integrated Dental Treatment Planning: A case-based approach, 1st ed., Oxford

8- Essential References

- 4- Essential Dental Handbook: Clinical and Practice Management Advice from the Experts by Robert R. Edwab. 2003.
- 5- Mabel Slater, 2009: Dental Team Companion: Clinical Practice - 6 (Quintessentials of Dental Practice)
- 6- Jain Malkin, 2002: Medical and Dental Space Planning: A Comprehensive Guide to Design, Equipment, and Clinical Procedures

9- Electronic Materials and Web Sites, etc.

- 1- Journal of dentistry
<https://www.journals.elsevier.com/journal-of-dentistry>

XXI. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.



5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery
Course Plan (Syllabus) of
Comprehensive Dentistry 2
Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

XXII. Course Identification and General Information:

1	Course Title:	Comprehensive dentistry 2				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	6			4
4	Study level/ semester at which this course is offered:	5 th Level / 10 th Semester				
5	Prerequisites:	Comprehensive dentistry I				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S)				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Assoc. Prof. Dr. Ibrahim Z. Al-Shami				
12	Date of Approval	2020-2021				

XXIII. Course Description:

This course is a continuation of Comprehensive Clinic Practice I. Students are assigned patients to provide comprehensive dental care in a general dentistry practice clinical setting.

During this course the student should be able to perform a complete clinical examination, diagnosis and management of patient case including all detailed clinical procedure in conservative treatment (operatory dentistry, endodontic, periodontology and fixed prosthodontic). Patient care is carried out under the supervision and teaching of clinical instructors and staff members from the department.

XXIV. Outcomes of the Course

Students would be able to take proper chair side history, examine the patient and perform medical and dental diagnostic procedures as well as perform relevant tests and interpret them to come to a reasonable diagnosis about the dental condition

- Plan and execute challenging clinical cases requiring comprehensive management strategies using contemporary materials and techniques

- Exhibit professional behavior, basic skills to carry out range of dental procedures in general dental practice independently with consistency and accuracy.
- Perform all levels of restorative work including Aesthetic procedures and treatment of complicated restorative procedures.

XXV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Recognize and diagnose the conditions of the oral cavity and its related structures, using proper diagnostic tools. |
| a2- | Demonstrate the ability to arrange the treatment plan in a logical manner, and a functionally acceptable arrangement |
| a3- | Describe the conservative concepts and the clinical steps required to manage destructive teeth |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|--|
| b1- | Verify the problem oriented treatment planning model and address all the list of dental problems that may face the patient |
| b2- | Evaluating the patients' needs and build a comprehensive treatment plan accordantly |
| b3- | Determining and identifying biological and mechanical principles in dental repair to improve tooth function and improve oral health and esthetics. |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| c1- | Perform a proper clinical diagnosis of different tooth disease and developed a formulated comprehensive problem based treatment plan. |
| c2- | perform appropriate preventive and esthetic restorative treatment options based on clinical and radiographic findings when indicated |
| c3- | Perform all technical details of various treatment steps and procedures to reinforce the pre-clinical knowledge. |
| c4- | Enhance the different skills of oral and dental treatment. |

(D) General and Transferable Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| d1- | Adapt to continuous, self-development and long life learning to remain update with advancement in esthetic dentistry |
| d2- | Analyze and resolve patients problems Using advanced information technologies and techniques to enrich and diversify professional experience. |

XXVI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Fixed Prosthodontic Dentistry	- Examination, Diagnosis & Investigation - Cementation & post insertion problems in fixed Prosthodontics	3 week	4
2	Endodontic lecture	New trend in obturation techniques & New endodontic instrumentation tech	2 week	4
3	Prosthodontics lecture	- Various treatment options in Removable Prosthodontic Dentistry - Troubleshootings in Removable Prosthodontics	3 week	6
4	Periodontics lecture	Scientific writing or presentation of a case report	2 week	6
5	Oral surgery lecture	TMD treatment planning, treatment and management	3 week	6
6	Oral Medicine lecture	- Radiographic Interpretation of Maxillofacial pathology - Radiation hazards and protection in dentistry - Differential diagnosis and management of head and neck swellings	3 week	4
7	Final Theoretical Exam	- MCQs and essay questions	1 week	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Examination, diagnosis & treatment planning	1 st to 14 th	6 per week
2	Anterior composite restoration, class IV and class III angle build up, Diastema closure, shaping and contouring of teeth.	1 st to 14 th	6 per week
3	Laminate veneers, direct and indirect composite veneers. Ceramic Veneers	1 st to 14 th	6 per week

4	Direct Posterior Amalgam and composite restorations	1 st to 14 th	6 per week
5	Bleaching (vital and non-vital)	1 st to 14 th	6 per week
6	Demonstration and practicing of post and core for anterior teeth	1 st to 14 th	6 per week
7	Scaling and Root Planning	1 st to 14 th	6 per week
8	Gingivectomy	1 st to 14 th	6 per week
9	Fixed prosthodontic Anterior/ posterior (Crowns & Brigs)	1 st to 14 th	6 per week
10	Crown lengthening	1 st to 14 th	6 per week
11	Large posterior (Complex) restorations: buildup (amalgam or composite)	1 st to 14 th	6 per week
12	Endodontic treatment for anterior and posterior teeth	1 st to 14 th	6 per week
13	Final Practical Examination	15 th	6
Number of Weeks / Units per Semester		15	90

XXVII. Teaching strategies of the course

- Practical Sessions
- Demonstrations
- Discussions
- Case Presentation
- Instructions

XXVIII. Assessment Methods of the Course:

- Practical Examination (Comprehensive clinical exam)
- Semester work (Practical Requirements)
- Oral Assessment
- Direct observation

XXIX. Assignments:

No.	Assignments	Week due	Mark
1	Semester practical work: - Clinical Cases, -Requirements - Case presentation	1 st to 14 th	50
Total			50

XXX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Final Theoretical Exam	Week 16	50	50%
Total			50	50%

Assessment of Practical Part

1	Assignments	1 st to 14 th	30	30%
2	Final Practical Exam and Oral Assessment	15 th	20	20%
Total			50	50%

XXXI. Learning Resources:

3- Required Textbook(s) (maximum two)

- 6- Michael Cohen, 2012: Interdisciplinary Treatment Planning: Principles, Design, Implementation, 2nd ed., Quintessence Publishing Co.
- 7- Kay E J , Shearer A C , Bridgman A M , Humphris G M, 2005: Integrated Dental Treatment Planning: A case-based approach, 1st ed., Oxford

2- Essential References

- 1- . Essential Dental Handbook: Clinical and Practice Management Advice from the Experts by Robert R. Edwab. 2003.
- 2- Mabel Slater, 2009: Dental Team Companion: Clinical Practice - 6 (Quintessentials of Dental Practice)
- 3- Jain Malkin, 2002: Medical and Dental Space Planning: A Comprehensive Guide to Design, Equipment, and Clinical Procedures

8- Electronic Materials and Web Sites, etc.

- 1- Journal of dentistry
<https://www.journals.elsevier.com/journal-of-dentistry>

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XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Oral Medicine (4)

Course No.()

2021/2022



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الجامعة الوطنية
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Prepared by:

Dr. Manal Mohammed Al-Hajri

Reviewed by:

Dr.

Quality Assurance

Dean:

VIII. Course Identification and General Information:						
1	Course Title:	Oral Medicine (4)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Oral Medicine (4)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

LXIX. Course Description:	
<p>This course is to train students to identify most common primary and secondary lesions affecting oral and para-oral structures of hard and soft tissues and perform oral and extra oral examination and diagnosis by taking history, clinical examination, and other diagnostic tests and provide the basic knowledge of oral medicine, relationship of oral diseases and systemic diseases, and oral health.</p>	

CLXX. Outcomes of the Course	
<p>1. Generate graduates that demonstrate the necessary knowledge, skills and attitude in Oral & Maxillofacial Diagnosis, Diagnostic procedures and medical management of such disorders.</p>	
<p>2. Create confident and competent Dental professionals who can accomplish and execute clinical deftness in the diagnosis and management of Orofacial disorders</p>	

I. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1	A1,2,4,,6b1,2,3,c2,3,4,6	a1-	Demonstrate an understanding of the etiology pathobiology and clinical presentation of diseases of the oral and peri-oral tissues
A2	A1,2,4,,6b1,2,3,c2,3,4,6	a2-	Understanding the different types of salivary gland disorders.
A3	A1,2,4,,6b1,2,3,c2,3,4,6	a3-	Understanding the different types of differential diagnosis of a swelling.
A4	A1,2,4,,6b1,2,3,c2,3,4,6	a4-	Understanding the differential diagnosis of orofacial pain.
A5	A1,2,4,,6b1,2,3,c2,3,4,6	a5-	Understanding the different types of endocrine diseases.
A6	A1,2,4,,6b1,2,3,c2,3,4,6	a6-	Understanding the different types of infectious diseases.
A7	A1,2,4,,6b1,2,3,c2,3,4,6	a7-	Understanding the different types of immunological diseases..
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam
a1-	Demonstrate an understanding of the etiology pathobiology and clinical presentation of diseases of the oral and peri-oral tissues		Homework
a2-	Understanding the different types of		

	salivary gland disorders.		
a3-	Understanding the different types of differential diagnosis of a swelling.		
a4-	Understanding the differential diagnosis of orofacial pain.		
a5-	Understanding the different types of endocrine diseases.		
a6-	Understanding the different types of infectious diseases.		
a7-	Understanding the different types of immunological diseases..		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	A2,4,6,b1,3,4	b1-	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.
B2-	A2,4,6,b1,3,4	b2-	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis.	Lectures exercise Debate	Exam Homework
b2-	Correlate the signs and symptoms of oral diseases with possible etiological factors and		

	histological changes.		
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(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1,2,5	c1-	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief complaints.
C2-	C1,2, 5,6	c2-	Request special investigations needed to confirm the clinical, working or tentative diagnosis.
C3-	C7	c3-	Select indicated clinical examination for specific oral lesion
C4-	C 5,7	c4-	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations
C5-	C1,2, 5,6,7	c5-	Assemble and link the data obtained from the patient's history and clinical examination to develop the differential diagnosis of patients chief complaint.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skillsto teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures	Exam
c1-	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief complaints.	exercise Debate	Homework

c2-	Request special investigations needed to confirm the clinical, working or tentative diagnosis.		
c3-	Select indicated clinical examination for specific oral lesion		
c4-	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations		
c5-	Assemble and link the data obtained from the patient's history and clinical examination to develop the differential diagnosis of patients chief complaint		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1	D2	d1	Use internet and multimedia.
D2	D3,4	d2	Manage time and resources

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
d1-	Use internet and multimedia.		
d2-	Manage time and resources		

XI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Salivary gland disorders	A1,2,3,4 5,b1,2,C1,2 , 3,4, 5	<ul style="list-style-type: none"> Salivary gland anatomy. Disorders of salivary gland. Xerostomia Sialorrhea Salivary gland tumors 	2	4
2	Differential diagnosis of a oral and facial swelling	A1,2,3,4 5,b1,2,C1,2 , 3,4, 5	<ul style="list-style-type: none"> Clinical, radiograph, investigation 	2	4
3	Diagnosis of orofacial pain.	A1,4,5,6,C1 ,2, 3,4, 5	<ul style="list-style-type: none"> • Odontogenic pain • Non-odontogenic pain 	2	4
4	Mid-Term Exam	a1 a2, a3		1	2
5	Endocrine diseases	A1,4 5,6,7,C1,2, 3,4, 5	<ul style="list-style-type: none"> Hypothalamus and anterior pituitary Adrenal diseases Thyroid diseases Diabetes Mellitus. 	2	4
6	Infectious diseases.	A1,,6, ,C1,2, 3,4, 5	<ul style="list-style-type: none"> Bacterial infections Protozoal infection Viral infections. 	4	8
7	Immunological diseases.	A1,4 5,6,7,C1,2, 3,4, 5	<ul style="list-style-type: none"> General principles Primary immunodeficiencies. Secondary immunodeficiencies. Connective tissue diseases. Allergy. 	2	4
8	Final Exam	A1,2,3,4,5,b1, 2,C1,2, 3,4, 5	•	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect					
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours	
1	Taking patient history	A1,2,,3,4, 5,6,7 c1,2,3,4, 5	1st,2 nd	6	
2	Clinical examination	C1,2,3,4, 5	3 rd to 6 th	9	
3	Taking intra-oral biopsy	c1,2,3,4, 5	4 th 5 th	6	
4	Lab investigations	C1,2,3,4, 5	5 th 6 th	6	

5	Take examples of differential diagnosis	C1,2,3,4, 5	8 th - 14 th	21
6	Practical exam	A1,2,,3,4, 5,6,7 c1,2,3,4, 5	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

XXII. Assessment Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

XXIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the instructor	10	a1, a2, a3,4, 5,6,7, d1, d2.
Total			10	

XXIV. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Mid tem exam	4 th	20	20%	a1a2,a3
2	Final tem exame	14th	40	40%	a1,2,3,4, 5,b1,2
3	Attending and assignment	1st to 14th	10	10%	a1, a2, a3,4, 5, d1, d2

Total		70	70%		
Assessment of Practical Part					
1	Taking patient history	1st,2nd	6	6%	A1,2,,3,4, 5,6,7 c1,2,3,4, 5
2	Clinical examination	3rd - 6th	6	6%	C1,2,3,4, 5
3	Taking intra-oral biopsy	4th 5th	6	6%	c1,2,3,4, 5
4	Lab investigations	5th 6th	6	6%	C1,2,3,4, 5
5	Take examples of differential diagnosis	8th 14th	6	6%	C1,2,3,4, 5
Total		30	30%		

XXV. Learning Resources:

10- Required Textbook(s) (maximum two)

- 5- Norman K. Wood - Differential Diagnosis of Oral and Maxillofacial Lesions: 5th (fifth) Edition Hardcover – October 15, 1997

11- Essential References

- 43- .Purkait, Swapan Kumar. Essentials of Oral Pathology. 3rd ed. Replika: Jaypee Brothers Medical Publishers, 2011.

- 44- Cawson R. A. and Odell E. W. Cawson's Essentials of Oral Pathology and Oral Medicine 8th ed. Edinburgh: Churchill Livingstone, 2008..

12- Electronic Materials and Web Sites, etc.

- Websites: Open e-learning

XXVI. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments

	or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry
Department of Dentistry
Bachelor of Dental Surgery

الجامعة الوطنية
Course Plan of Oral Medicine (4)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:	Dr.Manal Mohammed Al-Hajri	Office Hours					
Location& Telephone No.:	00967779212007						
E-mail:	dent.manal@yahoo.com	SAT	SUN	MON	TUE	WED	THU

2021/2022

XXXII. Course Identification and General Information:

1	Course Title:	Oral Medicine (4)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		3		3
4	Study level/ semester at which this course is offered:	5th Level / 2 nd Semester				
5	Prerequisites:	Oral Medicine (3)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

XXXIII. Course Description:

This course is to train students to identify most common primary and secondary lesions affecting oral and para-oral structures of hard and soft tissues and perform oral and extra oral examination and diagnosis by taking history, clinical examination, and other diagnostic tests and provide the basic knowledge of oral medicine, relationship of oral diseases and systemic diseases, and oral health.

XXXIV. Outcomes of the Course

1. Generate graduates that demonstrate the necessary knowledge, skills and attitude in Oral & Maxillofacial Diagnosis, Diagnostic procedures and medical management of such disorders.
2. Create confident and competent Dental professionals who can accomplish and execute clinical deftness in the diagnosis and management of Orofacial disorders

XXXV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|----|---|
| a1 | Demonstrate an understanding of the etiology pathobiology and clinical presentation of diseases of the oral and peri-oral tissues |
|----|---|

a2	Understanding the different types of salivary gland disorders.
a3	Understanding the different types of differential diagnosis of a swelling.
a4	Understanding the differential diagnosis of orofacial pain.
a5	Understanding the different types of endocrine diseases.
a6	Understanding the different types of infectious diseases.
a7	Understanding the different types of immunological diseases.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1	Categorize clinical findings and radiographic features of pathological conditions to a level that allows a differential diagnosis
b2	Correlate the signs and symptoms of oral diseases with possible etiological factors and histological changes.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1	Choose the appropriate diagnostic and management techniques based on patient's age, behavior capabilities, stage of dental growth/development and chief complaints.
c2	Request special investigations needed to confirm the clinical, working or tentative diagnosis.
c3	Select indicated clinical examination for specific oral lesion
c4	Analyze and interpret data collected from the patient's history, clinical, radiographic and other investigations
c5	Assemble and link the data obtained from the patient's history and clinical examination to develop the differential diagnosis of patients chief complaint.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1	Use internet and multimedia.
d2	Manage time and resources

XXXVI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Salivary gland disorders	<ul style="list-style-type: none"> • Salivary gland anatomy. • Disorders of salivary gland. • Xerostomia • Sialorrhea • Salivary gland tumors 	2	4
2	Differential diagnosis of a oral and facial swelling	<ul style="list-style-type: none"> • Clinical, radiograph, investigation 	2	4
3	Diagnosis of orofacial pain.	<ul style="list-style-type: none"> • •Odontogenic pain • •Non-odontogenic pain 	2	4
4	Mid-Term Exam		1	2
5	Endocrine diseases	<ul style="list-style-type: none"> • Hypothalamus and anterior pituitary • Adrenal diseases • Thyroid diseases • Diabetes Mellitus. 	2	4
6	Infectious diseases.	<ul style="list-style-type: none"> • Bacterial infections • Protozoal infection • Viral infections. 	4	8
7	Immunological diseases.	<ul style="list-style-type: none"> • General principles • Primary immunodeficiencies. • Secondary immunodeficiencies. • Connective tissue diseases. • Allergy. 	2	4
8	Final Exam	•	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Taking patient history	1 st , 2 nd	6
2	Clinical examination	3 rd to 6 th	9
3	Taking intra-oral biopsy	4 th 5 th	6
4	Lab investigations	5 th 6 th	6

5	Take examples of differential diagnosis	8 th - 14 th	21
6	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

XXXVII. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

XXXVIII. Assessment Methods of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

XXXIX. Assignments:

No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

XL. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Mid tem exam	4 th	20	20%
2	Final tem exame	14th	40	40%
3	Attending and assignment	1st to 14th	10	10%
Total			70	70%
Assessment of Practical Part				
1	Taking patient history	1st,2nd	6	6%

2	Clinical examination	3rd - 6th	6	6%
3	Taking intra-oral biopsy	4th 5th	6	6%
4	Lab investigations	5th 6th	6	6%
5	Take examples of differential diagnosis	8th 14th	6	6%
Total			30	30%

XLI. Learning Resources:

4- Required Textbook(s) (maximum two)

9- Norman K. Wood and Paul W. Goaz : Differential diagnosis of oral and maxillofacial lesions, (5th Ed).

10- Essential References

23- Purkait, Swapan Kumar. Essentials of Oral Pathology. 3rd ed. Replika: Jaypee Brothers Medical Publishers, 2011.
 24- Cawson R. A. and Odell E. W. Cawson's Essentials of Oral Pathology and Oral Medicine. 8th ed. Edinburgh: Churchill Livingstone, 2008.

11- Electronic Materials and Web Sites, etc.

Open e-learning

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam.

	assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Orthodontics (4)

Course No.()

2021/2022



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Prepared by:

Reviewed by:

Quality Assurance

Dean:

Dr. Ghamdan Abdullah Al-Harazi

Dr.

XXII. Course Identification and General Information:						
1	Course Title:	Orthodontics (4)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		2		3
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Orthodontics (3)				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Ghamdan Abdullah Al-Harazi				
12	Date of Approval	2020-2021				

XXIII. Course Description:	
<p>This is a clinical course of orthodontics, in which the students will know the risk and benefits of orthodontic treatment, retention and relapse, management of impacted canine, and gives an introduction to surgical orthodontics. Student will present seminars about different topics determined by the instructor. The clinical part will continue to cover diagnosis, radiological and clinical examinations of selected cases, orthodontic study models, photographs and cephalometric evaluation, preparation of treatment plans with limited treatment of orthodontic problems encountered in the general practice.</p>	

XXIV. Outcomes of the Course	
<p>1. Biology of tooth movement Basic understanding of the applied anatomy & physiology regarding to tooth & its surrounding structures will be inculcated into the student, so that the results of application of orthodontic forces can be understood and clinically used.</p> <p>2. Orthodontics/ Orthognathic Surgery Students will be thoroughly trained in conjoint diagnosis & treatment planning of cases requiring surgical intervention.</p>	

Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A1	a1-	Identify the principles and fundamentals of clinical orthodontics
A2-	A3	a2-	understand the principles of surgical orthodontics and management of impaction of canine according to rules and ethics that regulate the role of GP in the team
A3-	A4,A5	a3-	Determine the risks and benefits of orthodontic treatment and how to overcome its complications
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Group Discussion ▪ Exercises ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Coursework activity ▪ Exams
a1-	Identify the principles and fundamentals of clinical orthodontics		
a2-	understand the principles of surgical orthodontics and management of impaction of canine according to rules and ethics that regulate the role of GP in the team		
a3-	Determine the risks and benefits of orthodontic treatment and how to overcome its complications		

(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PIOs in intellectual skills		CIOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B5	b1-	Select orthodontic materials according to the appliance design
B2-	B3	b2-	outline a treatment plan according to patient's need attending the undergraduate clinics
B3-	B3	b3-	Design the best retention method after finishing the treatment to prevent any relapse

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CIOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Training 	<ul style="list-style-type: none"> ▪ Coursework activity ▪ Exams
b1-	Select orthodontic materials according to the appliance design		
b2-	outline a treatment plan according to patient's need attending the undergraduate clinics		
b3-	Design the best retention method after finishing the treatment to prevent any relapse		

(C) Professional and Practical Skills

Alignment of CIOs to PIOs in professional and practical skills

PIOs in professional and practical skills		CIOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C3	c1-	Apply infection control protocols during clinics
C2-	C1,C4	c2-	Identify patient's chief complaint, appearance and attitude, obtain and interpret medical, social and dental history, conduct clinical and radiographic

			normal and pathological hard and soft tissue abnormalities of the orofacial area and create a treatment plan
C3-	C5	c3-	Plan when, how and where to refer patients according to clinical assessment

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lectures ▪ Training 	<ul style="list-style-type: none"> ▪ Coursework activities ▪ Exam ▪ Practical session
c1-	Apply infection control protocols during clinics		
c2-	Identify patient's chief complaint, appearance and attitude, obtain and interpret medical, social and dental history, conduct clinical and radiographic examination, and distinguish between normal and pathological hard and soft tissue abnormalities of the orofacial area and create a treatment plan		
c3-	Plan when, how and where to refer patients according to clinical assessment		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D2	d1-	Use the latest technology for presenting and collecting data.
D2-	D4	d2-	Manage time and resources.
D3-	D5	d3-	Maintain full and accurate clinical records

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		<ul style="list-style-type: none"> ▪ Lab Sessions ▪ Exercises 	<ul style="list-style-type: none"> ▪ Coursework activities ▪ Practical sessions
d1-	Use the latest technology for presenting and collecting data.		
d2-	Manage time and resources.		
d3-	Maintain full and accurate clinical records		

XV. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Risks and benefits of orthodontic treatment	a3,b2,d1,d2,d3	<ul style="list-style-type: none"> • Main risks and benefits of orthodontic treatment – Prevention and treatment of complications related to orthodontic treatment 	1,2	4
2	Management of unerupted maxillary canine	a2,b1,b2,d1,d2,d3	<ul style="list-style-type: none"> • Incidence • Etiology • Assessment and diagnosis • Treatment options <ul style="list-style-type: none"> - Surgical - Orthodontics – others 	3,4	4
3	Introduction to surgical orthodontics	a2,b1,b2,d1,d2,d3	<ul style="list-style-type: none"> • Assessment • Indications • Planning for orthodontics • Teamwork • Surgical procedures – Stability and relapse 	5,6	4
4	Retention and relapse	a2,b2,b3,d1,d2	<ul style="list-style-type: none"> • Definition • Types • Duration 	7	2
5	Midterm	a1,a2,b1-b3,d1,d2	<ul style="list-style-type: none"> • Written exam 	8	2
6	Seminars	a1,a2,a3 h1 h2 d1 d2	Topics will be determined by the instructor	9-13	10

7	Review	a1,a2,a3,b1,b 2,d2	– Previous topics	14-15	4
8	Final Exam	a1,a2,a3,b1,b 2,d1,d2,d3	– MCQs	16	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Introduction to orthodontic clinic	c1-c3, d1,d2,d3	1 st	2
2	<ul style="list-style-type: none"> Examination and diagnosis of cases Orthodontic charting Study models Photographic, models, radiographic analysis Treatment plan Appliance insertion and monitoring 	c1-c3, d1,d2,d3	2 nd -14 th	26
3	Practical exam	c1-c3, d1,d2,d3	15 th	2
Number of Weeks / Units per Semester			15	30

VI. Teaching strategies of the course

- Lectures
- Group discussions
- Exercises
- Brainstorming
- Lab sessions

XXVII. Teaching Strategies of the Course:

- Midterm exam
- Requirements
- Practical exam
- Final MCQ exam
- Oral exam

XXVIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	20	c1-c3, d1,d2,d3
2	Seminars	9 th -13 th	10	a1,a2,a3,b1,b2,,d1,d2,d3
Total			30	

XXIX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Midterm written exam	8 th	10	10%	a1,a2,a3,b1,b2,d1,d2,d3
2	Final exam	16 th	40	40%	a1,a2,a3,b1,b2,d1,d2,d3
Total			50	50%	
Assessment of Practical Part					
1	Requirements	1 st -14 th	30	30%	a1,a2,a3,b1,b2,b3, c1-c3,d1,d2,d3
2	Practical Exam	15 th	10	10%	c1-c3, d1,d2,d3
3	Oral Exam	15 th	10	10%	a1-a3, b1-b2,d1,d2
Total			40	40%	

XXX. Learning Resources:

13- Required Textbook(s) (maximum two)	
6-	Proffit W., Fields H., Larson B., Sarver D. 2018. Contemporary Orthodontics.6thed. Mosby, USA.
14- Essential References	
12.	Graber L., Vanarsdall R., Vig K., Huang G. 2016. Orthodontics current principles and techniques. 6th ed. Mosby, USA.
13. Electronic Materials and Web Sites, etc.	
7-	https://www.ajodo.org/

XXXI. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from
---	--

	taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Orthodontics (4)

Course No. (----)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:							
E-mail:		SAT	SUN	MON	TUE	WED	THU

2021/2022

XLII. Course Identification and General Information:						
1	Course Title:	Orthodontics (4)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2		2	3	
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Orthodontics (3)				
6	Co-requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Ghamdan Abdullah Al-Harazi				
12	Date of Approval	2020-2021				

XLIII. Course Description:
<p>This is a clinical course of orthodontics, in which the students will know the risk and benefits of orthodontic treatment, retention and relapse, management of impacted canine, and gives an introduction to surgical orthodontics. Student will present seminars about different topics determined by the instructor. The clinical part will continue to cover diagnosis, radiological and clinical examinations of selected cases, orthodontic study models, photographs and cephalometric evaluation, preparation of treatment plans with limited treatment of orthodontic problems encountered in the general practice.</p>

XLIV. Outcomes of the Course
1. Biology of tooth movement Basic understanding of the applied anatomy & physiology regarding to tooth &

its surrounding structures will be inculcated into the student, so that the results of application of orthodontic forces can be understood and clinically used.

2. Orthodontics/ Orthognathic Surgery Students will be thoroughly trained in conjoint diagnosis & treatment planning of cases requiring surgical intervention.

XLV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Identify the principles and fundamentals of clinical orthodontics
a2-	understand the principles of surgical orthodontics and management of impaction of canine according to rules and ethics that regulate the role of GP in the team
a3-	Determine the risks and benefits of orthodontic treatment and how to overcome its complications

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Select orthodontic materials according to the appliance design
b2-	outline a treatment plan according to patient's need attending the undergraduate clinics
b3-	Design the best retention method after finishing the treatment to prevent any relapse

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Identify patient's chief complaint, appearance and attitude, obtain and interpret medical, social and dental history, conduct clinical and radiographic examination, and distinguish between normal and pathological hard and soft tissue abnormalities of the orofacial area and create a treatment plan
c2-	Apply infection control protocols during lab sessions
c3-	Perform fabrication of orthodontic appliances including wires bending, soldering and welding and acrylic base

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Use the latest technology for presenting and collecting data.
d2-	Manage time and resources.
d3-	Maintain full and accurate clinical records

XLVI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Risks and benefits of orthodontic treatment	<ul style="list-style-type: none"> Main risks and benefits of orthodontic treatment – Prevention and treatment of complications related to orthodontic treatment 	1,2	4
2	Management of unerupted maxillary canine	<ul style="list-style-type: none"> Incidence Etiology Assessment and diagnosis Treatment options <ul style="list-style-type: none"> - Surgical - Orthodontics – others 	3,4	4
3	Introduction to surgical orthodontics	<ul style="list-style-type: none"> Assessment Indications Planning for orthodontics Teamwork Surgical procedures – Stability and relapse 	5,6	4
4	Retention and relapse	<ul style="list-style-type: none"> Definition Types Duration 	7	2
5	Midterm	<ul style="list-style-type: none"> Written exam 	8	2
6	Seminars	Topics will be determined by the instructor	9-13	10
7	Review	– Previous topics	14-15	4
8	Final Exam	– MCQs	16	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect

Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Wire bending Zigzag, square Adam's	1-14	28

	z-spring		
2	Practical exam	15 th	2
Number of Weeks / Units per Semester		15	30

XLVII. Teaching strategies of the course

- Lectures
- Group discussions
- Exercises
- Brainstorming
- Lab sessions

XLVIII. Assessment Methods of the Course:

- Midterm exam
- Requirements
- Practical exam
- Final MCQ exam
- Oral exam

XLIX. Assignments:

No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	20
	Seminars	9 th -13 th	10
Total			30

L. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Midterm written exam	8 th	10	10%
2	Final exam	16 th	40	40%
Total			50	50%
Assessment of Practical Part				
1	Requirements	1 st -14 th	30	30%

2	Final Lab Exam	15 th	10	10%
3	Oral Exam	15 th	10	10%
Total			50	50%

LI. Learning Resources:

5- Required Textbook(s) (maximum two)

12- Proffit W., Fields H., Larson B., Sarver D. 2018. Contemporary Orthodontics. 6th ed. Mosby, USA.

13- Essential References

25- Graber L., Vanarsdall R., Vig K., Huang G. 2016. Orthodontics current principles and techniques. 6th ed. Mosby, USA.

14- Electronic Materials and Web Sites, etc.

8- <https://www.ajodo.org/>

XII. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the

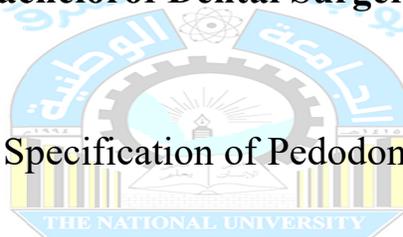
	Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Pedodontics (3)



الجامعة الوطنية

Course No. (-----)

2021/2022



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Prepared by:

Dr. Dr. Ahmed Obeyah

Reviewed by:

Dr.

Quality Assurance

Dean:

XXVI. Course Identification and General Information:						
1	Course Title:	Pedodontics (3)				
2	Course Number & Code:	----				
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		3	--	3	--	3
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Pedodontics (2)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Credit Hour System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. AhmedObeyah				
12	Date of Approval	2021				

XXVII. Course Description:

This course prepares the students to provide comprehensive dental care to his pediatric patients in order to produce a more ideal oral structure from a metabolic, functional and aesthetic view point in these growing children. It also provides the dental student with experience in proper management, behavior modification and the ability to establish a positive attitude towards dental treatment in his young patients

XXVIII. Outcomes of the Course

1. KNOWLEDGE	2. SKILLS	3. ATTITUDE	4. COMMUNICATION	5. PROBLEM SOLVING	6. TEAMWORK	7. LEADERSHIP	8. INDEPENDENT LEARNING	9. LIFELONG LEARNING	10. ETHICAL AND PROFESSIONAL BEHAVIOR
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capability to assess growth and development variations and suggest necessary referrals or actions as needed timely.

2. SKILL: Clinicians who can effectively and efficiently perform basic dental treatments in children from birth to adolescence with proper behavior management of child and the parent, as well as instill positive dental attitude with preventive modalities

XXIX. Intended learning outcomes (ILOs) of the course			
(A) Knowledge and Understanding:			
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.			
PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1	A4	a1-	Describe the levels of prevention of dental diseases, review the objectives of prevention for individual and community, describe diet history analysis and identify diet control measures
A2	A4	a2-	Identify the methods of fluoride application, determine the need for fissure sealant, interpret risk factors for dental caries
Teaching and Assessment Methods for Achieving Learning Outcomes			
Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:			
CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Describe the levels of prevention of dental diseases, review the objectives of prevention for individual and community, describe diet history analysis and identify diet control measures	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate ▪ Discussions 	<ul style="list-style-type: none"> ▪ class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam. ▪ Oral exam. ▪ Assignments
a2-	Identify the methods of fluoride application, determine the need for		

dental caries		
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(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B1	b1-	Appraise the indications and contraindications of pulp therapy in primary teeth
B2-	B3	b2-	Distinguish the clinical picture of fluorosis, explain manifestations of acute fluoride toxicity and evaluate the need for professional fluoride application

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	Appraise the indications and contraindications of pulp therapy in primary teeth	<ul style="list-style-type: none"> ▪ Lecture ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam. ▪ Assignments
b2-	Distinguish the clinical picture of fluorosis, explain manifestations of acute fluoride toxicity and evaluate the need for professional fluoride application		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	C1	c1-	Apply the basic steps of examination of pediatric dental patient and Formulate a contingent treatment plan for a pediatric dental patient

C2-	C2	c2-	Perform successful vial pulpotomy for primary teeth
C3-	C2	c3-	Prepare stainless steel crown for full coverage of primary teeth

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1	Apply the basic steps of examination of pediatric dental patient and Formulate a contingent treatment plan for a pediatric dental patient	<ul style="list-style-type: none"> ▪ Lectures ▪ Demonstration ▪ Debate ▪ Exercise 	<ul style="list-style-type: none"> ▪ Case based scenario / Problem based learning. ▪ Assignments ▪ Practical exam
c1	Perform successful vial pulpotomy for primary teeth		
c3	Prepare stainless steel crown for full coverage of primary teeth		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3	d1-	Associate in group activities to develop baseline understanding and implementation of teamwork performance strategies.
D2-	D4	d2-	Manage time and resources.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		

d1-	Associate in group activities to develop baseline understanding and implementation of teamwork performance strategies.	<ul style="list-style-type: none"> ▪ Lectures ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
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XX. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Treatment of Deep Caries, Vital Pulp Exposure, and Pulpless Teeth : Part 1	a1,b1	Diagnostic aids in the selection of teeth for Vital pulp therapy, Evaluation of treatment prognosis before Pulp therapy, Treatment of the deep carious lesion and Vital pulp exposure	1	2
2	Treatment of Deep Caries, Vital Pulp Exposure, and Pulpless Teeth -2	a1,b1	Vital pulp therapy techniques, Nonvital pulp therapy technique, Various pulp capping materials and Failures after vital pulp therapy	1	2
3	Pulp therapy for young permanent teeth	a1,a2, b1	Introduction, classification , anatomy of tooth and treatment	1	2
4	Crowns in Pediatric Dentistry	a1,a2	Introduction, Definition, Classification, Preparation of the tooth, Selection of crown size and Contouring of the crown	2	4
5	Fluorides in pediatric dentistry.	a1,a2	Fluoride administration, Technique of application ,Self-applied topical fluoride applications and Recommendations for use of topical fluorides	1	2
6	Dental material in pediatric dentistry	a1,b2	Classification, indication, advantages and disadvantages	1	2

7	Midterm exam	a1,a2, b1		1	2
8	Oral habits	a1,b2	Definition, Undesirable oral habits in children, Digital sucking and Tongue thrusting Bruxism, Mouth breathing, Lip biting and sucking habit, Cheek biting, Self-injurious habit and Nail biting	1	2
9	Mechanical and Chemotherapeutic home oral hygiene in pediatric dentistry-1	a2,b2	Manual toothbrush, Powered mechanical plaque removal dentifrices, Floss, Interproximal Brushes, End-tufted Brush, Disclosing agents, Tongue scrapers and Oral irrigators	1	2
10	Mechanical and Chemotherapeutic home oral hygiene in pediatric dentistry-2	a2,b2	Antiseptic agents, Essential Oils, Quaternary Ammonium Compounds, Triclosan, Stannous Fluoride, sugar substitutes, Age-specific home oral hygiene instructions and in office oral hygiene programs	1	2
11	Space Maintenance in the Primary Dentition: Part (1)	a2,b2	Space loss problems, Definition, Band and loop space maintainers, Crown and loop space maintainer and Lingual arch space maintainer	1	2
12	Space Maintenance in the Primary Dentition: Part (2)	a2,b2	Transpalatal arch appliance, Distal shoe space maintainer, Bonded space maintainer, Glass fiber reinforced composite resin space maintainer, Removable Space Maintainers and Fixed appliances for anterior space maintenance	1	2
13	Revision	a1,a2, b1,b2		2	4
14	Final Theoretical Exam	a1,a2, b1,b2		1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect				
Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Basic endodontic procedures in primary teeth, Pulp therapy young permanent Dentition (Pulp capping, indirect pulp therapy, Direct pulp therapy, apexogenesis, and apexification) - Habit breaking appliances in Pediatric patients - Removable space maintainers in Pediatric patients - Management of Dental trauma in Pediatric patients in clinics - Dental Management of Children with Systemic 	c1-c3, d1,d2	1 st -14 th	42
2	Final practical exam	c1-c3, d1,d2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

Lectures
 Debate
 Exercise
 Dialogue and discussion
 Brainstorming
 Self-independent learning (problem based learning)

XXXII. Teaching Strategies of the Course:

- Activities and Quiz
- Assignments
- Midterm exam
- Practical exam

- Oral exam
- Final exam

XXXIII. Assignments:				
No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	10	c1-c3, d1,d2
Total			10	

XXXIV. Schedule of Assessment Tasks for Students During the Semester					
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Activities and Quiz	4 th	10	10%	a1,b1
2	Midterm exam	8 th	20	20%	a1,a2, b1
3	Final theory	16 th	40	40%	a1,a2, b1,b2
TOTAL			70%	70%	
Assessment of Practical Part					
1	Assignments	1 st - 14 th	10	10%	c1-c3, d1,d2
2	Practical exam	15 th	10	10%	c1-c3, d1,d2
3	Oral exam	15 th	10	10%	a1,a2, b1,b2
Total			30	30%	

XXXV. Learning Resources:	
15- Required Textbook(s) (maximum two):	
	1-Jeffrey A. Dean,2015:McDonald and Avery's Dentistry for the Child and Adolescent 10th Edition, Mosby
16- Essential References	
	1- Amr M. Moursi ,2020: Clinical Cases in Pediatric Dentistry (Clinical Cases (Dentistry)) 2nd Edition, Wiley-Blackwell
	2- Arthur Nowak ,2018:Pediatric Dentistry: Infancy through Adolescence 6th Edition,Saunders
17- Electronic Materials and Web Sites, etc.	
	https://www.aapd.org/publications/journals/journal-of-dentistry-for-children/

XXXVI. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Forgery and Impersonation: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.



Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Plan (Syllabus) of Pedodontics (3)



Course No. (.....)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:		Office Hours					
Location& Telephone No.:	----						
E-mail:	--@--.--	SAT	SUN	MON	TUE	WED	THU

2021/2022

LII. Course Identification and General Information:

1	Course Title:	Pedodontics (3)				
2	Course Number & Code:	----				
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		3	--	3	--	3
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Pedodontics (2)				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Credit Hour System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Ahmed Obeyah				
12	Date of Approval	2021				

LIII. Course Description:

This course prepares the students to provide comprehensive dental care to his pediatric patients in order to produce a more ideal oral structure from a metabolic, functional and aesthetic view point in these growing children. It also provides the dental student with experience in proper management, behavior modification and the ability to establish a positive attitude towards dental treatment in his young patients

LIV. Outcomes of the Course

1. KNOWLEDGE: Dental practitioners with ability to diagnose common dental problems and/or

capability to assess growth and development variations and suggest necessary referrals or actions as needed timely.

2. SKILL: Clinicians who can effectively and efficiently perform basic dental treatments in children from birth to adolescence with proper behavior management of child and the parent, as well as instill positive dental attitude with preventive modalities

LV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

a1-	Describe the levels of prevention of dental diseases, review the objectives of prevention for individual and community, describe diet history analysis and identify diet control measures
a2-	Identify the methods of fluoride application, determine the need for fissure sealant, interpret risk factors for dental caries

(B) Intellectual Skills

After participating in the course, students would be able to:

b1-	Appraise the indications and contraindications of pulp therapy in primary teeth
b2-	Distinguish the clinical picture of fluorosis, explain manifestations of acute fluoride toxicity and evaluate the need for professional fluoride application

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Apply the basic steps of examination of pediatric dental patient and Formulate a contingent treatment plan for a pediatric dental patient
c2-	Perform successful vital pulpotomy for primary teeth
c3-	Prepare stainless steel crown for full coverage of primary teeth

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Associate in group activities to develop baseline understanding and implementation of teamwork performance strategies.
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d2- Manage time and resources.

LVI. Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Treatment of Deep Caries, Vital Pulp Exposure, and Pulpless Teeth : Part 1	Diagnostic aids in the selection of teeth for Vital pulp therapy, Evaluation of treatment prognosis before Pulp therapy, Treatment of the deep carious lesion and Vital pulp exposure	1	2
2	Treatment of Deep Caries, Vital Pulp Exposure, and Pulpless Teeth -2	Vital pulp therapy techniques, Nonvital pulp therapy technique, Various pulp capping materials and Failures after vital pulp therapy	1	2
3	Pulp therapy for young permanent teeth	Introduction, classification , anatomy of tooth and treatment	1	2
4	Crowns in Pediatric Dentistry	Introduction, Definition, Classification, Preparation of the tooth, Selection of crown size and Contouring of the crown	2	4
5	Fluorides in pediatric dentistry.	Fluoride administration, Technique of application ,Self-applied topical fluoride applications and Recommendations for use of topical fluorides	1	2
6	Dental material in pediatric dentistry	Classification, indication, advantages and disadvantages	1	2
7	Midterm exam		1	2
8	Oral habits	Definition, Undesirable oral habits in children, Digital sucking and Tongue thrusting Bruxism, Mouth breathing, Lip biting and sucking habit, Cheek biting, Self-injurious habit and Nail biting	1	2
9	Mechanical and Chemotherapeutic home oral hygiene in pediatric dentistry-1	Manual toothbrush, Powered mechanical plaque removal dentifrices, Floss, Interproximal Brushes, End-tufted Brush, Disclosing agents, Tongue scrapers and Oral irrigators	1	2
10	Mechanical and	Antiseptic agents, Essential Oils, Quaternary	1	2

	oral hygiene in pediatric dentistry-2	Fluoride, sugar substitutes, Age-specific home oral hygiene instructions and in office oral hygiene programs		
11	Space Maintenance in the Primary Dentition: Part (1)	Space loss problems, Definition, Band and loop space maintainers, Crown and loop space maintainer and Lingual arch space maintainer	1	2
12	Space Maintenance in the Primary Dentition: Part (2)	Transpalatal arch appliance, Distal shoe space maintainer, Bonded space maintainer, Glass fiber reinforced composite resin space maintainer, Removable Space Maintainers and Fixed appliances for anterior space maintenance	1	2
13	Revision		2	4
14	Final Theoretical Exam		1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	<ul style="list-style-type: none"> - Basic endodontic procedures in primary teeth, Pulp therapy young permanent Dentition (Pulp capping, indirect pulp therapy, Direct pulp therapy, apexogenesis, and apexification) - Habit breaking appliances in Pediatric patients - Removable space maintainers in Pediatric patients - Management of Dental trauma in Pediatric patients in clinics - Dental Management of Children with Systemic 	1 st -14 th	42
2	Final practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

LVII. Teaching strategies of the course

Lectures
 Debate
 Dialogue and discussion
 Exercise
 Brainstorming
 Self-independent learning (problem based learning)

LVIII. Assessment Methods of the Course:

- Activities and Quiz
 - Assignments
 - Midterm exam
 - Practical exam
 - Oral exam
 - Final exam



LIX. Assignments:

No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	10
Total			10

LX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Activities and Quiz	4 th	10	10%
2	Midterm exam	8 th	20	20%
3	Final theory	16 th	40	40%
Total			70	70%

Assessment of Practical Part

1	Assignments	1 st -14 th	10	10%
2	Practical exam	15 th	10	10%
3	Oral exam	15 th	10	10%
Total			30	30%

LXI. Learning Resources:

6- Required Textbook(s) (maximum two)

1- Jeffrey A. Dean.2015:McDonald and Avery's Dentistry for the Child and Adolescent 10th Edition, Mosby

15- Essential References

- 3- Amr M. Moursi ,2020: Clinical Cases in Pediatric Dentistry (Clinical Cases (Dentistry)) 2nd Edition, Wiley-Blackwell
 4- Arthur Nowak ,2018:Pediatric Dentistry: Infancy through Adolescence 6th Edition,Saunders

4- Electronic Materials and Web Sites, etc.

<https://www.aapd.org/publications/journals/journal-of-dentistry-for-children/>

XII. Course Policies:

1	<p>Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.</p>
2	<p>Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.</p>
3	<p>Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.</p>
4	<p>Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.</p>
5	<p>Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>
6	<p>Forgery and Impersonation: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.</p>



7	Other policies: The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.
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Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery



Course Specification of Periodontology (4)

Course No.()

2021/2022



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Prepared by:

Reviewed by:

Quality Assurance

Dean:



Dr. Manal Mohammed Al-Hajri

Dr.



الجامعة الوطنية
NU

XXXI. Course Identification and General Information:						
1	Course Title:	Periodontology (4)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	3		3	
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Periodontology 3				
6	Co –requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science				
		Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

XXXII. Course Description:
The course is advanced clinical periodontics course focuses on objectives of periodontal therapy, treatment planning & treatment techniques, including preprosthetic surgery, reconstructive and plastic surgery.

XXIII. Outcomes of the Course
1. Dental graduates on par with latest technologies which would develop them as professionals as well as help them in their employment opportunities
2. Dental graduate with practical skills which would improve doctor patient relationship having positive impact on society
3. Dental graduate who is skilled to apply multidisciplinary approach for successful treatment outcome

XXIV. Intended learning outcomes (ILOs) of the course
(A) Knowledge and Understanding:
Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.
PILOs in knowledge and understanding
CILOs in knowledge and understanding

After completing this program, students would be able to:	After participating in the course, students would be able to:
A1,2,B1,2,3,4, 5	a1- Treatment strategies and how they meet periodontal health goals
A1,2,B1,2,3,4, 5	a2- Infection hazards and the key principles relating to standard infection control during surgical periodontal treatment.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CIOs in Knowledge and Understanding	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	Lectures	Exam
a1- Treatment strategies and how they meet periodontal health goals	exercise	Homework
a2- Infection hazards and the key principles relating to standard infection control during surgical periodontal treatment.	Debate	

(B) Intellectual Skills

Alignment of Course CIOs to PILOs in intellectual skills:

PILOs in intellectual skills	CIOs of intellectual skills
After completing this program, students would be able to:	After participating in the course, students would be able to:
B1- A1,2,3,4, 5,6,B1,2,3,4, 5	b1- Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment.
B2- A1,2,3,4, 5,6,B1,2,3,4, 5	b2- Construct preventive strategies at different levels according to the targeted individual and community needs
B3- A1,2,3,4, 5,6,B1,2,3,4, 5	b3- Establish a maintenance program to avoid recurrence of periodontal disease
B4- A1,2,3,4, 5,6,B1,2,3,4, 5	b4- Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CIOs in intellectual skills	Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:	Lectures	Exam

b1-	Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment.	exercise Debate	Homework
b2-	Construct preventive strategies at different levels according to the targeted individual and community needs		
B3	Establish a maintenance program to avoid recurrence of periodontal disease		
b4-	Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
C1-	B1,2,3,4,5,c1,2,3,4,5,6	c1-	Managing of any periodontal emergencies including acute conditions which may present in dental practice
C2-	B1,2,3,4,5,c1,2,3,4,5,6	c2-	Examining the periodontium, establishing a diagnosis and prognosis and applying treatment plan.
C3-	B1,2,3,4,5,c1,2,3,4,5,6	c3-	Examining and monitoring the oral soft and hard tissues to make the proper diagnosis of various diseases and abnormalities of periodontal tissues
C4-	B1,2,3,4,5,c1,2,3,4,5,6	c4-	Oral hygiene instruction and motivation which consider one of the most critical and difficult elements of long-term success in periodontal therapy.
	B1,2,3,4,5,c1,2,3,4,5,6	c5-	Performing a range of clinical procedures which are within the scope of general dentistry, including: a). Applications of preventive procedures. b). Application of different local anesthetic techniques. c). Diagnosis of commonly encountered oral lesions. d). Performance of the necessary radiographs
	B1,2,3,4,5,c1,2,3,4,5,6	c6-	Applying current infection control guidelines.

	B1,2,3,4,5,c1,2,3,4,5,6	c7-	Evaluating and monitoring the outcome of treatment using specific indices.
	B1,2,3,4,5,c1,2,3,4,5,6	c8-	Undertaking minor Periodontal surgery indices.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
c1-	Managing of any periodontal emergencies including acute conditions which may present in dental practice		
c2-	Examining the periodontium, establishing a diagnosis and prognosis and applying treatment plan.		
c3-	Examining and monitoring the oral soft and hard tissues to make the proper diagnosis of various diseases and abnormalities of periodontal tissues		
c4-	Oral hygiene instruction and motivation which consider one of the most critical and difficult elements of long-term success in periodontal therapy.		
c5-	Performing a range of clinical procedures which are within the scope of general dentistry, including: a). Applications of preventive procedures. b). Application of different local anesthetic techniques. c). Diagnosis of commonly encountered oral lesions. d). Performance of the necessary radiographs		
c6-	Applying current infection control guidelines.		
c7-	Evaluating and monitoring the outcome of treatment using specific indices.		
c8-	Undertaking minor Periodontal surgery indices.		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs) in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
d1	D1.2.3.4. 5.6.7.8	d1-	Work in collaboration as a member of an

d2	D1,2,3,4, 5,6,7,8	d2-	A adapt to continuous, self-development and long life learning to remain update with advancement in periodontal practice
D3	D1,2,3,4, 5,6,7,8	d3-	Communicate effectively in multicultural work environment using verbal and non -verbal means.
D4	D1,2,3,4, 5,6,7,8	d4-	Use information technologies to enrich and diversify professional experience.
d	D1,2,3,4, 5,6,7,8	d5-	Manage time, set priorities and work to prescribed time limits.
D6	D1,2,3,4, 5,6,7,8	d6-	Make decisions based on sound ethical, moral and scientific principles.
D7	D1,2,3,4, 5,6,7,8	d7-	Establish a patient–dentist relationship that allows the effective delivery of periodontal treatment and to identify patient’s expectations, desires and attitudes when considering treatment planning.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:		Lectures exercise Debate	Exam Homework
d1-	Work in collaboration as a member of an interdisciplinary team.		
d2-	A adapt to continuous, self-development and long life learning to remain update with advancement in periodontal practice		
d3-	Communicate effectively in multicultural work environment using verbal and non -verbal means.		
d4-	Use information technologies to enrich and diversify professional experience.		
d5-	Manage time, set priorities and work to prescribed time limits.		
d6-	Make decisions based on sound ethical, moral and scientific principles.		
d7-	Establish a patient–dentist relationship that allows the effective delivery of periodontal treatment and to identify patient’s expectations, desires and attitudes when considering treatment planning.		

KV. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Periodontal Surgical Phase	A1,2, B1,2, 3,4,C1,2, 3,4, 5,6, 7, 8	<ul style="list-style-type: none"> • General Principles of Periodontal Surgery • Surgical Anatomy of the Periodontium and Related Structures • Gingival Curettage. • The Gingivectomy Technique • Treatment of Gingival Enlargement • The Periodontal Flap • The Flap Technique for Pocket Therapy • Resective Osseous Surgery • Regenerative Osseous Surgery • Furcation: The Problem and Its Management • The Periodontic-Endodontic Continuum • Periodontal Plastic and Esthetic Surgery. • Recent Advances in Surgical Technology 	7	14
2	Mid-Term Exam	A1,2, B1,2, 3,4,C1,2, 3,4, 5,6		1	2
3	Oral Implantology	A1,2, B1,2, 3,4,C1,2, 3,4, 5,6	<ul style="list-style-type: none"> • Biologic Aspects of Dental Implants • Clinical Aspects of Dental Implants 	3	6

		7, 8	<ul style="list-style-type: none"> •Surgical Aspects of Dental Implants •Advanced Implant Surgery and Bone Grafting Techniques. •Prosthetic Aspects of Dental Implants •Diagnosis and Treatment of Periimplantitis 		
4	Periodontal-Restorative Interrelationships	A1,2, B1,2, 3,4,C1,2, 3,4, 5,6, 7, 8	<ul style="list-style-type: none"> •Preparation of the Periodontium for Restorative Dentistry. •Periodontal-Restorative Interrelationships 	2	4
5	Periodontal maintenance phase	A1,2, B1,2, 3,4,C1,2, 3,4, 5,6, 7, 8	<ul style="list-style-type: none"> •Supportive Periodontal Treatment •Results of Periodontal Treatment, 	2	4
6	Final Exam	A1,2, B1,2, 3,4,C1,2,	•	1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	A1,2,b2,3,c1,2,3,7,8,d1,2,3,4, 5,6	All weeks	3
2	Instruct & motivate patients about all possible Oral hygiene procedures.	A5,b2,c4,7	All weeks	3
3	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	A1b1,2,4c2,3,6,7	All weeks	3
4	Make the correct diagnosis and proper treatment plan	A1,b1,3,2c4,7	All weeks	3
5	Identify the instruments for manual root planning and polishing	A1b1,2,4c2,3,6,7	All weeks	3

6	Using of manual instruments for scaling , root planning and polishing.	A1b1,2,4c2,3,6,7	All weeks	3
7	Using ultrasonic scaling and polishing.	A1b1,2,4c2,3,6,7	8th to 14 week	3
8	Sharpening of currets and scalers by using sharpening stones.	A1b1,2,4c2,3,6,7	8th	3
9	Participate in doing one periodontal surgery or periodontal splinting under supervision.	B3,4,c6,7,8,d1,3	14 th	3
10	Maintenance of periodontal patient	B3	8th to 14 week	3
11	Practical Exam		15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming

XXXVII. Teaching Strategies of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

XXXVIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Oral presentation	During the semester as distributed by the	10	a1, a2, b1,b2,3,4 d1, d2,4,3

Total	10
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XXXIX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Mid tem exam	6 th	20	30	a1a2
2	Final tem exam	14th	40	40	a1a2,b1,2,3,4
4	Attending and assignment	1st to 14th	10	10	a1, a2, b1,b2,3,4 d1, d2,4,3
Total			70	70%	

Assessment of Practical Part					
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	All weeks	3	3%	A1,2,b2,3,c1,2,3,7,8,d1,2,3,4, 5,6
2	Instruct & motivate patients about all possible Oral hygiene procedures.	All weeks	3	3%	A5,b2,c4,7
3	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	All weeks	3	3%	A1b1,2,4c2,3,6,7
4	Make the correct diagnosis and proper treatment plan	All weeks	3	3%	A1,b1,3,2c4,7
	Identify the instruments for manual root planning and polishing	All weeks	3	3%	A1b1,2,4c2,3,6,7
6	Using of manual instruments for scaling , root planning and polishing.	All weeks	3	3%	A1b1,2,4c2,3,6,7
7	Using ultrasonic scaling and polishing.	8th to 14 week	2	2%	A1b1,2,4c2,3,6,7
8	Sharpening of currets and scalers	8 th	2	2%	A1b1.2.4c2.3.6.7

	by using sharpening stones.				
9	Participate in doing one periodontal surgery or periodontal splinting under supervision.	14 th	2	2%	B3,4,c6,7,8,d1,3
	Maintenance of periodontal patient	8th to 14 week	2	2%	B3
Total			30	30%	

XL. Learning Resources:

18- Required Textbook(s) (maximum two)

7- 1.Jan Lindhe Clinical Periodontology and Implant Dentistry , 4th edition.

19- Essential References

45- .Carranza's Clinical Periodontology edition, 13th Edition.

20- Electronic Materials and Web Sites, etc.

42- Periodontology journals

XLI. Course Policies:

1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam



	assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.

Faculty of Dentistry

Department of Dentistry



Bachelor of Dental Surgery

الجامعة الوطنية

Course Plan of Periodontology (4)

Course No. (-----)

I. Information about Faculty Member Responsible for the Course:							
Name of Faculty Member:	Dr.Manal Mohammed Al-Hajri	Office Hours					
Location& Telephone No.:	00967779212007						
E-mail:	dent.manal@yahoo.com	SAT	SUN	MON	TUE	WED	THU

2021/2022

LXII. Course Identification and General Information:						
1	Course Title:	Periodontology (4)				
2	Course Number & Code:					
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	1			3
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Periodontology 3				
6	Co -requisite:	None				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Semester based System				
10	Location of teaching the course:	Faculty of Medical Science Department of Dentistry				
11	Prepared by:	Dr. Manal Mohammed Al-Hajri				
12	Date of Approval	2020-2021				

LXIII. Course Description:

The course is advanced clinical periodontics course focuses on objectives of periodontal therapy, treatment planning & treatment techniques, including preprosthetic surgery, reconstructive and plastic surgery.

LXIV. Outcomes of the Course

1. Dental graduates on par with latest technologies which would develop them as professionals as well as help them in their employment opportunities
2. Dental graduate with practical skills which would improve doctor patient relationship having positive impact on society
3. Dental graduate who is skilled to apply multidisciplinary approach for successful treatment outcome

LXV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

a1	Treatment strategies and how they meet periodontal health goals
a2	Infection hazards and the key principles relating to standard infection control during surgical periodontal treatment.

(B) Intellectual Skills

After participating in the course, students would be able to:

b1	Prioritize patient's treatment needs and formulate appropriate treatment plane including decision making for tooth extraction versus treatment.
b2	Construct preventive strategies at different levels according to the targeted individual and community needs
b3	Establish a maintenance program to avoid recurrence of periodontal disease
b4	Select a suitable periodontal techniques or instruments to be use in a specific clinical situation according to indications.

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1	Managing of any periodontal emergencies including acute conditions which may present in dental practice
c2	Examining the periodontium, establishing a diagnosis and prognosis and applying treatment plan.
c3	Examining and monitoring the oral soft and hard tissues to make the proper diagnosis of various diseases and abnormalities of periodontal tissues
c4	Oral hygiene instruction and motivation which consider one of the most critical and difficult elements of long-term success in periodontal therapy.
c5	Performing a range of clinical procedures which are within the scope of general dentistry, including: <ul style="list-style-type: none"> a). Applications of preventive procedures. b). Application of different local anesthetic techniques. c). Diagnosis of commonly encountered oral lesions. d). Performance of the necessary radiographs.
c6	Applying current infection control guidelines.
c7	Evaluating and monitoring the outcome of treatment using specific indices.
c8	Undertaking minor Periodontal surgery

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1	Work in collaboration as a member of an interdisciplinary team.
d2	Adapt to continuous, self-development and long life learning to remain update with advancement in periodontal practice
d3	Communicate effectively in multicultural work environment using verbal and non-verbal means.
d4	Manage time, set priorities and work to prescribed time limits.
d5	Make decisions based on sound ethical, moral and scientific principles.
d6	Establish a patient–dentist relationship that allows the effective delivery of periodontal treatment and to identify patient’s expectations, desires and attitudes when considering treatment planning.

LXVI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Periodontal Surgical Phase	<ul style="list-style-type: none"> General Principles of Periodontal Surgery Surgical Anatomy of the Periodontium and Related Structures Gingival Curettage. The Gingivectomy Technique Treatment of Gingival Enlargement The Periodontal Flap The Flap Technique for Pocket Therapy Resective Osseous Surgery Regenerative Osseous Surgery Furcation: The Problem and Its Management The Periodontic-Endodontic Continuum 	7	14

		<ul style="list-style-type: none"> • Periodontal Plastic and Esthetic Surgery. • Recent Advances in Surgical Technology 		
2	Mid-Term Exam		1	2
3	Oral Implantology	<ul style="list-style-type: none"> •Biologic Aspects of Dental Implants •Clinical Aspects of Dental Implants •Surgical Aspects of Dental Implants •Advanced Implant Surgery and Bone Grafting Techniques. •Prosthetic Aspects of Dental Implants •Diagnosis and Treatment of Periimplantitis 	3	6
4	Periodontal-Restorative Interrelationships	<ul style="list-style-type: none"> •Preparation of the Periodontium for Restorative Dentistry. •Periodontal-Restorative Interrelationships 	2	4
5	Periodontal maintenance phase	<ul style="list-style-type: none"> •Supportive Periodontal Treatment •Results of Periodontal Treatment, 	2	4
6	Final Exam	•	1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Fill the case sheet for 4th level students and perform all periodontal measurement.	All weeks	3
2	Instruct & motivate patients about all possible Oral hygiene procedures.	All weeks	3
3	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	All weeks	3
4	Make the correct diagnosis and proper treatment plan	All weeks	3

	Identify the instruments for manual root planning and polishing	All weeks	3
6	Using of manual instruments for scaling , root planning and polishing.	All weeks	3
7	Using ultrasonic scaling and polishing.	8 th to 14 week	3
8	Sharpening of currets and scalers by using sharpening stones.	8 th	3
9	Participate in doing one periodontal surgery or periodontal splinting under supervision.	8 th to 14	3
10	Maintenance of periodontal patient	8th to 14	3
11	Practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

LXVII. Teaching strategies of the course

- Lectures
- exercise
- Debate
- Training
- Dialogue and discussion
- Brainstorming



LXVIII. Assessment Methods of the Course:

- Mid tem exam
- Final tem exam
- Practical exam
- Attending and assignment

LXIX. Assignments:

No.	Assignments	Week due	Mark
1	Oral presentation	During the semester as distributed by the instructor	10
Total			10

LXX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part

No.	Assessment method	Week due	Mark	Proportion of final assessment
	Final tem exam	14th	40	40%
1	Mid tem exam	4th	20	20%
3	Attending and assignment	1st to 14th	10	10%
Total			70	70%

Assessment of Practical Part

1	Fill the case sheet for 4th level students and perform all periodontal measurement.	All weeks	2	2%
2	Instruct & motivate patients about all possible Oral hygiene procedures.	All weeks	2	2%
	Examine gingival tissues (Plaque and gingival index) and perform all requested periodontal measurement in case sheet.	All weeks	2	2%
	Make the correct diagnosis and proper treatment plan	All weeks	2	2%
	Identify the instruments for manual root planning and polishing	All weeks	2	2%
	Using of manual instruments for scaling , root planning and polishing.	All weeks	2	2%
	Using ultrasonic scaling and polishing.	8 th to 14 week	2	2%
	Sharpening of currets and scalers by using sharpening stones.	8 th	2	2%
	Participate in doing one periodontal surgery or periodontal splinting under supervision.	8 th to 14	2	2%
	Maintenance of periodontal patient	8th to 14	2	2%
Total			30	30%

LXXI. Learning Resources:	
7- Required Textbook(s) (maximum two)	
	16- Jan Lindhe Clinical Periodontology and Implant Dentistry , 4th edition.
17- Essential References	
	26- Carranza's Clinical Periodontology edition, 13th Edition.
18- Electronic Materials and Web Sites, etc.	
	2- Periodontology journals

XII. Course Policies:	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects: Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancelation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Plagiarism: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: Forgery/Impersonation is an act of fraud that results in the cancelation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.



Faculty of Dentistry

Department of Dentistry

Bachelor of Dental Surgery

Course Specification of Preventive dentistry (2)



Course No. (-----)

الجامعة الوطنية
2021/2022



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Prepared by:

Reviewed by:

Quality Assurance

Dean:

Dr.

Dr.

XXVI. Course Identification and General Information:						
1	Course Title:	Preventive dentistry (2)				
2	Course Number & Code:	----				
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	--	3	--	3
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Preventive dentistry (1)				
6	Co –requisite:	Pedodontics (3)				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Credit Hour System				
10	Location of teaching the course:	Faculty of Medicine Sciences Department of Dentistry				
11	Prepared by:	Dr. AhmedObeyah				
12	Date of Approval	2021				

XXVII. Course Description:
<p>The course is designed to introduce and provide Dental students with an understanding of concepts, principles and methods of prevention in Dentistry. An emphasis is given to the causation and Epidemiology of common oral health problems such as Dental caries and Periodontal diseases. The course describes the effect of Diet/Nutrition on oral health with a focus on primary preventive measures such as Fluoride therapy, plaque control measure, Sealants and dental health programs.</p>

XVIII. Outcomes of the Course

1. Ability to conduct Oral Health Surveys in order to identify all the oral health problems affecting the community and find solutions using multi-disciplinary approach.
2. Develop appropriate person power at various levels and their effective utilization.
3. Conduct survey and use appropriate methods to impart Oral Health Education.
4. Respect patient's rights and privileges including patients right to information and right to seek a second opinion.

XXIX. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

Alignment of Course-Intended Learning Outcomes (CILOs) to Program-Intended Learning Outcomes (PILOs) in Knowledge and Understanding.

PILOs in knowledge and understanding		CILOs in knowledge and understanding	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
A1-	A4	a1-	Identify the principles, concept, method of preventive dentistry and knowing the epidemiology, etiology and prevention of dental caries and periodontal disease.
A2-	A1	a2-	Describe the methods of diagnosis of medical health and its managements

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of knowledge and understanding to teaching and assessment methods:

CILOs in Knowledge and Understanding		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
a1-	Identify the principles, concept, method of preventive dentistry and knowing the epidemiology, etiology and prevention of dental caries and periodontal disease.	<ul style="list-style-type: none"> ▪ Lectures ▪ Debate ▪ Discussions 	<ul style="list-style-type: none"> ▪ class participation ▪ Quiz ▪ Mid-term written exam. ▪ Final-term written exam.
a2-	Describe the methods of diagnosis of		<ul style="list-style-type: none"> ▪ Oral exam.

medical health and its managements	▪ Assignments
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(B) Intellectual Skills

Alignment of Course CILOs to PILOs in intellectual skills:

PILOs in intellectual skills		CILOs of intellectual skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
B1-	B3	b1-	To know about of effect of nutrition and oral health, different types of pit and fissure sealants , oral hygiene agents used and the mechanism of fluoride in preventive dentistry.
B2-	B3	b2-	Detect the needs and demands of community for oral health care

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of intellectual skills to teaching methods and assessment methods:

CILOs in intellectual skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
b1-	To know about of effect of nutrition and oral health, different types of pit and fissure sealants , oral hygiene agents used and the mechanism of fluoride in preventive dentistry.	<ul style="list-style-type: none"> ▪ Lecture ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam. ▪ Assignments
b2-	Detect the needs and demands of community for oral health care		

(C) Professional and Practical Skills

Alignment of CILOs to PILOs in professional and practical skills

PILOs in professional and practical skills		CILOs in professional and practical skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	

C1-	C1	c1-	Demonstrate hand-eye coordination skills for clinical examination, diagnosis and treatment planning of different clinical and dental pediatric procedures on models.
C2-	C4	c2-	Determine the management technique that is most appropriate for each age group as well as each behavior type

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment of learning outcomes of professional and practical skills to teaching and assessment methods:

CILOs in professional and practical skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
c1	Demonstrate hand-eye coordination skills for clinical examination, diagnosis and treatment planning of different clinical and dental pediatric procedures on models.	<ul style="list-style-type: none"> ▪ Lectures ▪ Demonstration ▪ Exercise ▪ Debate 	<ul style="list-style-type: none"> ▪ Case based scenario / Problem based learning. ▪ Assignments
c1	Determine the management technique that is most appropriate for each age group as well as each behavior type		

(D) General and Transferable Skills

Alignment of course intended-learning outcomes (CILOs) to program-intended learning outcomes (PILOs) in general and transferable skills

PILOs in general and transferable skills		CILOs in general and transferable skills	
After completing this program, students would be able to:		After participating in the course, students would be able to:	
D1-	D3	d1-	Associate in group activities to develop baseline understanding and implementation of teamwork performance strategies.
D2-	D1	d2-	Apply different preventive programs to fulfill various community needs.

Teaching and Assessment Methods for Achieving Learning Outcomes

Alignment Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:

CILOs in general and transferable skills		Teaching strategies/methods	Methods of assessment
After participating in the course, students would be able to:			
d1-	Associate in group activities to develop baseline understanding and implementation of teamwork performance strategies.	<ul style="list-style-type: none"> ▪ Lectures ▪ Dialogue and discussion ▪ Brainstorming 	<ul style="list-style-type: none"> ▪ Exam ▪ Homework
d2-	Apply different preventive programs to fulfill various community needs.		

KC. Course Content:					
1 – Course Topics/Items:					
a – Theoretical Aspect					
Order	Topic List / Units	CILOs	Sub-topic List	No. of weeks	Contact hours
1	Prevention of dental trauma	a1	definition, classification, etiology, pathogenesis, clinical features, complications and management.	1	2
2	Prevention of periodontal disease.	a1,b1	definition, classification, etiology, pathogenesis, clinical features, complications and management	1	2
3	Prevention of dental erosion	a1,b2	definition, classification, etiology, pathogenesis, clinical features, complications and management	2	4
4	Periodontal Oral Health care	a1,b2	– Periodontal Disease Risk Assessment Epidemiology of Periodontal Disease Measurement of Periodontal Disease Prevention of Periodontal Disease	1	2
5	Prevention in the aging dentition	a1,b2	– Geriatric dentistry Prevention of malocclusion	1	2

6	Prevention of Oral mucosal diseases	a2,b1,b2	definition, classification, etiology,pathogenesis, clinical features, complications and management	1	2
7	Mid-Term Theoretical Exam	a1,a2,b1,b2		1	2
8	Impairment: Preventing a disability	a2,b2	definition, classification, etiology,pathogenesis, clinical features, complications and management	1	2
9	Child abuse	a2,b2	definition, classification, etiology	1	2
10	Prevention of Musculoskeletal disorders and guidelines on radiographic screening	a1,b2	pathogenesis, clinical features, complications and management	1	2
11	Forensic dentistry	a1,a2,b1,b2	Forensic dentistry	1	2
12	Minimal intervention dentistry	a1,a2,b1,b2	definition indications types of interventions steps of application	2	4
13	oral cancer prevention	a1.a2	definition, classification, etiology, pathogenesis, clinical features, complications and management new methods for early detection materials for screening technology for oral cancer detection and diagnosis	1	2
14	Final Theoretical Exam	a1,a2,b1,b2		1	2
Number of Weeks /and Units per Semester				16	32

b - Practical Aspect

Order	Tasks/ Experiments	CILOs (symbols)	Number of Weeks	Contact Hours
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1	Recording case history, clinical examination, radiographs, diagnosis, treatment planning in children and application of topical fluorides	c1,c2,d1,d2	1 st -14 th	42
2	Final practical exam	c1,c2,d1,d2	15 th	3
Number of Weeks / Units per Semester			15	45

VI. Teaching strategies of the course

Lectures
 Debate
 Dialogue and discussion
 Exercise
 Brainstorming
 Self-independent learning (problem based learning)

XLII. Assessment Strategies of the Course:

- Activities and Quiz
- Assignments
- Midterm exam
- Final practical exam
- Oral exam
- Final exam

XLIII. Assignments:

No.	Assignments	Week due	Mark	Aligned CILOs (symbols)
1	Requirements	1 st -14 th	10	c1,c2,d1,d2
Total			10	

XLIV. Schedule of Assessment Tasks for Students During the Semester

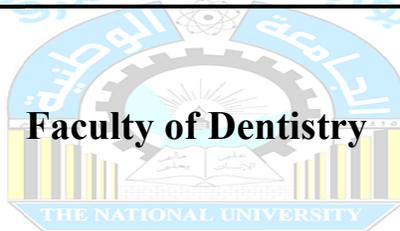
Assessment of Theoretical Part					
No.	Assessment method	Week due	Mark	Proportion of final assessment	CILOs
1	Activities and Quiz	4 th	10	10%	a1,b1,b2
2	Midterm exam	8 th	20	20%	a1,a2,b1,b2
3	Final theory	16 th	40	40%	a1,a2,b1,b2
TOTAL			70	70%	
Assessment of Practical Part					
1	Assignments	1 st -14 th	10	10%	c1,c2,d1,d2
2	Final practical exam	15 th	10	10%	c1,c2,d1,d2
3	Oral exam	15 th	10	10%	a1,a2,b1,b2
Total			30	30%	

XLV. Learning Resources:	
21- Required Textbook(s) (maximum two)	
	1-Jeffrey A. Dean,2015:McDonald and Avery's Dentistry for the Child and Adolescent 10th Edition, Mosby
22- Essential References	
	1- Wright, G.Z and Kupietzky, A. 2014, Behavior management in Dentistry for children, 2nd,Wiley Blackwell,
23- Electronic Materials and Web Sites, etc.	
	http://www.aapd.org/policies/

XI. Course Policies: (Based on the Uniform Students' By law (2007))	
1	Class Attendance: Class Attendance is mandatory. A student is considered absent and shall be banned from taking the final exam if his/her absence exceeds 25% of total classes.
2	Tardiness: A student will be considered late if he/she is not in class after 10 minutes of the start time of class.
3	Exam Attendance/Punctuality: No student shall be allowed to the exam hall after 30 minutes of the start time, and shall not leave the hall before half of the exam time has passed.
4	Assignments & Projects:



	Assignments and projects must be submitted on time. Students who delay their assignments or projects shall lose the mark allocated for the same.
5	Cheating: Cheating is an act of fraud that results in the cancellation of the student's exam or assignment. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
6	Forgery and Impersonation: Forgery/Impersonation is an act of fraud that results in the cancellation of the student's exam, assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.



الجامعة الوطنية
Department of Dentistry
NU

Bachelor of Dental Surgery

Course Plan (Syllabus) of Preventive dentistry (2)

Course No. (.....)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member:		Office Hours					
Location & Telephone No.:	----						
E-mail:	--@--.--	SAT	SUN	MON	TUE	WED	THU

2021/2022

LXXII. Course Identification and General Information:

1	Course Title:	Preventive dentistry (2)				
2	Course Number & Code:	----				
3	Credit hours:	C.H				Total
		Th.	Pr.	Tr.	Seminar.	
		2	--	3	--	3
4	Study level/ semester at which this course is offered:	5 th Level / 2 nd Semester				
5	Prerequisites:	Preventive dentistry (1)				
6	Co –requisite:	Pedodontics (3)				
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery				
8	Language of teaching the course:	English				
9	Study System:	Credit Hour System				
10	Location of teaching the course:	Faculty of Medicine Sciences				
		Department of Dentistry				
11	Prepared by:	Dr. Ahmed Obeyah				
12	Date of Approval	2021				

LXXIII. Course Description:

The course is designed to introduce and provide Dental students with an understanding of concepts, principles and methods of prevention in Dentistry. An emphasis is given to the causation and Epidemiology of common oral health problems such as Dental caries and Periodontal diseases. The course describes the effect of Diet/Nutrition on oral health with a focus on primary preventive measures such as Fluoride therapy, plaque control measure, Sealants and dental health programs.

LXXIV. Outcomes of the Course

1. Ability to conduct Oral Health Surveys in order to identify all the oral health problems affecting the community and find solutions using multi-disciplinary approach.
2. Develop appropriate person power at various levels and their effective utilization.
3. Conduct survey and use appropriate methods to impart Oral Health Education.
4. Respect patient's rights and privileges including patients right to information and right to seek a second opinion.

LXXV. Intended learning outcomes (ILOs) of the course

(A) Knowledge and Understanding:

After participating in the course, students would be able to:

- | | |
|-----|--|
| a1- | Identify the principles, concept, method of preventive dentistry and knowing the epidemiology, etiology and prevention of dental caries and periodontal disease. |
| a2- | Describe the methods of diagnosis of medical health and its managements. |

(B) Intellectual Skills

After participating in the course, students would be able to:

- | | |
|-----|---|
| b1- | To know about of effect of nutrition and oral health, different types of pit and fissure sealants , oral hygiene agents used and the mechanism of fluoride in preventive dentistry. |
| b2- | Detect the needs and demands of community for oral health care. |

(C) Professional and Practical Skills

After participating in the course, students would be able to:

c1-	Demonstrate hand-eye coordination skills for clinical examination, diagnosis and treatment planning of different clinical and dental pediatric procedures on models.
c2-	Determine the management technique that is most appropriate for each age group as well as each behavior type.

(D) General and Transferable Skills

After participating in the course, students would be able to:

d1-	Associate in group activities to develop baseline understanding and implementation of teamwork performance strategies.
d2-	Apply different preventive programs to fulfill various community needs.

LXXVI. Course Content:

1 – Course Topics/Items:

a – Theoretical Aspect

Order	Topic List / Units	Sub-topic List	No. of weeks	Contact hours
1	Prevention of dental trauma	definition, classification, etiology, pathogenesis, clinical features, complications and management.	1	2
2	Prevention of periodontal disease.	definition, classification, etiology, pathogenesis, clinical features, complications and management	1	2
3	Prevention of dental erosion	definition, classification, etiology, pathogenesis, clinical features, complications and management	2	4
4	Periodontal Oral Health care	– Periodontal Disease Risk Assessment Epidemiology of Periodontal Disease Measurement of Periodontal Disease Prevention of Periodontal Disease	1	2
5	Prevention in the aging dentition	– Geriatric dentistry Prevention of malocclusion	1	2
6	Prevention of Oral mucosal diseases	definition, classification, etiology, pathogenesis, clinical features, complications and	1	2

		management		
7	Mid-Term Theoretical Exam		1	2
8	Impairment: Preventing a disability	definition, classification, etiology, pathogenesis, clinical features, complications and management	1	2
9	Child abuse	definition, classification, etiology	1	2
10	Prevention of Musculoskeletal disorders and guidelines on radiographic screening	pathogenesis, clinical features, complications and management	1	2
11	Forensic dentistry	Forensic dentistry	1	2
12	Minimal intervention dentistry	definition indications types of interventions steps of application	2	4
13	oral cancer prevention	definition, classification, etiology, pathogenesis, clinical features, complications and management new methods for early detection materials for screening technology for oral cancer detection and diagnosis	1	2
14	Final Theoretical Exam		1	2
Number of Weeks /and Units per Semester			16	32

b - Practical Aspect			
Order	Tasks/ Experiments	Number of Weeks	Contact Hours
1	Recording case history, clinical examination, radiographs, diagnosis, treatment planning in children and application of topical fluorides	1 st -14 th	42
2	Final practical exam	15 th	3
Number of Weeks / Units per Semester		15	45

LXXVII. Teaching strategies of the course

Lectures
 Debate
 Dialogue and discussion
 Exercise
 Brainstorming
 Self-independent learning (problem based learning)

LXXVIII. Assessment Methods of the Course:

Activities and Quiz
 Assignments
 Midterm exam
 Final practical exam
 Oral exam
 Final exam



LXXIX. Assignments:

No.	Assignments	Week due	Mark
1	Requirements	1 st -14 th	10
Total			10

LXXX. Schedule of Assessment Tasks for Students During the Semester

Assessment of Theoretical Part				
No.	Assessment method	Week due	Mark	Proportion of final assessment
1	Activities and Quiz	4 th	10	10%
2	Midterm exam	8 th	20	20%
3	Final theory	16 th	40	40%
Total			70	70%
Assessment of Practical Part				

1	Assignments	1 st -14 th	10	10%
2	Final practical exam	15 th	10	10%
3	Oral exam	15 th	10	10%
Total			30	30%

LXXXI. Learning Resources:

8- Required Textbook(s) (maximum two)

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19- Essential References

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<http://www.aapd.org/policies/>

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	assignment or project. If it takes place in a final exam, the penalties stipulated for in the Uniform Students' Bylaw (2007) shall apply.
7	Other policies: The University official regulations in force will be strictly observed and students shall comply with all rules and regulations of the examination set by the Department, Faculty and University Administration.



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