

1	Course title	Conservative Dentistry 5 – practical
2	Course number	1304544
3	Credit hours (theory, practical)	6 credit hour (practical)
	Contact hours (theory, practical)	6 hours/ week
4	Prerequisites/corequisites	
5	Program title	Doctor of Dental Surgery (DDS)
6	Program code	NA
7	Awarding institution	University of Jordan
8	Faculty	Dentistry
9	Department	Conservative Dentistry
10	Level of course	Bachelor
11	Year of study and semester (s)	Fifth year – first and second semesters 2019/2020
12	Final Qualification	DDS
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	

16. Course Coordinator:

Dr.Rada Haddadin

Office hours: Mon 12-2

Phone no.: 23552

E-mail: r.haddadin@ju.edu.jo / dr.radahaddadin@gmail.com

17. Other instructors:

Office numbers, office hours, phone numbers, and email addresses should be listed.

Prof. Awni Al-Kayed, office hours: Sun.10-12, phone: 23552, E-mail: amkayed48@hotmail.com

Prof. Amen Khraisat. Office hours: Sun. 9-11 phone: 23552, E-mail: a.khraisat@ju.edu.jo

Prof. Fouad Kadim, office hours: Sun.11-12, Tue: 12-1, phone: 23552, E-mail: fouadk@ju.edu.jo

Prof. Jamal Aqrabawi, office hours: Mon.12-2, phone:23552, E-mail:jamal58@go.com

Prof. Leena Smadi, office hours:, phone no.23552, E-mail: L.smadi@ju.edu.jo

Dr. Mohammad Al-Rababah, office hours: Wed.1:30-2:30., phone no.23552, E-mail: m.alrababah@ju.edu.jo

Dr. Susan Hattar, office hours: Mon.12-2., phone: 23552, Email: s.hattar@ju.edu.jo

Dr. Ahmad Maaita, office hours:....., phone no.23552, E-mail:ahmadmayyta@hotmail.com

Dr. Ibrahim Abu-Tahum, office hours: Wed: 12-2, phone: 23552, E-mail: ihahun@yahoo.com
Dr. Mohammad Hammad, office hours: Tues. 11-1 phone no. 23552, E-mail: m.hammad@ju.edu.jo
Dr. Alaa Sabra, office hours: Wed. 11-1, phone: 23552, E-mail: sabralolo@yahoo.com
Dr. Firas Shaini, Wed. 12-2, phone: 23552, Email: den5fjs6@hotmail.com
Dr. Ayah Al-asmal, phone: 23552, E-mail: dr.ayahalasmal@yahoo.com
Dr. Alaa Haddad, phone: 235520, E-mail: alaahaddad@yahoo.com
Dr. Rawan Abu Zaghlan, phone no. 23552, E-mail: r.abuzaghlan@ju.edu.jo

18. Course Description:

This course provides the student with the opportunity to examine and treat patients within the scope of conservative dentistry (Operative Dentistry, Endodontics and fixed Prosthodontics). This includes the diagnosis of various functional and aesthetic problems, the formulations of comprehensive treatment plans and the practice of various restorative procedures.

19. Course aims and outcomes:

A- Aims:

To achieve competence in clinical skills of conservative dentistry including diagnosis and treatment planning, prevention and management of caries and tooth wear, fixed prosthodontics and endodontics.

B- Intended Learning Outcomes (ILOs):

Upon successful completion of this course students should be able to:

- Obtain and analyse information from their patients
- Use the gathered information and diagnostic methods and tools to make a diagnosis of their patients' problem(s)
- Establish treatment plans taking into consideration their patients' wishes and concerns.
- Perform the basic procedures in restorative dentistry to a satisfactory level including simple restorations, fixed prosthodontic work and root canal treatments.
- Arrange for long-term maintenance of oral health.

20. Topic Outline and Schedule:

The topics covered in the theory part are practiced throughout the academic year.

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

Teaching methods:

- 1- Discussion of each case with the supervisor including diagnosis and treatment planning
- 2- The student observing their supervisor performing the task (or part of it)
- 3- The student performing the procedure while being instructed and supervised.

22. Evaluation Methods and Course Requirements:

This course covers an intermediate level of restorative dentistry with an emphasis on diagnosis and treatment planning, fixed prosthodontics, endodontics for molar teeth and operative dentistry.

A comprehensive multidisciplinary approach for managing dental and oral health problems is encouraged, and students are expected to present one case towards the end of the year showing their comprehensive management of a patient.

Students get one 3-hour clinic per week and another every other week. This makes an average clinical exposure of 4.5 hours per week and an average 40 clinical sessions throughout the year.

In order to pass the course, students must satisfy **ALL** the following conditions:

- 1- Complete the minimum clinical requirements
- 2- Achieve all the assigned competencies
- 3- Achieve an overall pass mark (50% or higher)

i- Clinical requirements:**a- Fixed prosthodontics:**

Students are expected to complete a minimum of two full-coverage crowns and a maximum of five.

Fixed-fixed bridges, fixed-movable bridges and cantilever bridges are permitted (subject to the supervisor's approval) and the number of abutments will count as a full coverage unit(s).

Resin-bonded bridges can be performed as an "extra" procedure but will not count as a full coverage unit.

Onlays, endocrowns and resin-bonded bridges can be performed subject to the supervisor's approval and feasibility **BUT ONLY** after having completed a minimum of three full-coverage units and having signed the three competencies related to fixed prosthodontics.

b- Endodontics:

Each student is expected to complete a minimum of two molar root canal treatment using manual instrumentation (a maximum of five)

Anterior and premolar root canal treatments are allowed (and encouraged if they are a part of the comprehensive cases) and will be given extra marks but will not count towards the minimum requirements.

Rotary instrumentation is permitted only after completing a minimum of two manual molar root canal treatment and having achieved the competency for manual instrumentation.

Vital pulp therapy will be given extra marks but is subject to strict criteria as explained below in this document.

c- Operative dentistry:

Students are expected to complete a minimum of **10** multi-surface restorations.

One-surface restorations will be given extra marks but will not count towards the minimum requirements.

However, they must be completed for all patients and not to be referred for 4th year students.

Only composite or amalgam are accepted as the restorative material. GIC, IRM and ZnOE are considered temporary restorative materials.

ii- Competencies:

Students must prove their competence in **ALL** of the following procedures:

- 1- Class II composite restoration
- 2- Full-coverage crown preparation
- 3- Provisional restoration of a full-coverage crown or bridge
- 4- Final impression of a full-coverage crown or bridge preparation
- 5- Rubber dam isolation for a molar tooth.
- 6- Access cavity for a molar tooth.
- 7- Manual canal instrumentation of a molar tooth.
- 8- Obturation of a molar tooth.

- Criteria for competencies are explained in the students' logbook.
- Each competency must be approved and signed by two instructors.
- Students **cannot** attempt any competency before having performed the procedure at least once before with a grade of **B** or higher.
- Incompetent attempts should be documented.

iii- Comprehensive case:

Each student is expected to complete and present **ONE** clinical case that involves all disciplines of restorative dentistry (Operative dentistry, Prosthodontics, Endodontics and Periodontics)

For the clinical case to be considered a comprehensive one, **ALL** the following questions must be answered with a YES.

- 1- Is the treatment plan reasonable? (Are the treatment items justifiable?)
- 2- Was the treatment plan approved **and** signed by the supervisor prior to treatment start?
- 3- Does the case require multi-disciplinary treatment? (Operative dentistry, Prosthodontics, Endodontics and Periodontics)
- 4- Was the case properly documented (photographs, radiographs, study casts... etc)?

iv- Grading system:

The grand total mark (out of 100) is divided into:

- 1- Term-time clinical work (**40 marks**): Fixed prosthodontics (15), endodontics (15) and operative dentistry (10)
- 2- Comprehensive case (**20 marks**).
- 3- Final exams (**40 marks**): OSCE (30) and a viva exam (10).

Total grade (/100)					
Term-time clinical work (/40)			Comprehensive case (/20)	Final exams (/40)	
Fixed prosthodontics (/15)	Endodontics (/15)	Operative dentistry (/10)		OSCE (/30)	Viva (/10)

The grading scale used to mark the term-time clinical work is as follows: A: 1, B: 0.8, C: 0.6, D: 0.4, F: 0

a- Fixed prosthodontics:

Each unit is given 3 points, which is then multiplied by the alphabetical grade factor achieved for that unit.

The grade for this part is the sum of the grades for all the units performed.

Example: a student has performed two crowns with a grade of A and one fixed-fixed bridge with a grade B.

Crown 1: 3 (points) x 1 (the grade factor for A) x 1 (the number of units) = 3 marks

Crown 2: 3 x 1 x 1 = 3 marks

Bridge: 3 x 0.8 x 2 = 4.8 marks

The grade for the fixed prosthodontics part = 3+3+4.8 = **10.8/ 15**

b- Endodontics:

Each molar RCT is given 3 points, which is then multiplied by the alphabetical grade factor achieved for that unit.

A premolar RCT is given 1.2 points and an anterior tooth RCT 0.6 point.

Vital pulp therapy that satisfies the assigned criteria will be given extra marks.

The grade for this part is the sum of the grades for all the units performed.

Example: a student has completed a molar RCT with a grade C, another with a grade B, a third with a grade A and two anterior RCT with a grade B

Molar 1: 3 (points) x 0.6 (the grade factor for C) x 1 (the number of molar teeth with this score) = 1.8 marks

Molar 2: 3 x 0.8 x 1 = 2.4 marks

Molar 3: 3 x 1 x 1 = 3 marks

Anterior RCT: 1.2 x 0.8 x 2 = 1.96 marks

The grade for the endodontics part = **9.16/ 15**

c- Operative dentistry:

A multi-surface restoration is given 0.5 points and a one-surface restoration is given 0.25 points

The grade for this part is the sum of points multiplied by their alphabetic grade factor

d- Comprehensive case:

The comprehensive case is marked out of 20. There are two steps to reach the final mark as follows:

i- Calculating the factor:

- 1- Towards the end of treatment, were the initial objectives met? (2 marks)
- 2- Did the patient attend for final assessment? (2 marks)
- 3- Upon final assessment, did the patient have any active disease? (2 marks)
- 4- Did the treatment result in an overall improvement to the patient's oral health? (2 marks)
- 5- Did the treatment address the initial patient's complaints/ expectations? (2 marks)

The sum of points 1-5 will be divided by 10 to give a factor that will be used to calculate the final grade.

ii- Case assessment (out of 20).

This will take into consideration 4 factors:

- 1- Investigation carried out, diagnosis and treatment planning (5 marks)
- 2- Quality and complexity of work. (5 marks)
- 3- Quality of presentation. (5 marks)
- 4- Theoretical knowledge/ ability to answer questions. (5 marks)

**Rubrics for case assessment are explained below.*

Final grade for comprehensive case (/20) = Grade for point "b" * the factor from point "a"

Example: Upon final assessment, the student was judged to have satisfied the initial treatment objectives (point a1), has improved the overall oral health of the patient (point a4) and has addressed the patient's complaints (point a5). However the patient failed to attend for final assessment (points a2& a3 will be considered as 0). In this case the factor will be 0.6. The quality of work was given a grade of 15/20.

Therefore, the final mark will be: **15 * 0.6 = 9/20**

Rubrics for comprehensive case assessment:*1- Investigation carried out, diagnosis and treatment planning (5/20)**

5/5: Proper history taken, full examination done and documented. A detailed and accurate list of diagnosis and clinical findings, and a treatment plan that is conservative, addresses the patient's needs and is cost effective.

3-4/5: History and examination done properly. However, some points had been overlooked but without compromising the treatment plan. Diagnosis is satisfactory. Treatment plan is reasonable and addresses the patient's needs. However, some treatment items can be controversial or aggressive.

1-2/5: Defective history taking. Examination did not cover all relevant aspects and the missing information could compromise the treatment plan. Diagnosis is inaccurate and not based on a solid approach. Treatment plan is questionable, aggressive or does not address the patient's needs

0/5: The whole process from investigation to treatment planning is defective and shows lack of knowledge and/or awareness to the basics of treatment planning

2- Quality and complexity of work. (5/20)

5/5: Treatment provided is of immaculate quality and involves some advanced dental work (including fixed bridge work and molar root canal treatment)

3-4/5: Quality of work is acceptable for a general dental practitioner level, and is reasonably complex

1-2/5: Dental treatment provided is of poor quality and/or too simple.

0/5: Unacceptable level of quality or complexity.

3- Quality of presentation. (5/20)

5/5: Excellent case presentation including the use of scientific language, computer presentation, posters or leaflets, and radiographs properly displayed. The presentation was completed within the allocated time frame.

3-4/5: Good presentation. However, some points could have been explained or demonstrated better. Student exceeded the allocated time to complete the presentation

1-2/5: Poor presentation including poor language, insufficient use of photographs/illustrations, improperly displayed radiographs and/or casts and exceeding the allocated time (or not using it effectively)

0/5: Very poor presentation. Examiners lost the interest to listen or ask questions.

4- Theoretical knowledge/ ability to answer questions. (5/20)

5/5: Excellent knowledge. Student answered all or most of the questions correctly

3-4/5: Acceptable knowledge. However, some advanced questions were not answered correctly.

1-2/5: Poor knowledge and questionable decision making.

0/5: Dangerous student. Should not be practising dentistry with this level of knowledge.

Criteria for vital pulp therapy:

1- Proper examination and diagnosis

2- Rubber dam isolation prior to and throughout caries excavation

3- Complete caries excavation

4- The use of bioactive material (MTA/ Biodentine...) as the capping/ lining material

5- Completion of the definitive restoration (Composite or amalgam)

6- Follow-up to confirm vitality, absence of symptoms, lack of radiographic signs of apical pathology.

7- Proper case documentation.

If any of the above points is missing the case will not be registered as a VPT.

General Regulations

Students are allowed a maximum of 2 competencies per clinical session

Violations of cross infection control and professional conduct will not be tolerated and **WILL** result in dismissal from the clinical session and, if repeated, suspension from attending one or more clinical sessions.

23. Course Policies:**A- Attendance policies:**

Attendance is obligatory. Students are not allowed to attend final exam if they exceed the permitted percentage set in the UJ's regulations.

B- Absences from exams and handing in assignments on time:

The student will be allowed to set for a make-up exam if he/she did not attend the exam due to an acceptable excuse and the excuse was presented in due time as set in the UJ's regulations. If he/she did not attend an exam without an acceptable excuse the student's mark for that exam will be zero

C- Health and safety procedures:

Meticulous cross-infection control and needle stick injury precautions.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

Cheating is considered an unacceptable behavior in exams and a reason for unsuccessful course result. Please refer for your Student Guide book for detailed regulations.

E- Grading policy:

60% of the final grade is assigned to term-time work, which equally divided between competencies (20%), comprehensive case presentation (20%) and the minimum requirements (20%). The other 40% is assigned to the final exams (30% clinical or OSCE and 10% viva). Percentage marks are converted to letters. (A)/(A-) are usually given for top 10-15% of students. Percentage mark < 50 does not mean a mark of (D-) or (F)

F- Available university services that support achievement in the course:

Students can utilize UJ's medical or main library facilities. In addition, they can access e-journals and e-books within campus. They can access the Moodle e-learning through the UJ's wireless internet facilities for free or through the computer lab in the Faculty of Dentistry. A lot of other facilities and support can be provided through the Deanship of Student Affairs.

24. Required equipment:

Most equipment is provided by the Faculty of Dentistry and the JUH. Students are expected to have their own basic examination and restorative kits

25. References:

- 1- Rosenstiel FS, Land MF, Fujimoto J. **Contemporary fixed prosthodontics**. St Louis: Mosby.
- 2- Shillingburg HT, Hobo S, Whitset LD. **Fundamentals of fixed prosthodontics**. Quintessence, Chicago
- 3- Sturdevant, C. M., Barton, R. E. **The art and science of operative dentistry**. The C. V. Mosby Co. St. Louis.
- 4- Baum, L., Phillips, R. W., Lund, R. M. **Textbook of operative dentistry**. W. B. Saunders Co. Philadelphia.
- 5- Cohen, S., and Burns, R. C. **Pathways of the pulp**. The C. V. Mosby Co. St.Louis.
- 6- Walton, R. E. and Torabinejad, M. **Principles and practice of endodontics**. W. B. Saunders Co. Philadelphia.

26. Additional information:

Expected workload:
 Students are getting one clinic 3 hours per week and another every other week. So weekly exposure is 4.5 hours. Through the year students will get 45 clinics, upon average 40 clinics.

Feedback
 Concerns or complaints should be expressed in the first instance to the course co-ordinator. If no resolution is forthcoming then the issue should be brought to the attention of the department chair and if still unresolved to the dean.

Course Coordinator: **Dr Rada Haddadin** Signature: ----- Date: 15/09/2019

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

Copy to:
 Head of Department
 Assistant Dean for Quality Assurance
 Course File