

1	Course title	Dental Local Anesthesia
2	Course number	1301463
3	Credit hours (theory, practical)	1 hour Theory
	Contact hours (theory, practical)	1 hour per week
4	Prerequisites/corequisites	None
5	Program title	Doctor of Dental Surgery (DDS)
6	Program code	NA
7	Awarding institution	The University of Jordan
8	School	Faculty of Dentistry
9	Department	Department of Oral surgery, Oral medicine and Periodontology
10	Level of course	4 <sup>th</sup> year
11	Year of study and semester (s)	1 <sup>st</sup> semester 2020/2021
12	Final Qualification	DDS
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Teaching methodology	<input type="checkbox"/> Blended <input checked="" type="checkbox"/> Online
16	Electronic platform(s)	<input checked="" type="checkbox"/> Moodle <input checked="" type="checkbox"/> Microsoft Teams <input type="checkbox"/> Skype <input type="checkbox"/> Zoom <input type="checkbox"/> Others.....
15	Date of production/revision	03 October 2022

#### 16. Course Coordinator:

**Dr Ahmad A Hamdan**

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#### 17. Other instructors:

Professor Hazem Al Ahmad h.alahmad@ju.edu.jo
Professor Ashraf Abu Karaky A.abukaraky@ju.edu.jo
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### 18. Course Description:

*As stated in the approved study plan.*

This subject is a theoretical dental local anaesthesia; it is supplemented by Clinical Oral Surgery 1. Therefore, this course is comprised of lectures given by the course instructors. Each lecture is commenced with the aims and objectives of the subject, lectures are supplemented with clinical cases, discussions and assignments on data retrieval from the literature are encouraged

### 19. Course aims and outcomes:

A- Aims:
The aim of this course is to make student familiar with dental local anesthesia in terms of anesthetic agents, equipment, injection techniques and management of the different complications that might arise after injections. In addition, general anesthesia and conscious sedation are covered. An account of nerve physiology and anatomical considerations are also covered.
B- Intended Learning Outcomes (ILOs): Upon successful completion of this course students will be able to:
<b>1- Knowledge and Understanding, students should:</b>
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
A4) Be able to recognize the mode and site of action of other pain control modalities (sedation and general anesthesia)
<b>2- Intellectual skills- with ability to:</b>
B1) Relate failures of achieving anesthesia with problems in armamentarium or technique B2) Identify the different complications of local anesthesia and their management
<b>3- Subject specific skills- with ability to</b>
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
<b>4- Transferable skills- with ability to:</b>
D1) Display an integrated approach to the deployment of communication skills D2) Develop self-confidence in performing the different local anesthetic injections.

### 20. Topic Outline and Schedule:

Lecture: Discussion on weeks with even numbers (2 <sup>nd</sup> ,4 <sup>th</sup> ...)at 4-5, 5-6 pm Bahjat Talhouni					
Topic	Week/Date to be uploaded	Instructor	Achieved ILOs	Evaluation Methods	Reference
Neurophysiology, mode and site of action of Local anesthesia	<b>Week 1</b> <b>11/10/202</b> <b>2</b>	<b>Dr. Ahmad A Hamdan</b>	<b>1(A2), 2(B1, B2), 3(C1), 4(D2)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Pharmacology of local anesthesia	<b>Week 2</b> <b>18/10/202</b>	<b>Dr. Khadeejah Alzoubi</b>	<b>1(A1), 2(B1, B2), 3(C1),</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>

	<b>2</b>		<b>4(D2)</b>		
Pharmacology of vasoconstrictors	<b>Week 3 25/10/2022</b>	<b>Prof. Hazem Al-Ahmad</b>	<b>2(B2), 3(C1), 4(D2)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Local anesthetic agents in clinical use	<b>Week 4 01/11/2022</b>	<b>Dr. Omar Karadsheh</b>	<b>1(A3), 2(B1), 3(C3), 4(D2)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Local anesthetic equipment	<b>Week 5 08/11/2022</b>	<b>Dr. Omar Karadsheh</b>	<b>1(A3), 2(B1, B2), 3(C3)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Basic injection techniques and anatomical Considerations	<b>Week 6 15/11/2022 2</b>	<b>Dr. Khadeejah Alzoubi</b>	<b>1(A3), 2(B1, B2), 3(C3), 4(D2)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Techniques of maxillary anesthesia 1	<b>Week 7 22/11/2022</b>	<b>Dr. Najla Kasabreh</b>	<b>1(A3), 2(B1, B2), 3(C3), 4(D1, D2)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Techniques of maxillary anesthesia 2	<b>Week 8 29/11/2022</b>	<b>Dr. Najla Kasabreh</b>	<b>1(A3), 2(B1, B2), 3(C3), 4(D1, D2)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Techniques of mandibular anesthesia 1	<b>Week 9 06/12/2022</b>	<b>Prof. Mohammad Al-Shayyab</b>	<b>1(A3), 2(B1, B2), 3(C3), 4(D1,D2)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Techniques of mandibular anesthesia 2	<b>Week 10 13/12/2022 2</b>	<b>Prof. Mohammad Al-Shayyab</b>	<b>1(A3), 2(B1, B2), 3(C3), 4(D1,D2)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Supplemental injection techniques of anesthesia	<b>Week 11 20/12/2022</b>	<b>Dr Ahmad A. Hamdan</b>	<b>1(A2), 3(C2), 4(D1, D2)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Complications and contraindications of Local anesthesia	<b>Week 12 27/12/2022</b>	<b>Dr Ahmad A. Hamdan</b>	<b>1(A2), 3(C2), 4(D1, D2)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
General anesthesia in dentistry	<b>Week 13 03/01/2023</b>	<b>Prof. Mohammad Al-Mustafa (School of Medicine)</b>	<b>1(A4)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>
Sedation in dentistry	<b>Week 14 10/01/2023</b>	<b>Prof. Mohammad Al-Mustafa (School of Medicine)</b>	<b>1(A4)</b>	<b>22 (1, 2)</b>	<b>25 (A, B)</b>

## 21. Teaching Methods and Assignments:

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

One lecture per week over 16 weeks in first semester.

Each lecture is commenced with the aims and objectives of the subject, lectures are supplemented with clinical cases, discussions and assignments on data retrieval from the literature are encouraged.

14 weeks, 14 hours in total

Lectures: 12 hours, 2 per week + two weeks for exams.

Lecture will be recorded and uploaded online and a discussion will take place every 2 weeks.

## 22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Computer assisted exams, usually in the form of the best selected answer.

1. Midterm exam (40%)

2. Final exam (60%)

## 23. Course Policies:

### A- Attendance policies:

Students are not allowed to enter lecture room after 5 minutes of its start. Marks are not awarded for attendance. 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. Contributions in e-learning forums are accepted if submitted 24 hours before time of final exam.

### C- Health and safety procedures:

No special recommendations.

### 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:

According to the rules and regulations of the university of Jordan

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

University Library , Internet.

## 24. Required equipment: ( Facilities, Tools, Labs, Training,...)

None

**25. References:**

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

Handbook of Local Anesthesia/ Stanley F. Malamed. 7<sup>th</sup> Ed. Elsevier. 2020

Recommended books, materials, and media:

- Pain and anxiety control for the conscious dental patient. Meechan, Robb, and Seymour. Oxford University Press. 1998.
- Foundation of anesthesia: Basic science for clinical practice by Hugh C. Hemmings; (Mosby Inc; Nov 2, 2005)
- Hand book for anesthesia and co existing disease by Robert K. Stoelting, et al - Illustrated Edition, Paperback (Churchill Livingstone; Mar 12, 2002)

**26. Additional information:**

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

Name of Course Coordinator: -Dr. Ahmad A Hamdan--Signature: -----Date: 03/10/2022

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

Head of Department:.....Signature: .....

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

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