The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

ILO dental physiology2 -2022/2023
0541229

1	Course title	**Physiology 2**
2	Course number	**0541229**
3	**Credit hours (theory, practical)**	**4 (4 theory)**
	Contact hours (theory, practical)	**90**
4	Prerequisites/corequisites	**0304101, 0304111**
5	Program title	**Doctor in Dentistry and Surgery**
6	Program code	**DDS**
7	Awarding institution	**University of Jordan**
8	Faculty	**Faculty of Dentistry**
9	Department	
10	Level of course	**Bachelor**
11	Year of study and semester (s)	**Second year, Spring semester**
12	Final Qualification	**-**
13	Other department (s) involved in teaching the course	**-**
14	Language of Instruction	**English**
15	Date of production/revision	**2022/2023**

16. Course Coordinator:

Dr. Faisal Mohammad
Faculty of Medicine, Room 111.
Variable office hours according to timetable of the coordinator, please refer to the coordinator.
Ext 23482
fmmed@ju.edu.jo

17. Other instructors:

Dr. Yanal Shafagoj, Dr. Mohammad Khatatbeh , r, , Dr.Salim Khraisha, Dr. Ebaa Alzayadneh
Variable office hours according to timetable of the staff member, please refer to the instructor.
yanals@ju.edu.jo, malessa@ju.edu.jo, , l.zghoul@ju.edu.jo, salimkh@ju.edu.jo, e.zayadneh@ju.edu.jo

18. Course Description:

This medical physiology course is designed to provide students with an understanding of the physiological principles needed for the practice of dental profession. It covers a range of topics from the integrated physiology of organ systems. The course covers respiratory physiology, physiology of the endocrine system, physiology of renal system, as well as the neurophysiology of the central nervous system and special senses. It is primarily a lecture-based course.

1. 19. Course aims and outcomes:

A- Aims:
1.To develop broad spectrum knowledge about the functions of human body systems.
2. To acquire skills to integrate the physiology of the respiratory, endocrine, renal and neurophysiology as well as special senses.

B- Intended Learning Outcomes (ILOs): Successful completion of the course should lead to the following outcomes:

A. Knowledge and Understanding: Student is expected to

A1. Describe the organization of the respiratory system as well as its function and components.
A2. Name and analyze the structural-functional relationship of the renal system and its integrative function with other organ systems.
A3. Compare the physiological responses caused by acid or base disturbances.
A4. Describe the organization and function of the endocrine system and explain its role in regulating homeostasis of the human body.
A5. Recognize the interplay between genes and hormones in the expression of male and female phenotypes.
A6. Describe and compare the male and female reproductive systems.
A7. Recognize the main component of the nervous system and their function.
A8- Review the physiology of sensory receptors and different sensory pathways.
A9- Explain the functional structures of the organs concerned with the special senses, including vision, auditory, vestibular, smell and taste, and their functions, receptors of sensations, their pathway and their localization in the cerebral cortex
A10- Describe the motor system including reflexes of spinal cord, motor tracts, and the motor regulators such as the basal ganglia and cerebellum.
A11- Point out the neural basis of higher order functions such as the language, personality, learning and memory as well as sleep and alertness.

B. Intellectual Analytical and Cognitive Skills: Student is expected to

B1. Perform practice sessions with the spirometry, hormonal measurements and neurological testing.
B2.Interpret the findings in various altered states of the respiratory, hormonal, renal and neurological.
B3. Increasing ability to identify potential causes for loss of sensations and motor functions.
B4. Identify potential mechanisms involved in loss of special sensations (vision, hearing, taste and smell).

C. Subject- Specific Skills: Students is expected to

C1.Acquire the skills in the use of basic clinical equipment, such as: use of Spirometry, and neurological examination tools.
C2.Perform spirometry and neurological examinations
C3. Realize the importance of specific tests involved in checking the motor and sensory functions of the Central Nervous System
C4. Interpret some specific tests for defining Vision, Hearing, Smell and Taste alterations.

D. Transferable Key Skills: Students is expected to

D1. Develop individual and group communication skills by interacting with fellow students and observing the group dynamics.

D2. Express individual ideas and points of view while showing respect for that of others.

20. Topic Outline and Schedule:

Topic	Week 4 hours/week	Instructor	Achieved ILOs	Evaluation Methods	Reference
1.Respiratory physiology	1-2	**Physiology section**	A1	**MCQ exams**	**Textbook of medical physiology: Guyton**
2. Renal physiology	3-4	**Physiology section**	A2, A3	**MCQ exams**	**As above**
3.Endocrine physiology	5-6	**Physiology section**	A4	**MCQ exams**	**As above**
4.Reproductive physiology	7-8	**Physiology section**	A5,A6	**MCQ exams**	**As above**
5.Sensory neurophysiology	9-10	**Physiology section**	A7,A8,A9	**MCQ exams**	**As above**
6.Motor neurophysiology	11-12	**Physiology section**	A7, A10	**MCQ exams**	**As above**
7.Intellectual functions of the brain	13-14		A11	**MCQ exams**	**As above**

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:
1- Didactic lectures presented in power point slides will be provided for students.
2- Assigned chapters from the text book are expected to be read by students.
3- Lab sessions throughout the course demonstrate the practical and clinical aspect of the theoretical part.

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:
- MCQ exams designed to achieve ILO's of the course.
- Midterm 40%, Practical (Lab) 10%, Final 50%

23. Course Policies:

A- Attendance policies: According to rules and regulation of the University, please refer to University of Jordan Students Handbook (page 13 and 14) http://registration.ju.edu.jo/Documents/daleel.pdf

B- Absences from exams and handing in assignments on time: According to rules and regulation of the University, please refer to University of Jordan Students Handbook (page 16 and 17) http://registration.ju.edu.jo/Documents/daleel.pdf

C- Health and safety procedures: lab work related health and safety measures are given to students by the instructors in every lab session.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

According to rules and regulation of the University, please refer to University of Jordan Students Handbook (page 62-70) http://registration.ju.edu.jo/RegRegulations/الطلبة%20تأديب%20نظام.pdf

E- Grading policy:

Rules are preset by the Faculty and Department Councils.

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

Main University Library, School of Medicine library, Medical Skills lab for illustration and simulation, School of Medicine Lab of Physiology.

24. Required equipment:

Lab coat for laboratory sessions

25. References:

A- Required book (s), assigned reading and audio-visuals:
Textbook of medical physiology by: Guyton and Hall Textbook of Medical Physiology, 13th Edition By John E. Hall, PhD

B- Recommended books, materials, and media:
1. Physiology, by: Robert Berne & Matthew Levy, 7th. ed.
2. Best and Taylors Physiological Basis of Medical Practice by: John B. West, 12th. ed 1990.
3. Human physiology, by: Lauralee Sherwood, last edition.

26. Additional information:

Nothing

Name of Course Coordinator: ----------Signature: ---------- Date: ---------- 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

2022-2023