KINGDOOM OF SAUDI ARABIA

Ministry of Education

Al-Imam Mohammad Ibn Saud Islamic University

College of Sciences Department of Biology



المملكة العربية السعودية وزارة التعليسم جامعة الإمام محد بن سعود الإسلامية كلية العلوم قسم الأحياء

SYLLABUS

Course Code	Course .Num	Course Name	Credit Hours	.Lec	.Lab	.Tut	Private study	requisites-Pre	Course Level	Teaching Language
BIO	314	ANIMAL PHYSIOLOGY	4	3	2	0	6	212BIO	5	English

A. Description Course

An introduction to the mechanisms of how the body works, concentrating on homeostasis, osmoregulation and excretion, digestion, nerves, respiration, reproduction, muscles and cardiovascular system.

B. Outcomes Course

By the end of this course, the student must be able to:

- 1. To recognize the parts of the body which are linked into a whole functioning unit.
- 2. To know gastrointestinal physiology and regulation of metabolism and energy balance.
- 3. To define the homeostasis and feedback control.
- 4. To outline cardiovascular physiology and respiratory system.
- 5. To recall osmoregulation and excretion.
- 6. To define the importance of endocrine glands and hormones which related to reproductive physiology.

C. : References

Required Textbook

- Hickman C. P. Jr. et al., Integrated Principles of Zoology. -ISBN .(۲۰۱۳) .th ed ۱٦ Moyes ۹۷۸: ۱۳ and P.M. Schulte. Principles of Animal Physiology 2nd Edit (2013). .^-٥٣٥١-٨٠٥٣- ISBN:
- Richard W. Hill, Gordon A. Wyse, Margaret Anderson, Animal Physiology, 3rd Edit, (2012), ISBN-10: 0878938982.

:ncesOther refere

- Campbell, N.A. and Reece, J. B. (2008) Biology 8th edition, Pearson Benjamin Cummings, San Francisco.
- Griffiths, A.J.F et al (2008) Introduction to Genetic Analysis, 9th edition, W.H. Freeman & Co. NY
- Raven, P.H et al (2006) Biology 7th edition Tata McGraw-Hill Publications, New Delhi
- HILL R W, WYSE, G A and ANDERSON, M. logyPhysio Animal (Y · · · ٤) Edition ST \ Sinauer . Associates

Course Website: Google Classroom Webpage: http://www.imamm.org/

D. Topics Outline

topics Lectures .1D

- 1. Introduction to course, Basic Body Organization; Homeostasis and Feedback Control.
- 2. Cellular Reactions and Metabolism; Cellular Metabolism.

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- 3. .Physiology Gastrointestinal
- 4. Regulation of Metabolism and Energy Balance.
- 5. .Physiology Cardiovascular
- 6. Respiratory System; Control of Respiration.
- 7. Urinary System Kidneys and Fluid/Electrolyte Balance.
- 8. .Control Muscle and muscular
- 9. Cells of the Nervous System, NS organization.
- 10. .Hormones Endocrine Glands and
- 11. Physiology Reproductive

Laboratories topics . 7D

- 1. Introduction, administrative issues, lab safety, hypothesis testing, data presentation.
- 2. .enzymes Detection of Digestive
- 3. .(fragility Osmoregulation (RBCs
- 4. Determination of Blood components
- 5. Determination of hemoglobin and hematocrit.
- 6. Blood pressure, heart rate, & rat guts.
- 7. .analysis Urine
- 8. .muscle Frog skeletal
- 9. .dynamics Cardiac
- 10. .reflexes & Special senses
- 11. .thermoregulation Vertebrate
- 12. .estimation Some physiological
- 13. Metabolic rate and body size.

E. Hours Office

Office hours give students the opportunity to ask in-depth questions and to explore points of confusion or interest that cannot be fully addressed in class.

F. System Exams & Grading

The semi-official dates of the exams for this course are:

Midterm 1: 6th or 7th week.

Midterm 2: 11th or 12th week.

- **Quizzes & Homeworks:** During the semester.

- **Final lab. Exam**: 14th or 15th week.

- .weekth16 :Final Exam

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Your course grade will be based on your semester work as follows:

% 15 :1Midterm	% 15 :2Midterm	%20Final lab. Exam:	% 40Final Exam:					
% 10Homework, Attendance & Participation: 2 ,Quizzes 2								

:The grading distribution

+ A	A	+ B	В	+ C	С	+ D	D	F
[100 ,95]	(95,90]	(90 ,85]	(85,80]	(80 ,75]	(75,70]	(70 ,65]	(65,60]	(60,0]

G. workload Student

#	Teaching/Learning activities	Contact hours	Frequency	Total contact hours	Self- study hours	Total self-study hours	Student learning time
5	Lecture	3	15	45	2	30	75
2	Tutorial	0	0	0	0	0	0
0	Lab\practical	2	15	30	1	15	45
5	Homework	0	4	0	2	8	8
4	Quiz	0.5	2	1	1	2	3
6	Midterm	1.5	2	3	5	10	13
7	Final Exam	2	1	2	12	12	14
	Total	81		77	158		

H. Attendance/Absence Student

Only three situations will be considered as possible excused absences:

- Occurrence of a birth or death in the immediate family will be excused. ("Immediate family" is defined by the University as spouse, grandparents, parents, brother, or sister).
- Severe illness in which a student is under the care of a doctor and physically unable to attend class will be excused. Students are not excused for a doctor's appointment. Do not make appointments that conflict with rehearsals. .accepted alth Center will be Notes from the University He

Executive Rules for Study Regulations and Exams

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