

Quality Assurance Unit



وزارة التعليم العالي والبحث العلمي جامعة صنعاء جامعة طب الاسنان وحدة ضمان الجودة

Department: Restorative and Esthetic Dentistry

Title of the Program: Bachelor of Dental Surgery BDS

Course Specification of Operative Dentistry (2)

	I. Course Identification and General Information:							
1	Course Title:	Operative	Operative Dentistry (2)					
2	Course Code & Number:	DBCD3101						
			С.Н			Total		
3	Credit hours:	Lecture	Seminar/Tutorial	Practical	Training	Total		
		1		2		2		
4	Study level/ semester at which this course is offered:	3 rd Level / 1 st Semester						
5	Pre –requisite (if any):	Operative Dentistry 1 Dental material II Dental morphology II						
6	Co –requisite (if any):	None						
7	Program (s) in which the course is offered:	Bachelor of Dental Surgery (B.D.S).						
8	Teaching Language:	English						
9	Study System:	Semester based System						
10	Prepared by:	Prof. Dr. Ibrahim Z. Al-Shami						
11	Approval date:	2023/2024						
12	Approved by:	Prof. Dr A	Abdulwahab Al-khola	ni & Dr. Mu	ıneer Al-azz	ani		

II. Course Description:

This is the second pre-clinical operative dentistry course provided during the first semester of the third year. This course representing different preparation and restorative procedures in operative dentistry preparing the students for the clinical courses, the lecture courses in operative dentistry II together with a complementary laboratory course are designed and directed to provide students with knowledge and skills in the diagnosis and treatment of carious lesions and other types of tooth structure defects, students will be trained to prepare anterior and posterior compound & complex cavities and restore with different restorative techniques and materials like Amalgam, resin composite and modified glass ionomer cement, apply liners and bases, finish and polish restorations 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.

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Prof. Dr. Ibrahim Z.
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Sana'a University
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وزارة التعليم العالي والبحث العلمي جارة التعليم العالي والبحث العلمي جامعة صنعاء كلية طب الاسنان وحدة ضمان الجودة

]	III. Course Intended learning outcomes (CILOs) of the course	Referenced PILOs				
Know	ledge and Understanding					
By the	end of this course, the student will be able to:					
a.1	Identify the cavity preparation and restoration for amalgam and resin composite materials	A4				
a.2	Describe the classification, diagnosis, clinical features and sequelae of dental caries.	A5				
Intelle	ectual Skills:					
By the	end of this course, the student will be able to					
b.1	Distinguish between the uses of different dental materials in different clinical situations.	B5				
b.2	b.2 Distinguish dental caries and compare between acute and chronic decay. B1					
Profe	ssional and Practical Skills					
By the	end of this course, the student will be able to					
c.1	Practice different cavity designs for amalgam and composite filling materials with proper finishing and polishing of restorations on artificial teeth					
c.2	Apply cement, base materials in different cavities.	C4				
	ferable (General) Skills:					
By the	By the end of this course, the student will be able to					
d.1	Communicate with dental assistants and colleagues easily	D3				
d.2	Utilizes modern sources as tools getting information for self-learning and self-evaluation.	D2				
d.3	Manage time during lab work	D4				

(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching and Assessment Strategies:						
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies				
Identify the cavity preparation and restoration for amalgam and resin composite materials Describe the classification, diagnosis, clinical features and sequelae of dental caries.	Lecture Demonstrations Supervision Instruction	Written Exams, Oral discussion Quizzes				
()	(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching and Assessment Strategies:					
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies				
Distinguish between the uses of different dental materials in different clinical situations.	Lectures Demonstrations	Written Exams, Oral discussion				

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				Emad	



Manage time during lab work.

Prof. Dr. Ibrahim Z.

Al-Shami

Prof. Dr. Abdulwahab I.

Al-kholani



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Continuous Assessment

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Distinguish dental caries and compare between acute and chronic decay.	Case present	ation	Quizzes
(C) Alignment Course Intended Teach	Learning Outcomes of I ing and Assessment Str		d Practical Skills to
Course Intended Learning Outco	mes Teaching	strategies	Assessment Strategies
Practice different cavity designs for amaly and composite filling materials with proper finishing and polishing of restorations on artificial teeth Apply cement, base materials in different	Practical Demon	l Sessions strations rvision uction	Direct observation Oral discussion Practical Exams Semester work
(D) Alignment Course Inter Strate	nded Learning Outcome gies and Assessment Str		ble Skills to Teaching
Course Intended Learning Outco	omes Teaching	strategies	Assessment Strategies
Communicate with dental assistants and colleagues easily Utilizes modern sources getting informati self-learning and self-evaluation.	on for Practical Super	vision	Semester work (Practical Requirements) Observation

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Instruction

Faculty

Dr Hasan

Alshamahy

Center & Quality

Assurance

Ass. Prof. Huda Al-

Emad

University

Dr. Al-Qassim

Mohammed Abbas

First: Theoretical Aspects								
Order	Units/To	-	Learning Outcomes	Su	btopics List		Number of Weeks	contact hours
1	None Ca Lesio		a2, b1, b2,	 Definitions a Causes Signs and sy Bruxism: aet presentation Diagnosis, tr of tooth surfa 	mptoms iology and cl		1 week	1
2	Comp Amalg		c1, d2, d3	IntroductionPin less-retapreparations	ined complex	c amalgam	1 week	1
Pren	ared by	Head o	of Department	Vice Dean for Quality	Dean of the	Academic Development	Rector	of Sana'a

Assurance Affairs

Dr. Muneer Al-Azzani

Ministry of Higher Education and Scientific Research Sana'a University Faculty of Dentistry Quality Assurance Unit



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	Restoration		- The additional means of retention:		
	Resionation		- retentive grooves, amalgam pins,		
			slots, steps, circumferential slots.		
			Restorative Technique		
			-		
			- Cusps capping		
			 Intermediary base materials 		
			- Cavity liners, cement bases		
			and varnishes.		
	Pulp Protection		- Definitions and material		
	therapy	a1 a2 h1	properties		
3		a1, a2, b1, b2, c2, d3	 Indications for Insulating materials placed under amalgam and 	1 week	1
		,,	composite		
			 advantages and disadvantages, 		
			Manipulation		
			Pulp-dentin complex reaction to		
			cavity liners and varnishes		
			- History, Composition		
4	Composite		- Classification		
4	Resin Materials	a2,a3, b2,	 Indication, Contraindication, 	1 week	1
			Advantages, Disadvantages		
	Principles of				
	Tooth		- Class III, IV and V		
5	preparation for	a3, b2, c1,	– Definitions	1 week	1
	Composite		Tooth preparation		
	Restoration		- Different designs		
			- Class III, IV, V restorations		
			Dentine adhesive systems		
			- Etching,		
	Composite	a2,a3, b2,	_		
6	Cavity	e3,d3	- Bonding (to enamel and dentin)	2 weeks	2
	Restoration	-	- Restorative Procedures:		
			- Preparation of operating site		
			- Shade selection and Pulp		
			Protection		
			<u> </u>	<u> </u>	

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Rector of Sana'a University Dr. Al-Qassim Mohammed Abbas

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فَشْ فَهُ رُدَى فَهِ مَدَدَ فَهُ وَ الْعِمْدَ وَ الْعِمْدِ وَ الْعِمْدِ الْعَلْمِي وَالْبِحْثُ الْعَلْمِي جَامِعة صنعاء كلية طب الاسنان وحدة ضمان الجودة

			- Manipulation of composite resin		_
			and insertion into the cavity:		
			- incremental placement, curing and		
			finishing		
			misinig		
7	Midterm Theoretical Examination	a1, a2, a3, b2, d2	MCQs and essay questions	1 week	1
8	Direct Posterior Composite Restorations	a1, b2, c1, d3	 Indication and contraindications advantages, and disadvantages Preparation types and Restorative Procedures: Class I, and Class II The stamp technique 	1 week	1
9	Glass ionomer restorative material	a1, b2, c1, d3	 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	1
10	Finishing and Polishing of Restorations	a2, b2, c3, d3	DefinitionObjectivesInstrumentations and Techniques	1 week	1
11	Indirect Restorations	a3, b2, c1, d3	 Definitions Inlay and Onlay Classification Materials Indications and contraindications advantages and disadvantages. Principles of Tooth Preparation for Indirect Restorations 	1 week	1

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الفَّهُ وَرُدِيَ الْمُعِندِيَ الْعَلمي وزارة التعليم العالمي والبحث العلمي جامعة صنعاء كلية طب الاسنان وحدة ضمان الجودة

12	Tooth Preparation for Cast Gold Inlay and only Restorations	a3, b2, c1, d3	 Indications for cast gold inlay, onlay Steps of preparation for Cast Gold Inlay and Onlay Restoration Difference between amalgam and inlay preparation. 	1 week	1
13	Provisional Restoration	a3, b2, c2, d3	 Definition Objectives and Requirements Provisional restoration materials Techniques 	1 week	1
14	Review	a1, a2, a3, b1, b2	- All Previews topics	1 week	1
15	Final Theoretical Examination	a1, a2, a3, b2, d2	MCQs and essay questions	1 week	1
	Number of Weeks /and Units Per Semester				

Second: Practical/Tutorial/Clinical Aspects Write up practical/tutorial/clinical topics						
No.	Practical/Tutorial/Clinical topics	No. of Weeks	Contact Hours	CILOs		
1	 Introduction to the Course, Distribution of Instruments Mounting of Plastic Teeth Review and Practice: Class II (MOD) Amalgam Cavity Preparation on lower molars. 	1 st	2	b1, b2, c1, d3		
2	Demonstration and Practice: Class II (MOD) Amalgam Cavity Preparation on lower and upper molars (MO-OL)	2 nd	2	b1, c1, d3		
3	Demonstration and Practice: Class II Amalgam Cavity Preparation on	3 rd	2	b1, c1, d3		

			5 (1)	Academic	D
Prepared by	Head of Department	Vice Dean for Quality	Dean of the Faculty	Development Center & Quality	Rector of Sana'a University
Prof. Dr. Ibrahim Z.	Prof. Dr. Abdulwahab I.	Assurance Affairs	Dr Hasan	Assurance	Dr. Al-Qassim
Al-Shami	Al-kholani	Dr. Muneer Al-Azzani	Alshamahy	Ass. Prof. Huda Al-	Mohammed Abbas
				Emad	

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	lower and upper premolars			
4	Demonstration and Practice: - liner and base, - Matrix Formation, & Placement - Amalgam Restorations on all Class II cavities	4 th & 5 th	4	b1, b2, c1, c2, c3, d3
5	Demonstration and Practice: Finishing and Polishing of various Amalgam Restorations - Class I, II and Class V	$6^{ m th}$	2	b2, c1, c2, c3, d3
6	Demonstration and Practice: Cavity Preparation and restorations for Composite Resin on upper and lower centrals and laterals, Class III Lingual Approach	7 th & 8 th	4	b2, c1, c2, c3, d3
7	Demonstration and Practice: Cavity Preparations and restorations Class IV for Composite Resin on upper anterior teeth (Traumatic) using (silicone keys)	9 th	2	b2, c1, c2, c3, d3
8	Demonstration and Practice: Preparation and restorations for Composite Resin on anterior and posterior teeth, Class V Facial Cavities	$10^{ m th}$	2	b2, c1, c2, c3, d3
9	Demonstration and Practice: Preparation and restorations for Composite Resin on posterior teeth, class I & class II	11 th & 12 th	4	b2, c1, c2, c3, d3
10	Demonstration and Practice: Finishing and Polishing of Composite Resin Restorations	13 th	2	b2, c2, c3, d3
11	Final Practical Exam	14 th	2	b1, b2, c1, c2, c3, d3
Tota	l number of weeks and hours	14	28	

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V. Teaching strategies of the course:

- Lectures
- Demonstrations
- Practical Sessions
- Self-Learning

	VI. Assignments:							
No.	Assignments	Aligned CILOs (symbols)	Week Due	Mark				
1	Semester work: - practical laboratory work and Requirements	b1, b2, c1, c2, c3, d3	Week 1 to week 13	10				
	Total							

	VII. Learning Assessment								
No.	Assessment Tasks	Week due	Mark	Proportion of Final Assessment	Aligned CILOs				
1	Assignments	2 - 13	10	10 %	b1, b2, c1, c2, c3, d3				
2	Quiz	2 - 14	10	10 %	a1, a2, a3, b1, b2				
3	Midterm Theoretical Exam	8	20	20 %	a1, a2. a3, b2, d2				
4	Final Practical Exam	14	20	20 %	b1, b2, c1, c2, c3, d3				
5	Final Theoretical Exam	16	40	40 %	a1, a2. a3, b2, d2				
	Total		100	100%					

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VIII. Learning Resources:

1- Required Textbook(s).

- 1. Theodore M. Roberson, Harald Heymann, Edward J. Swift, 2012, Sturdivant's Art and Science of Operative Dentistry, 6th Edition, Mosby.
- 2. James B. Summit, J. William Robbins, Richard S. Schwartz, 2006: Fundamentals of operative dentistry: a contemporary approach. 3rd edition, Quintessence.

2- 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

3- Electronic Materials and Web Sites etc.

Websites:

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

	IX. Course Policies:						
1	(Class Attendance) Attendance of students is taken at beginning of lecture time The allowed absence percentage is 20% without excuse and 30% with acceptable excuse, - When student has been absent for more than 30% of course lectures without acceptable excuse, the student will be prohibited from entering subject the final						
2	(Tardy) If the student came late to class for 15 minutes, he/she is registered absent but he/she allowed to enter the hall to listen lecture presentation.						
3	(Exam Attendance/Punctuality): According to examination roles or policies: - If the student is absent in the year works exams, the decision is referred to the teacher whether to allow or to reject according to the offered excuse If the student is absent in the final exam with an acceptable excuse, the student would be attended the re-sit exam as 1st trial If the student is absent in the final exam without an acceptable excuse, the student						

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would be attended re-sit exam as 2nd trial. (Assignments & Projects): According to examination roles or policies: - The student should be attended the final exam at certain 4 time and according to the accredited exam table. - If the student came late after 15 minutes from the exam beginning, the student would be to attend the exam with oral monition of never repeat. - In case of the repeat, the student prevented from entrance and considered absent. (Cheating): According to examination roles or policies: - If the student cheated in the year works exams of the course, the student prohibited from entrance the final exam and given zero degree with prevented him from entrance the re-sit exam of this course. - If the student cheated in the final exam of the course, the student prohibited from the cheated course and the followed course and given zero degree in both courses, and prevented him from entrance the re-sit exams of them. - If the cheated course is the last at 5 the exam table, the student prohibited from the cheated course and the past course and given zero degree in both courses, and prevented him from entrance the re-sit exams of them. - If the cheating is discovered in subsequent time, the cheated student didn't escape from payment and ordinance is referred to precision committee and the final decision is referred to the collage council. - If the cheating is discovered during the correcting the answered books, the corrector has written a report to the chairman of concerned department for taking available procedure. - The faculty council is able to segregate the student for one academic year in 2nd cheating trial and final segregation from the university after accreditation of university council in 3rd cheating trial. (Plagiarism): According to examination roles or policies: Plagiarism means a student plagiarizes the personality of another student. Plagiarism for exam purpose: 1- Both students are prohibited from the plagiarized 6 academic year and all results of them are rejected with prohibition of them from entrance the re-sit exam. 2- If the plagiarized student is from outside the university, the student is referred to the university police. -Plagiarism for other purposes: 1- Both students are warned as segregation. plagiarized student is from outside the university, the student is referred to the university police. (Other policies): 7 The student should be followed the instructions for the exam entrance. - The student should be followed all systems & laws of the university.



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Course Plan of Operative Dentistry (2)

I. Information of Faculty Members responsible for the course:							
Name of Faculty Member	Prof. Dr. Ibrahim Z. Al-Shami Prof. Dr. Abdulwahab I. Al-kholani	Office Hours					
Location & Telephone No.	Sanaa 777980568 Sanaa 777775025	SAT	SUN	MON	TUE	WED	THU
E-mail	ibrahimzaed@yahoo.com						

II.	II. Course Identification and General Information:								
1-	Course Title:	Operativ	ve dentistry	(2)					
2-	Course Number & Code:	DBCD3	101						
			C.l	H		Total			
3-	Credit hours:	Th.	Seminar	Pr.	F. Tr.	Total			
		1		2		2			
4-	Study level/year at which this course is offered:	3 rd Level / 1 st Semester							
5-	Pre –requisite (if any):	Operative Dentistry 1 Dental material II Dental morphology II							
6-	Co –requisite (if any):	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-	System of Study:	Semester based System							
10-	Location of teaching the course:	Faculty	of Dentistry	7	_	_			

III. Course Description:

This is the second pre-clinical operative dentistry course provided during the first semester of the third year. This course representing different preparation and restorative procedures in operative dentistry preparing the students for the clinical courses. the lecture courses in operative dentistry II together with a complementary laboratory course are designed and directed to provide students with knowledge and skills in the diagnosis and treatment of carious lesions and other types of tooth structure defects, students will be trained to prepare anterior and posterior compound & complex cavities and restore

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with different restorative techniques and materials like Amalgam, resin composite and modified glass ionomer cement, apply liners and bases, finish and polish restorations 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.

IV	IV. Intended learning outcomes (ILOs) of the course					
After completing this course, students will be able to:						
a.1	Identify the cavity preparation and restoration for amalgam and resin composite materials					
a.2	Describe the classification, diagnosis, clinical features and sequelae of dental caries.					
b.1	Distinguish between the uses of different dental materials in different clinical situations.					
b.2	Distinguish dental caries and compare between acute and chronic decay.					
c.1	Practice different cavity designs for amalgam and composite filling materials with proper finishing and polishing of restorations on artificial teeth					
c.2	Apply cement, base materials in different cavities.					
d.1	Communicate with dental assistants and colleagues easily					
d.2	Utilizes modern sources as tools getting information for self-learning and self-evaluation.					
d3	Manage time during lab work					

V. Course Content:

A. Theoretical Aspect:

	A. Theoretical Aspect.							
Order	Units/	Topics List	Sub-Topics List				Number of Weeks	
1	None Ca	aries Lesions	 Definitions and types Causes Signs and symptoms Bruxism: aetiology and clinical presentation Diagnosis, treatment and prevention of tooth surface loss 			1 st	1	
2	-	ex Amalgam storation	_	 Introduction Pin less-retained complex amalgam preparations, 			2 nd	1
Prof. Dr.	Prepared by Head of Departm Prof. Dr. Ibrahim Z. Prof. Dr. Abdulwah Al-Shami Al-kholani			Vice Dean for Quality Assurance Affairs Dr. Muneer Al-Azzani	Dean of the Faculty Dr Hasan Alshamahy	Academic Developmen Center & Qual Assurance Ass. Prof. Huda Emad	ity l Dr	tor of Sana'a Jniversity . Al-Qassim ammed Abbas

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		- The additional means of retention:		
		- retentive grooves, amalgam pins,		
		slots, steps, circumferential slots.		
		Restorative Technique Cusps capping		
		Intermediary base materials		
3	Pulp Protection therapy	 Cavity liners, cement bases and varnishes. Definitions and material properties Indications for Insulating materials placed under amalgam and composite advantages and disadvantages, Manipulation 	3rd	1
		 Pulp-dentin complex reaction to cavity liners and varnishes 		
4	Composite Resin Materials	 History, Composition Classification Indication, Contraindication, Advantages, Disadvantages 	4 th	1
	Principles of Tooth	- Class III, IV and V		
5	preparation for Composite Restoration	- Definitions	5 th	1
3		Tooth preparation		1
		Different designs		
		Class III, IV, V restorations		
		Dentine adhesive systems		
		·		
		- Etching,		
	Composite Cavity	- Bonding (to enamel and dentin).	(th. 1. 7th	2
6	Restoration	Restorative Procedures:	$6^{\text{th}} + 7^{\text{th}}$	2
		- Preparation of operating site		
		- Shade selection and Pulp protection		
		- Manipulation of composite resin		
		and insertion into the cavity		
		and motival into the early		

Prepare Prof. Dr. Ib Al-Sh:	rahim Z.	Head of Department Prof. Dr. Abdulwahab I. Al-kholani	Vice Dean for Quality Assurance Affairs Dr. Muneer Al-Azzani	Dean of the Faculty Dr Hasan Alshamahy	Academic Development Center & Quality Assurance Ass. Prof. Huda Al- Emad	Rector of Sana'a University Dr. Al-Qassim Mohammed Abbas	
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فَ هُرُوتِ مَ الْمِمْتَ مِنْ فَيْ الْمُعْمَى وَزَارة التعليم العالمي والبحث العلمي جامعة صنعاء كلية طب الاسنان وحدة ضمان الجودة

B Direct Posterior Composite Restorations Glass ionomer restorative material Direct Posterior Composite Restorations - advantages, and disadvantages - Preparation types and Restorative Procedures: Class I, and Class II - The stamp technique - Conventional, modified, Compomers and smart materials - Types	1
Glass ionomer and smart materials	
restorative material 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
Finishing and Polishing of Restorations - Definition - Objectives - Instrumentations and Techniques	1
Indirect Restorations - Definitions - Inlay and Onlay - Classification - Materials - Indications and contraindications - advantages and disadvantages Principles of Tooth Preparation for Indirect Restorations	1
Tooth Preparation for Cast Gold Inlay and only Restorations - Indications for cast gold inlay, onlay - Steps of preparation for Cast Gold Inlay and Onlay Restoration - Difference between amalgam and inlay preparation.	1
Provisional – Definition 14 th	1

				Academic	
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Ministry of Higher Education and Scientific Research Sana'a University Faculty of Dentistry Quality Assurance Unit



الفَّهُ مُرْدَةِ الْمُعِندِّ الْعَلمي وزارة التعليم العالمي والبحث العلمي جامعة صنعاء كلية طب الاسنان وحدة ضمان الجودة

	Restoration	 Objectives and Requirements 		
		 Provisional restoration materials 		
		- Techniques		
	Review	All Previews topics	15 th	1
	Final Theoretical Examination	MCQs and essay questions	16 th	1
	16	16		

	B. Practical//Clinical Aspects					
No.	Practical//Clinical topics	No. of Weeks	Contact Hours			
1	 Introduction to the Course, Distribution of Instruments Mounting of Plastic Teeth Review and Practice: Class II (MOD) Amalgam Cavity Preparation on lower molars. 	1 st	2			
2	Demonstration and Practice: Class II (MOD) Amalgam Cavity Preparation on lower and upper molars (MO-OL)	2 nd	4			
3	Demonstration and Practice: Class II Amalgam Cavity Preparation on lower and upper premolars	3 rd	2			
4	Demonstration and Practice: - liner and base, - Matrix Formation, & Placement - Amalgam Restorations on all Class II cavities	4 th & 5 th	4			
5	Demonstration and Practice: Finishing and Polishing of various Amalgam Restorations - Class I, II and Class V	6 th	2			
6	Demonstration and Practice: Cavity Preparation and restorations for Composite Resin on upper and lower centrals and laterals,	7 th & 8 th	4			

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	Class III Lingual Approach		
7	Demonstration and Practice: Cavity Preparations and restorations Class IV for Composite Resin on upper anterior teeth (Traumatic) using (silicone keys)	9 th	2
8	Demonstration and Practice: Preparation and restorations for Composite Resin on anterior and posterior teeth, Class V Facial Cavities	$10^{ m th}$	2
9	Demonstration and Practice: Preparation and restorations for Composite Resin on posterior teeth, class I & class II	11 th & 12 th	4
10	Demonstration and Practice: Finishing and Polishing of Composite Resin Restorations	13 th	2
11	Final Practical Exam	14 th	2
	Total number of weeks and hours	14	28

VI. Teaching strategies of the course:

- Lectures
- Demonstrations
- Practical Sessions
- Self-Learning

VII. Assignments:						
No	Assignments	Week Due	Mark	Proportion of Final Assessment		
1	Semester work: - practical laboratory work and Requirements	Week 1 to week 13	10	10%		
	Total		10	10%		

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لطفحؤرت كالمحنت

III. Learning Assessment

No.	Assessment Tasks	Week due	Mark	Proportion of Final Assessment
1	Assignments	2 - 13	10	10 %
2	Quiz	2 - 14	10	10 %
3	Midterm Theoretical Exam	8	20	20 %
4	Final Practical Exam	14	20	20 %
5	Final Theoretical Exam	16	40	40 %
	Total		100	100%

IX. Learning Resources:

1- Required Textbook(s).

- 1. 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
- 3. operative dentistry: a contemporary approach. 3rd edition, Quintessence...

2- 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

3- Electronic Materials and Web Sites etc.

Websites:

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

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X. Course Policies:

Class Attendance:

- Attendance of students is taken at beginning of lecture time.
- After 15 minutes of lecture time the student is considered absent.
- When student has been absent for more than 25% of course contents, the student should be prohibited for entrance the final exam.

Tardy:

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- If the student came late to class for 15 minutes, he/she is registered absent but he/she allowed to enter the hall to listen lecture presentation.

Exam Attendance/Punctuality:

- -According to examination roles or policies:
- If the student is absent in the year works exams, the decision is referred to the teacher whether to allow or to reject according to the offered excuse.
- If the student is absent in the final exam with an acceptable excuse, the student would be attended the re-sit exam as 1st trial.
- If the student is absent in the final exam without an acceptable excuse, the student would be attended re-sit exam as 2^{nd} trial.

Assignments & Projects:

- -- According to examination roles or policies:
- The student should be attended the final exam at certain time and according to the accredited exam table.
- If the student came late after 15 minutes from the exam beginning, the student would be to attend the exam with oral monition of never repeat.
- In case of the repeat, the student prevented from entrance and considered absent.

Cheating:

According to examination roles or policies:

- If the student cheated in the year works exams of the course, the student prohibited from entrance the final exam and given zero degree with prevented him from entrance the re-sit exam of this course.
- If the student cheated in the final exam of the course, the student prohibited from the cheated course and the followed course and given zero degree in both courses, and prevented him from entrance the re-sit exams of them.
- If the cheated course is the last at the exam table, the student prohibited from the cheated course and the past course and given zero degree in both courses, and prevented him from entrance the re-sit exams of them.
- If the cheating is discovered in subsequent time, the cheated student didn't escape from payment and ordinance is referred to precision committee and the final decision is referred to the collage council.
- If the cheating is discovered during the correcting the answered books, the corrector has written a report to the chairman of concerned department for taking available procedure.
- The faculty council is able to segregate the student for one academic year in 2nd cheating trial and final segregation from the university after accreditation of university council in 3rd cheating trial.

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Plagiarism:

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-According to examination roles or policies:

Plagiarism means a student plagiarizes the personality of another student.

Plagiarism for exam purpose:

- 1- Both students are prohibited from the plagiarized academic year and all results of them are rejected with prohibition of them from entrance the re-sit exam.
- 2- If the plagiarized student is from outside the university, the student is referred to the university police.
- -Plagiarism for other purposes:
- 1- Both students are warned as segregation.
- 2- If the plagiarized student is from outside the university, the student is referred to the university police.

Other policies:

- -The student should be followed the instructions for the exam entrance.
- The student should be followed all systems & laws of the university.