

The University of Jordan
Faculty of Dentistry
Department of Conservative Dentistry

Course Title: Occlusion

Course Code: 1302303

Course Coordinator: Dr Yara Oweis

Year: 3rd year, second semester

Credit: 1 credit hour

Prerequisite for: considered essential for all other courses in conservative and Prosthetic Dentistry

Instructor:s

Name: Dr Yara Oweis (yara.oweis@ju.edu.jo)

Dr Susan Hattar (s.hattar@ju.edu.jo)

Dr Sahar Taha (shr_taha@yahoo.com)

Course Objectives:

A general and complete description of the dental anatomy, physiology and occlusion has been viewed in a previous course. The actual course aims to give the student a full and comprehensive idea of the fundamentals of occlusion in all its aspects, static or dynamic, normal or pathologic. It also spans the biological, biomechanical and physiological aspects of occlusion

The main objectives could be summarized in the following items :

- To give the student an idea about static and dynamic relations that exist between the maxilla and mandible as well as the mechanisms of mandibular motion.
- An idea of the normal tooth to tooth relationships, in other words the various occlusal schemes.
- A full description and understanding of the anatomy as well as function of the temporomandibular joint *TMJ* (i.e. muscles involved, motion, anatomy etc.). In addition special attention is given to the clinical examination of the system as well as the signs and symptoms occurring in cases of *TMJ* disorders.
- An illustration of the scientific basis for the use of articulators and face bow registration to help in the diagnostic evaluation of occlusion and treatment planning.

Learning Outcomes:

A successful completion of this module should lead to the following outcomes :

A- Knowledge and understanding

A1) Full analysis and evaluation of the occlusal status as well as TMJ condition in order to conduct some occlusal modification such as selective grinding when required before any treatment.

A2) Comprehensive understanding of the mandibular movements, jaw relationships as well as occlusal harmony. In addition to the uses of articulators as a diagnostic device.

B- Intellectual skills

B1) Ability to investigate and evaluate the actual occlusal scheme of the patient, as well as the state of his TMJ in the purpose of detecting any pathological or abnormal condition prior to treatment.

C- Subject specific skills

C1) Ability to mount and record occlusal relationships of a patient with the help of face bow and articulators for the purpose of evaluation and eventual treatment.

C2) To be able with further knowledge to develop an appreciation of the occlusion, and to acquire skills to diagnose and to treat simple occlusal dysharmonies.

D- Transferable skills

Since the fundamental aspects of occlusion play an important role in all other disciplines in dentistry, this course enables the student in the decision making to establish a biologically based prosthodontic treatment plan and goals

Teaching methods:

- Duration: 16 weeks, 16 hours in total.
- Lectures: 14 hours, 1 per week + two weeks for exams.

Modes of assessment:

- Midterm exam: 40 points, MCQs.
- Final Exam: 560points, MCQs.

Attendance policy:

Lecture attendance is obligatory. The handout and recommended textbook are not comprehensive and additional material will be covered in lectures. You are responsible for all material covered in lectures.

Expected workload:

On average you should expect to spend between 3 and 5 hours per week on this course.

Course Content & Weight:

Lecture no.	Subject	Instructor
1	Anatomic determinants of occlusion, function and anatomy of the tempro-mandibular joint	Dr Yara
2	The neuro-muscular function and its interaction with occlusal morphology	Dr Susan
3	Articulators	Dr Susan
4	Occlusal Registration and Facebow	Dr Susan
5	Anterior Guidance	Dr Susan
6	Examination of the tempro-mandibular joint and related muscles	Dr Sahar
7,8	Classification and diagnosis of tempro-mandibular disorders I	Dr Sahar
9	Factors of mandibular movement related to occlusal morpholoty	Dr Yara
10	Occlusal Analysis	Dr Yara
11	Occlusal Diseases	Dr Yara
12	Treatment modalities of tempro-mandibular disorders	Dr Sahar
13	Anterior deprogrammer and posterior deprogrammer	Dr Maher
14	Selective grinding	Dr Maher

Feedback:

Concerns or complaints should be expressed in the first instance to the course instructor. 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. Questions about the material covered in the lectures, notes on the content of the course, its teaching and assessment methods can be also sent by e-mail.

References and Supporting Material:

- Okeson Dmd, Jeffrey P** « *The Management of Temporomandibular Disorders and Occlusion* » 5th Edition, Mosby 2003.
- 2- Dawson Peter E** « *Evaluation, Diagnosis, and Treatment of Occlusal Problems* » 2nd Edition, Mosby 1989.
- 3- Ash M, Nelson S** « *Wheeler's Dental Anatomy, Physiology and Occlusion* » 8th Edition, Elsevier 2003.