

The University of Jordan
Faculty of Dentistry
Department: of Oral Surgery, Oral Medicine, and Periodontology

Course Title: Dental Local Anesthesia

Course Code: 1301463

Prerequisite: None

Course Coordinator: Dr. Soukaina Ryalat

Office Phone: 23553

Office Hours: Sunday 9-10:15, Monday 8-5, Tuesday 2:30-5, Thursday 2:30-5.

Lecturers:

Dr. Soukaina Ryalat E-mail: salryalat@yahoo.com, s.ryalat @ju.edu.jo

Dr. Mohammad Al Shayyab

Dr. Al Mustafa (Faculty of medicine)

Course Objectives:

The course is given to fourth year dental students during the first semester. It comprises 14 lectures and two exams. The aim of this course is to make the student familiar with dental local anesthesia in terms of local anesthetic materials and equipment, injection techniques, and management of the different complications that might arise after injections. A brief account of Nerve physiology and anatomical considerations will be also given.

Learning Outcomes:

Successful completion of this course should lead to the following learning outcomes:

A- Knowledge and Understanding (students should)

A1) be able to recognize the mode and site of action of local anesthetics

A2) be able to identify the clinical implications of neuroanatomy and neurophysiology

A3) be able to demonstrate armamentarium of anesthetic injections

B- Intellectual skills- with ability to:

B1) Relate failures of achieving anesthesia with problems in armamentarium or technique

B2) Identify the different complications of local anesthesia and their management

C- Subject specific skills- with ability to

C1) be aware of the dental local anesthetic techniques

C2) Recognize the appropriate anesthetic technique for each clinical situation.

C3) Select the appropriate local anesthetic solution for each medical condition

D- Transferable skills- with ability to:

D1) Display an integrated approach to the deployment of communication skills

D3) Develop self-confidence in performing the different local anesthetic injections

Teaching Methods

Duration: 16 weeks in first semester, 16 hours in total, one lecture per week

Tests and Evaluation:

1. Midterm exam (40%)

2. Final exam (60%)

Course contents and Weights:

No.	Course content	Lecturer
1	Neurophysiology, mode and site of action of	Dr. Al Shayyab

	Local anesthesia.	
2	Pharmacology of local anesthesia, and pain pathophysiology	Dr. Soukaina Ryalat
3	Pharmacology of vasoconstrictors, how to calculate the optimum dose.	Dr. Al Shayyab
4	Local anesthetic agents in clinical use, application of new agents	Dr. Al Shayyab
5	Local anesthetic equipment, new armamentarium.	Dr. Soukaina Ryalat
6	Basic injection techniques and anatomical Considerations, an over view to modern techniques.	Dr. Al Shayyab
7	Complications and contraindications of Local anesthesia	Dr. Soukaina Ryalat
8	Techniques of maxillary anesthesia	Dr. Soukaina Ryalat
9	Techniques of maxillary anesthesia , new techniques (Computer aided anesthesia)	Dr .Soukaina Ryalat
10	Techniques of mandibular anesthesia 1	Dr. Soukaina Ryalat
11	Techniques of mandibular anesthesia 2	Dr. Al Shayyab
12	Supplemental injection techniques of anesthesia	Dr. Al Shayyab
13	General anesthesia in dentistry	Dr. Mah. Al Mustafa
14	Sedation in dentistry	Dr. Mah. Al Mustafa

Recommended textbooks:

1. Handbook of Local Anesthesia/ Fourth Ed. Stanley F. Malamed. Mosby-Year Book. 1997
2. Pain and anxiety control for the conscious dental patient. Meechan, Robb, and Seymour.
- 3-Foundation of anesthesia: Basic science for clinical practice by Hugh C. Hemmings; (Mosby Inc; Nov 2, 2005).
- 4- Local Anesthesia in Dentistry/Book and Video [Hardcover]. Markus D. W. Lipp (Author), Monka Daublander (Author), H. Fuder (Author), Mark Coldwell (Translator)