

Course Plan for Bachelor Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0408-4.0E
---	----------------

Study Plan No.	2021/2022		University Specialization		Bachelor of Pharmacy	
Course No.	0201281		Course Name		Anatomy and Physiology Lab	
Credit Hours	1		Prerequisite *Co-requisite		*Anatomy and Physiology (2)	
Course Type	☐ Mandatory University Requirement	☐ University Elective Requirement	☒ Faculty Mandatory Requirement	☐ Support course family requirements	☐ Mandatory Requirement	☐ Elective Requirement
Teaching Style	☐ Full Online Learning		☐ Blended Learning		☒ Traditional Learning	
Teaching Model	☐ 1 Synchronous: 1 Asynchronous		☐ 1 Face to Face: 1 Asynchronous		☒ 1 Traditional	

Faculty Member and Study Divisions Information (to be filled in each semester by the subject instructor)

Faculty Member and Study Division Information (to be filled in each semester by the subject instructor)					
Name	Academic rank	Office No.	Phone No.	E-mail	
Office Hours (Days/Time)	Sunday, Tuesday, Thursday ()		Monday, Wednesday ()		
Division number	Time	Place	Number of Students	Teaching Style	Approved Model
				Traditional Learning	1 Traditional

Brief Description

This course introduces students to laboratory techniques related to human physiology and provides demonstrations of important physiological processes of the human body. Laboratory exercises cover a wide range of topics such as classical experiments in sensory, blood, endocrine, nervous, cardiovascular, renal, reproductive, and respiratory physiology.

Learning Resources

Course Book Information (Title, author, date of issue, publisher ... etc)	Experiments in Physiology, Tharp G. D. and Woodman D. A., 2011, 10th Edition, Pearson Education Inc.			
Supportive Learning Resources (Books, databases, periodicals, software, applications, others)	1. Human Physiology, Stuart Ira Fox, 2022, 16 th edition, Mc Graw Hill. 2. Essentials of Human Anatomy and Physiology, Elaine Marieb, 2015, 11th edition, Pearson Education Inc.			
Supporting Websites	-			
The Physical Environment for Teaching	☐ Classroom	☒ Labs	☒ Virtual Educational Platform	☐ Others
Necessary Equipment and Software	Moodle			
Supporting People with Special Needs	-			
For Technical Support	E-Learning & Open Educational Resources Center. Email: ellearning@zu.edu.jo ; Phone: +962 6 429 1511 ext. 425/362.			

Course Plan for Bachelor Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0408-4.0E
---	----------------

Course learning outcomes (K= Knowledge, S= Skills, C= Competencies)

No.	Course Learning Outcomes	The Associated Program Learning Output Code
Knowledge		
The student should be able to:		
K1	Identify the component parts of the major systems covered in this course.	MK1
K2	Explain the function of the major systems covered in this course.	MK1
K3	Identify significant diseases and disorders, medical procedures and medical terminology related to the major systems covered in this course.	MK1
Skills		
The student should be able to:		
S1	Correlate experimental data with normal or abnormal physiological processes.	MS2
Competencies		
The student should be able to:		
C1	-	-

Mechanisms for Direct Evaluation of Learning Outcomes

Type of Assessment / Learning Style	Fully Electronic Learning	Blended Learning	Traditional Learning (Theory Learning)	Traditional Learning (Practical Learning)
Midterm Exam	30%	30%	30%	0%
Participation / Practical Applications	0%	0%	20%	60%
Asynchronous Interactive Activities	20%	20%	0%	0%
Final Exam	50%	50%	50%	40%

Note 1: Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, and work within student groups ... etc, which the student carries out on his own, through the virtual platform without a direct encounter with the subject teacher.

Note 2: According to the Regulations of granting Master's degree at Al-Zaytoonah University of Jordan, 40% of final evaluation goes for the final exam, and 60% for the semester work (examinations, reports, research or any scientific activity assigned to the student).

Course Plan for Bachelor Program - Study Plan Development and Updating Procedures/ Pharmacy Department	QF02/0408-4.0E
---	----------------

Schedule of Simultaneous / Face-to-Face Encounters and their Topics

Week	Subject	Learning Style*	Reference **
1	Check-in: Introduction to laboratory and safety rules	Lecture	Lab manual
2	Skeletal system: Anatomy of the Axial and appendicular Skeleton	Lecture + Teaching with models	Lab manual
3	Blood physiology I: Erythrocyte (RBC) parameters	Lecture + Experiment	Lab manual
4	Blood physiology II: Leukocyte and platelets parameters	Lecture + Experiment	Lab manual
5	Endocrine system: Regulation of blood glucose	Lecture + Experiment	Lab manual
6	Respiratory system	Lecture + Teaching with models + Experiment	Lab manual
7	Human Cardiovascular system function	Lecture + Teaching with models + Experiment	Lab manual
8	Sensory Physiology I: Hearing and Equilibrium	Lecture + Teaching with models	Lab manual
9	Sensory Physiology II: Vision	Lecture + Teaching with models + Experiment	Lab manual
10	Nervous system: CNS anatomy and Reflex functions	Lecture + + Teaching with models + Experiment	Lab manual
11	Renal Physiology	Lecture + Teaching with models + Experiment	Lab manual
12	Male Reproductive Physiology	Lecture + Teaching with models	Lab manual
13	Female Reproductive Physiology	Lecture + Teaching with models + Experiment	Lab manual
14	Check-out		
15	Practical Laboratory Exam		
16	Final Exam		

* Learning styles: Lecture, flipped learning, learning through projects, learning through problem solving, participatory learning ... etc.

** Reference: Pages in a book, database, recorded lecture, content on the e-learning platform, video, website ... etc.

Schedule of Asynchronous Interactive Activities (in the case of e-learning and blended learning)

Week	Task / Activity	Reference	Expected Results
-	-	-	-