1	Course title	Fixed & Removable Prosthodontics-2
2	Course number	1304713
3	Credit hours (theory, practical)	4 hrs (1 theory, 3 practical)
	Contact hours (theory, practical)	2 hrs (theory)/2 weeks, 13 hrs (clinical)/week
4	Prerequisites/corequisites	Fixed & Removable Prosthodontics-1 (1302727)
5	Program title	MSc in Fixed & Removable Prosthodontics
6	Program code	
7	Awarding institution	The University of Jordan
8	Faculty	Faculty of Dentistry
9	Department	Department of Conservative Dentistry & Department of Removable Prosthodontics
10	Level of course	Masters
11	Year of study and semester (s)	first year, Second semester
12	Final Qualification	MSc
13	Other department (s) involved in teaching the course	Department of Conservative Dentistry & Department of Removable Prosthodontics
14	Language of Instruction	English
15	Date of production/revision	March 2019

16. Course Coordinator:

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

***Dr Sandra AlTarawneh**, office hours:Tue: 12-2, Ext 23552, E-mail: s_altararwneh@ju.edu.jo*

17. Other instructors:

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

***Prof Jamani** E-mail: kifah@ju.edu.jo*
Prof. Wala Amin email: wami@ju.edu.jo
***Dr Susan Hattar**, office hours: Mon.12-2, Ext 23552, Email: s.hattar@ju.edu.jo*
***Prof Fouad Kathem**, office hours: Sun.11-12, Tue: 12-1, Ext 23552, E-mail: fouadk@ju.edu.jo*
***Prof Ameen Khraisat**, E-mail: a.khraisat@ju.edu.jo*

18. Course Description:

As stated in the approved study plan.

This course is composed of the advanced knowledge in the methods of diagnosis and the methods of devising treatment plans appropriate for fixed and removable prosthetic cases in it complete and partial divisions in addition to cases that will transfer from a treatment with a partial to full prosthesis. This course will define the theoretical frame for the clinical and laboratory treatment methods and the clinical training related to diagnosis and treatment of cases requiring various types of prosthetic treatment.

19. Course aims and outcomes:

A- Aims:

1) Ensure that the students are up to date with latest developments related to fixed and removable prosthodontics and capable of performing more complex operative and prosthodontic tasks.
2) The practical components aim at having the student capable of evaluating his/her gained skills, and develop new diagnostic and clinical skills related to fixed and removable prosthodontics, including laboratory procedures.

B- Intended Learning Outcomes (ILOs):

3) Show a high degree of skill in treatment of patients requiring complex fixed and removable prosthetic work
4) Treat cases requiring immediate dental prosthesis or overdentures, taking into consideration mechanical, biological, aesthetic and functional considerations.
5) Reproduce jaw relationships both centric and eccentric, mount them in correct relationship on semi adjustable articulators, design occlusal scheme according to patients needs
6) Perform full arch diagnostic wax up, apply occlusal concepts in equilibration.
7) Fabricate provisional restorations by making use of diagnostic wax up and modification of these provisionals intra-orally to meet patients' aesthetic and functional requirements
8) Apply occlusal concepts of conformative and reorganized approaches when treating patients, while applying knowledge of mandibular movements and determinants.
9) Establish proper design for removable prosthesis based on literature and scientific evidence.
10) Discuss and elaborate on Biomimetic procedures in dentistry, apply this approach in operative and implant disciplines.
11) Treat patients requiring combined fixed and removable prosthesis through a variety of treatment modalities such as attachments, telescopic crowns and other.
12) Manage difficult cases of edentulism and provide them with functional and esthetic prosthesis, especially cases of edentulism opposed by natural dentition and utilizing precision attachments when necessary.
13) Communicate well with patient in a professional ethical manner, ability to explain and discuss treatment plan and path.
14) Present clinical cases in a didactic manner and defend the treatment modality and progress of the case.
15) Design a portfolio that represents the students work at the end of the semester

20. Topic Outline and Schedule:

Seminar No.	Topic	Supervisor	Achieved ILOs	Evaluation Method	Reference
1 (week 2)	Occlusal management in simple and advanced restorative work - Examination of the occlusion	Prof. Amin	5, 6, 8	22	25 (A&B)

	- Conformative of the occlusion - Re-organized approach - Centric relation - Preparation of terminal abutment				
2 (week 4)	Provisional restorations - Functions of provisional restoration - Material used in provisional restoration - Techniques for fabrication provisional restoration - Provisional restorations in adhesive restorations - Provisional implants restorations - Criteria for immediate loading and provisional in implants - Problems faced and how to correct them - Provisional restoration repair	Dr. Susan	7	22	25 (A&B)
3 (week 6)	Color science and shade selection - Color science - Color perception - Tooth color determination - Color systems - Shade guides a. Instrumental assessment Biomimetic mineralization Development of artificial salivary glands	Dr Susan	6, 10	22	25 (A&B)
4 (week 8)	Fixed partial denture design for PFM prosthesis - Fixed partial design - Pontic design a. pontic-residual ridge relating b. Pontic in implant supported fixed - Connector design a. Split pontic non-ridge	Prof. Khraisat	5, 6	22	25 (A&B)

	connector Connector design of all-ceramic for FDP				
5 (week 10)	Biomechanics of removable partial denture design - Mechanical principles applicable in removable partial dentures design - Stress considerations in removable partial dentures - Biomechanical considerations of individual components of the removable partial denture Biomechanical aspects of movements in removable partial dentures	Prof. Jamani	9	22	25 (A&B)
6 (week 12)	Principles of removable partial denture design - Biological basis of residual ridge resorption and preservation and factors affecting selection of denture bearing (support) areas - Fundamental factors affecting the appropriate design of direct and indirect retainers - Advantages and disadvantages of various clasp designs and how they are implemented. - Comparison of different choices for rest design and placement for RPDs	Prof. Amin	9	22	25 (A&B
7 (week 14)	Combination of fixed and removable prostheses - Considerations of the use of attachments in partial dentures - Considerations of the use of telescopic crowns in partial dentures - Considerations in fabrication of surveyed crowns	Prof. Amin	11	22	25 (A&B)

21. Teaching Methods and Assignments:

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

- **Clinical Sessions**

Each clinic duration is 3 hours, (one of the clinical sessions is 4 hours to utilize the first hour for treatment plan discussion) 3 times a week. Students are asked to bring their patients and perform full examination and documentation of each case. Followed by a discussion of the comprehensive treatment plan with the instructors. After getting the approval for the clinical case, the student may start the clinical work that is continuously monitored and supervised by the instructor all through the sememster.

- **Seminar Sessions**

Seminars will be lead by the faculty members listed in the course outline.
Every other week a seminar of 2 hours is given to the students coresponding the designated topic.
Faculty members will distribute a number of *"Key Scientific Articles"* at least one week before the scheduled date of the seminar.
Each student will be responsible for reading and understanding all articles.
The seminar consists of a brief introduction of the subject (instructor), followed by a discussion of the most recent litterature review.
Each student will be responsible for presenting one or two of the key articles during the seminar (10 – 15 min) and provide a typed and printed handout to everyone attending the seminar.
The seminar ends with an interactive discussion and exchange of ideas between students and staff members

22. Evaluation Methods and Course Requirements:

Requirements:

- Students must accomplish by the end of the semester the following ***MINUMUM*** clinical requirements:
  1. **A treatment of patient with at least 6 units of crown/bridge work (minimum 4 abutments).**
  2. **A treatment of patient with combined fixed and removable prosthodontic work.(minimum of two preparations)**
  3. **2 arches (one upper and one lower) Complete or immediate or copy denture patients**
  4. **An overdenture retained by natural teeth. (only dome shaping, or metal coping or precision attachments)**
  5. **A Cr-Co partial denture patient**
  6. **At least three of the followings**
     - Cast/fiber post
     - Adhesive bridge
     - Relining/rebasing of a denture
     - Occlusal splint therapy
     - Surgical crown lengthening for 1 tooth.
     - Acrylic partial denture
     - Molar endodontic treatment/retreatment
     - Socket preservation.

IMPORTANT:

- All patients must be approved by the faculty of the graduate program.
- All postgraduates MUST abide by cross infection control measures and regulations. .
- All students MUST submit a portfolio containing the following:
  I. Digital records of all their clinical cases including photographs
  II. A table containing all the clinical requirements performed.
  III. Seminars prepared

IV. Any publications, audits, abstracts presented by the student during the semester

Evaluation:

- 45 % of the mark is attributed to written exams (15% mid-term and 30% final)
- 55 % of the mark is attributed to the students clinical work (requirements)

23. Course Policies:

A- **Attendance policies:**

Seminar and clinic attendance is mandatory. However, 15% allowed absence is granted for students by the university law.

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

A make up exam is allowed in cases where the students misses the exam due to an acceptable excuse, and the excuse is submitted in due time according tp the university regulations.

C- Health and safety procedures:

All patients must be approved by the faculty of the graduate program.

All postgraduates MUST abide by cross infection control measures and regulations.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

We follow the rules and regulations set by the University of Jordan.

E- Grading policy:

Student overall grade will be comprised of:

- *15% midterm written exam*
- *30% final written exam*
- *15% seminar evaluation*
- *40% continuous clinical assessment*
  - 20% on quality
  - 20% on quantity

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

24. Required equipment:

Students are required to have:

1) **Semiadjustable articulator**
2) **Macrolens camera, intra-oral mirrors and retractors.**
3) **Laptop**
4) **Dental loops (optional)**

25. References:

A. Required book (s), assigned reading and audio-visuals:

1) Contemporary Fixed Prosthodontics; by Rosenstiel FS, Land MF, Fujimoto J. 4th Edition. St Louis: Mosby.
2) Fundamentals of Fixed Prosthodontics; by Shillingburg HT, Hobo S, Whitset LD.. Quintessence,

Chicago
3) Sturdevant's Art and Science of Operative Dentistry; by Sturdevant, C. M., Barton, R. E., Sockwell, C. L., Strickland, W. D. The C. V. Mosby Co. St. Louis.
4) Cohen's Pathways of the pulp; by Cohen, S., and Berman, R. C. 11th Edition 2015. Mosby Co. St.Louis.
5) McCracken's Removable Partial Prosthodontics; by Carr A, Brown D. 12th Edition 2010.

B- *Key Scientific articles* and the most updated literature articles are given for each seminar (The topics covered in the seminars constitutes the main exam material)

26. Additional information:

PG students must prepare the following documentation during the course of their study and clinical training:

- A cumulative logbook outlining all treatment provided to patients as well as a copy of the patient file
- All treatment plans should be co-signed by two supervisors BEFORE any treatment is started and registered at the academic coordinator. Any treatment carried out before a treatment plan is signed will not be counted towards requirements.
- PG students should make sure that their clinical cases are supervised by attending faculty members.
- A portfolio folder containing documentation of all clinical cases including clinical photographs and relevant radiographs as a brief PowerPoint presentations.

Name of Course Coordinator: **Dr. Sandra Altarawneh**-Signature: ---------- Date: ----------

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

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Head of Department: - **----------** - Signature: ----------

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

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

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