



مركز الاعتماد
وإضمان الجودة
ACCREDITATION & QUALITY ASSURANCE CENTER



The University of Jordan

Accreditation & Quality Assurance Center

COURSE Syllabus

**Physiology 2 Pharmacy
0501215**

1	Course title	Physiology 2
2	Course number	0501215
3	Credit hours (theory, practical)	2 (theory) two lectures per week in two different days
	Contact hours (theory, practical)	==
4	Prerequisites/corequisites	0551214
5	Program title	Bachelor in Pharmacy + Doctor of Pharmacy
6	Program code	
7	Awarding institution	University of Jordan
8	Faculty	Faculty of Pharmacy
9	Department	
10	Level of course	Bachelor
11	Year of study and semester (s)	Second year, fall 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. Yanal A. Shafagoj
Faculty of Medicine, Room 301.
Variable office hours according to timetable of the coordinator, please refer to the coordinator.
Ext 23478
yanals@ju.edu.jo

17. Other instructors:

Dr. Faisal Mohammed, Dr. Mohammad Khatatbeh, , Dr.Salim Khraisha, Dr. Ebaa Alzayadneh
 Variable office hours according to timetable of the staff member, please refer to the instructor.
fmed@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 Physiology course will present concepts of tissue functions that will be important in understanding subsequent studies in other materials like Pathology, Pharmacology and Pharmacotherapy.

The course tackles physiological topics such as: Gastrointestinal, Reproductive and Renal systems, as well as Endocrine and Central Nervous system including Physiology of Special Senses.

After knowing the normal functions of systems that will be given, the student can deduce alterations that may occur which gives him/her better understanding of pathology and pharmacology courses. This course is a pre-requisite for Pharmacology.

1.

19. Course aims and outcomes:

A- Aims:

The main aim of this course is: Understand optimal systemic functions to keep homeostasis and mechanisms involved to perform these functions. This course will increase student's ability to analyze functional relations between systems and the mechanisms of alterations that results in generating diseases. For each section there are specific objectives that will be delivered to student by each lecturer.

tended Learning Outcomes (ILOs):

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

A. Knowledge and Understanding: Student is expected to

- A1- Know functional structures of the gastrointestinal system.
- A2- Explain the functional mechanisms (motilities, secretions, digestion and absorption) of the gastrointestinal tract and their regulation
- A3- Describe body energetics and mechanisms involved in regulation of food intake.
- A4- Know systemic endocrine glands and specific hormones released by these glands.
- A5- Define the functions of each hormone.
- A6- Describe mechanisms underlying functional regulation of glandular secretions and their role in homeostasis.
- A7- Identify functional structures of reproductive system.
- A8- Explain mechanisms involved in reproduction and the role of related hormones.
- A9- Know structures of renal system and specific function for each structure.
- A10- Describe mechanisms involved in performing specific functions in renal system.
- A11- Conclude the role of Renal system in maintaining homeostasis of body fluids, ions and pH.
- A12- Identify the functional structures of the Central Nervous System.
- A13- Describe the mechanisms involved in performing functions.
- A14- Define the role of Nervous system in Motor functions and sensation.
- A15- Identify functional structures for special senses (Vision, Hearing, Smelling and Tasting).
- A16- Explain functional mechanisms involved in these sensations.

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

- B1- Analyze potential alterations of gastrointestinal functions and impacts on body energy and Fluids' homeostasis..
- B2- Predict potential changes in hormones and impact on ions and fluids homeostasis and other systemic functions.
- B3- Analyzing potential causes of infertility in man and women.
- B4- Deduce alterations of the renal system and potential changes in the composition of urine and body fluids.
- B5- Increasing ability to identify potential causes for loss of sensations and motor functions.
- B6- Identify potential mechanisms involved in loss of special sensations (vision, hearing, taste and smell).

C. Subject- Specific Skills: Students is expected to

- C1- Predict the effect of diarrhea on the composition of body fluids.
- C2- Assessment of blood tests for hormones, ions, and other specific constituents.
- C3 – Predict causes of infertility in man and woman.
- C4-Predict renal function tests and urine analysis in acute and chronic renal failure
- C5- Predict the effect of certain medication on GFR
- C6- Realize the importance of specific tests involved in checking the motor and sensory functions of the Central Nervous System
- C5- Interpret some specific tests for defining Vision, Hearing, Smell and Taste alterations.

D. Transferable Key Skills: Students is expected to

- D1- Evaluate the significance of information taken in Physiology for subsequent Biomedical courses
- D2- use of different resources to understand physiological process in human body.

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Gastrointestinal system (5 lectures)	1-3	Physiology section	Gastrointestinal physiology, mobility, secretions and its role in maintaining homeostasis	MCQ exams	<u>Principle of Anatomy and Physiology</u> , By: G.J Tortora and B.H. Derickson Latest edition
Endocrine system (4 Lectures)	3-5	As above	Hormones: structure and function	As above	As above
Reproductive system (4 lectures)	1	As above	Functional structures of reproductive system.	As above	As above
Renal system (4 Lectures)	1	As above	Structures of renal system and segmental functions	As above	As above
Central Nervous system (8 Lectures)	21/2	As above	Functional structures of the Central Nervous System	As above	As above
Special & Somatic Senses(4 Lectures)	5	As above	Functional structures for special senses	As above	As above

21. Teaching Methods and Assignments:

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

- 1- Didactic lectures presented using overhead projectors and power point
- 2- Assigned chapters from the text book are expected to be read by students.

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 30%, Quiz 20%, 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- 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/نظام%20تأديب%20الطلبة.pdf>

D- Grading policy:

Rules are preset by the **Faculty** and Department Councils.

E- 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:

25. References:

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

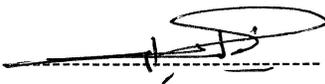
Principle of Anatomy and Physiology, By: G.J Tortora and B.H. Derickson

Latest edition

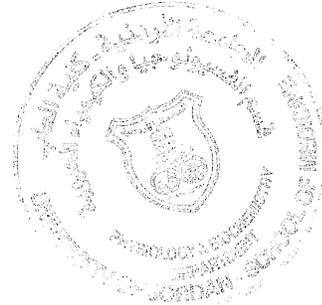
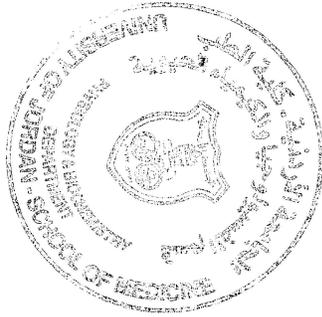
Recommended books, materials, and media:

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: *د. نبال سنان* Signature:  -----
Dean: -----Signature: -----

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Assistant Dean for Quality Assurance
Course File



2022, 2023