

Course Outline of Special Topics

1. Instructor's Information

Instructor's / Coordinator's Name:	Ahmed abu-Zaiton
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Email:	abuzaiton@aabu.edu.jo
Research and Teaching Assistant / Supervisor / Technical (if any):	

2. Course Description

This course will elaborate extensively on the major topics of animal physiology. It will focus mostly on the study of Homeostasis of all organism systems, and with emphasis on mammals. Topics will include neurophysiology, neurotransmission, sensory reception systems, the nervous system, the endocrine, circulatory, urinary, respiratory, and digestive system osmoregulation, muscle physiology, motor outputs, and behavior.

3. Course Information

Course No.: BIO 404492	Course Title: Special Topics	Level: 4
Course Type: Theoretical	Prerequisite / Animal Physiology	Class Time: 13-14
Academic Year:2019 / 2020	Semester: first	Study hours: 2

4. Course Objectives:

a-	To explain the roles of organ functions in body homeostasis
b-	To understand the mechanism correction of body temperature overheating and overcooling
c-	To understand the disorders of cardiovascular and Urinary systems
d-	Students should demonstrate understanding of how specific organs and organ system work in different groups of animals

5. Learning Outcomes

(Knowledge, Skills, and Competencies)

Upon successful completion of the course, the students will be able to:

1. Summaries the functions of all body organs
2. Classify the factors that increase or decrease the mechanism correction
3. Debate the function of adrenal glands (aldosterone, cortisol, and catecholamine).
4. Evaluate the negative feedback control in Homeostasis
5.

6.

6. Course Content

Week	Subject
First	Homeostasis - body temperature - Blood glucose level - Osmoregulation
Second	Endocrine and neuroendocrine systems
Third	The organization of the nervous system
Fourth	Mechanoreceptor
	First Exam
Eighth	Mammalian hormones
Ninth	The physiology of muscle contraction
Tenth	The regulation of skeletal muscle contraction
	Second Exam
Thirteenth	The circulatory system
Fourteenth	Breathing & the regulation of gas transfer
Fifteenth	Respiratory Physiology
	Mammalian kidney
Sixteenth	Final Exam

7. Teaching and Learning Strategies and Evaluation Methods

No.	Learning Outcomes	Teaching Strategies	Learning Activities	Evaluation /Measurement Method (Exam/ presentations/ discussion/ assignments)
1				
2				
3				
4				
5				
6				

8. Assessment

Methods Used	Assessment Time	Distribution of grades
1- semester work (report, assignments, attendance)	During semester	
2- First Exam	Seventh week	25%
3- Second Exam	Twelfth week	25%
4- Final Exam	Week of the final exams	50%

9. Textbook

Main Reference	Eckert Animal Physiology: Mechanisms and Adaptations
Author	Randall, Burggren, and French. Freeman
Publisher	McGraw-Hill
Year	2002.
Edition	5th edition
Textbook Website	

10. Extra References (books and research published in periodicals or websites)

1-	
2-	
3-	

Academic Program Descriptions

1.	Program Title	
2.	Program Number	
3.	University Name	
4.	Program Level	
5.	Program Scientific Degree	
6.	Faculty	
7.	Department	

8.	Other Departments engaged in teaching the program	
9.	Attendance Method	
10.	Program Period	
11.	Credit Hours/ Actual Hours	
12.	Language of Teaching	
13.	Number and date of the program license by the Ministry of Higher Education	
14.	Number and date of the program national accreditation	
	Program Capacity/ Year	
	The Program is accredited by other authorities	
15.	Date of program initiation / date of the program last review	
16.	Current number of students	
17.	Program Coordinator (Name, Phone, Email)	

18. About the Program and its Themes

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19. Program Vision and Mission

<p><u>Vision</u></p> <p>.....</p> <p>.....</p> <p><u>Mission</u></p> <p>.....</p> <p>.....</p>
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20. Reasons of the Initiation of the Program

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21. Program Objectives

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22. Targeted Learning Outcomes

Upon completion of the program, the student will be able to:

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23. Conditions of Admission to the Program

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24. Teaching Strategies and Methods

Targeted learning outcomes are developed through the following teaching strategies and activities:
blended learning, Flip learning, cooperative learning, discussion and dialogue, practical approach to knowledge acquisition through application, inquiry, critical thinking and problem solving, creative thinking, lecture, debate, ...etc.

25. Evaluation Methods

The achievement of the targeted learning outcomes is proved through the following evaluation methods:
Examples

1. Continuing evaluation during lectures with real evaluation strategies and tools: performance-based evaluation, observation, communication, self-review, ...
2. Writing a research paper in one of the subjects of the course provided that it is not literally translated, but a documented paper showing the features of writer's character.
3. Applying some of the official assessment tools and providing a relevant report
4. Developing a scale that addresses a developmental aspect
5. Providing a summary and critique of some recent studies dealing with the subjects of the course
1. 6. Examinations in accordance with instructions

26. Benchmarks

Targeted learning outcomes have been developed to reflect the following benchmarks (vision and mission of the University, standards of local and global accreditation commissions, international universities, relevant legislative and syndicate commissions, academic staff, students, employers, and community representatives)

27. Four Outstanding International Universities Offer the Same Specialization and their Plans Have been benefited from

1.
2.
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28. Program Instructions

Instructions of success and failure, assessment, and the like, which are not included in the degree award instructions.

29. Study Plan

1- University Requirements

A. Compulsory Requirements

Course Number	Course Title	Credit Hours		Prerequisite
		Theoretical	Practical	

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B. Optional Courses

Course Number	Course Title	Credit Hours		Prerequisite
		Theoretical	Practical	

2- Faculty Requirements

A. Compulsory Requirements

Course Number	Course Title	Credit Hours		Prerequisite
		Theoretical	Practical	

B. Optional Courses

Course Number	Course Title	Credit Hours		Prerequisite
		Theoretical	Practical	

3- Specialization Requirements

A. Compulsory Requirements

Course Number	Course Title	Credit Hours		Prerequisite
		Theoretical	Practical	

B. Optional Courses

Course Number	Course Title	Credit Hours		Prerequisite
		Theoretical	Practical	

30. Field Training (if available)

Description, timing, training credit hours

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34. Educational Facilities to Support Teaching and Learning Process

A- Facilities and Laboratories
B- Support Staff (name, place, job, specialization)
C. Equipment and Tools

D- Academic Staff

No.	Name	Date of Birth	Nationality	General and Accurate Specialization	University of graduation and graduation date (last qualification)	Educational Qualifications	Academic rank, date, and university name	Course(s) to be taught
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2.								
3.								
4.								
5...								

E- Office and technical materials needed to implement the program

Type of office material	Number	Available for		
		Academic Staff	Students	Both
Books				
Scientific Journals				
Electronic Books				
Electronic Scientific Journals				
Data Base				

F- Authorities that provide facilities for practical and field training

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35. Methods to Ensure Program Quality

1. What are the methods used to assess the teaching and learning process, and the effectiveness of the study plan?

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2. What are the methods used to obtain feedback from students regarding the quality of education, skills and experiences acquired?

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3. What are the methods used to develop the skills, knowledge and competencies of the academic staff in the program?

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4. What criteria and indicators are used to ensure program quality commitment?

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36. Statistics and surveys issued by official authorities showing the numbers of graduate students and the unemployment rate in this specialization

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Program Coordinator Name: Ahmed Abu-zaiton Signature ----- Date 10-2-2021

Head of the Department:----- Signature-----

Rapporteur of the Plan Committee/ Faculty:----- Signature-----

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

