

Oklahoma Baptist University
Department of Biology
Hurley College of Science and Mathematics

HUMAN PHYSIOLOGY, BIOL 2364 B
FALL 2011

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Class Dates	Class Times	Classroom	Laboratory: WSB Room 115
Mon. Wed. Fri.	Section B = 9:00-9:50am	Section B = WSB 118	Section 1 = Mon.. 2:00-5:00pm, Section 4 = Wed. 2:00-5:00pm WSB 113 Section 2 = Wed. 2:00-5:00pm Section 3 = Thurs. 2:00-5:00pm

Instructor	Office	Office Hours	Phone	E-Mail
Dr. Dale Utt, Ph.D.	WSB 119D	MF 10am-11am F 2pm-3pm	405-878-2042	dale.utt@okbu.edu

DESCRIPTION

Detailed study of the manner in which different organ systems of the human body function.

COURSE OBJECTIVES

In keeping with the overall goals of the Science Division, this course is designed to provide students with the opportunity to enhance their understanding of complex biological subject matter and to develop the skills necessary for independent and critical analysis of complex phenomena, data, and observations encountered in the scientific endeavor. In this multidisciplinary approach, our academic exploration will include but will not be limited to analysis of anatomical, physiological, ecological, evolutionary, genetic, and cellular systems in plants, animals and microbes. Emphasis will be placed on developing the students' skills in inquiry-based problem solving, design and execution of experiments, interpretation of experimental data, and presentation of experimental results in both written and oral format. Moreover, it is the intent of this course to enhance the students' understanding of the interconnectedness of the sciences by relating the major

concepts of chemistry, earth/space sciences, and physics, to the Biological sciences; and to emphasize and apply mathematical concepts, including statistics and pre-calculus to investigations in biology and the analysis of data. Finally, it is the goal of this course to provide an environment in which the students can explore the relatedness of historical, sociological, technological, and ethical issues and developments to the study of contemporary Biology.

TEXTS

HUMAN ANATOMY AND PHYSIOLOGY: 9th ed.: By: F. Martini

PHYSIOEX 9.0 FOR HUMAN PHYSIOLOGY (CD-ROM version): By:
T. Stabler & G. Peterson

PREREQUISITES

Biology 2354 or permission of the instructor. Laboratory is required.

CLASS PARTICIPATION

Students are expected to have made thorough preparation for each class period. Well-prepared students will be those who have made an honest attempt to read these sections and master these concepts PRIOR to coming to class, for, unfortunately, fifty minutes is insufficient time to cover every topic in great depth. You are expected to master all the concepts regardless of whether or not we have specifically covered them in class. Therefore, be prepared to ask questions, as much of the class period will be devoted to addressing concepts with which you may be having difficulty.

ATTENDANCE

The Oklahoma Baptist University attendance policy will be followed according to guidelines published in the Student Handbook.

EXAMS

There will be six major exams and a comprehensive final, all of equal value.

LABORATORY

Attendance at all laboratory sessions is required. I expect to be informed in advance if illness or some other emergency prevents your attendance in lab or lecture. For specific topics and laboratory requirements see lab syllabus.

LATE ASSIGNMENTS

Arrangements for make-up exams must be made at least 24hrs in advance of the test date and will only be granted in cases of extreme illness or family emergency. Other reasons may be considered at the discretion of the instructor and the grade for that assignment will be reduced by a minimum of a full letter grade from the score achieved on the make-up exam.

GRADES

Grades will be based on the standard 100 percent scale: A (100-90%), B (89-80%), C (79-70%), D (69-60%), F (59% and below). Percentages will be based on the following components:

6 exams x 100 points each	600 points
Final Exam	100 points
7 Laboratory Simulation Reports x 15 points each	105 points
Osmosis & Diffusion lab	15 points
Senses lab	15 points
Urine lab	15 points
<u>Lab Final</u>	<u>100 points</u>
TOTAL POINTS	950 points

OFFICE HOURS

My office hours are Monday and Friday 10-11 and Friday 2-3. You can also make an appointment to meet with me at other times. If you stop by my office at the designated times and I am not in, you will probably find me in the laboratory preparing for class or working in the museum area.

STUDENTS WITH DISABILITIES

Oklahoma Baptist University complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Students with disabilities who need special accommodations must self-identify and submit acceptable documentation in the Student Services office located in the Geiger Center, Room 101.

ADDITIONAL IMPORTANT INFORMATION FOR OBU STUDENTS

Please refer to the following link, http://www.okbu.edu/academics/forms/Syllabus_Attachment_Fall011.pdf for important information regarding class attendance policies academic policies and expectations, tutoring information, library hours, important dates and holidays, inclement weather policies, chapel attendance policies, and more.

LECTURE SCHEDULE

DATE	ASSIGNMENT	TOPIC
Aug 26	Chapter 1	Introduction and discussion of syllabus. Intro to Anatomy & Physiology
Aug 29	Chapter 2	Chemical level of organization
Aug 31	Chapter 3	Cellular level of organization
Sept 2	Chapter 4	Tissue level of organization
Sept 5	Labor Day Holiday	No Class
Sept 7	Chapter 6	Osseous Tissue and Skeletal Structure
Sept 9	Chapter 6 cont'd	Osseous Tissue Function con't

Sept 12	EXAM I	NONE
Sept 14	Chapter 10	Muscle Tissue
Sept 16	Chapter 10 cont'd	Muscle Tissue con't
Sept 19	Chapter 12	Neural Tissue
Sept 21	Chapter 12 cont'd	Neural Tissue con't
Sept 23	Chapter 13	Spinal Cord and Spinal Nerves
Sept 26	EXAM II	NONE
Sept 28	Chapter 14	Brain and Cranial Nerves
Sept 30	Chapter 14 con't	Brain Function con't
Oct 3	Chapter 15	Integrative Functions
Oct 5	Chapter 16	Autonomic Nervous System, Higher Order Functions
Oct 7	Chapter 17, pgs 548-565	Sensory Function
Oct 10	Chapter 17, pgs 565-592	Sensory Function
Oct 12	EXAM III	NONE
Oct 14	Chapter 18	Endocrine System
Oct 17	Chapter 18 con't	Endocrine System con't
Oct 19	Chapter 19	Blood
Oct 20,21	Fall Free Days	No Class
Oct 24	Chapter 19 con't	Blood con't
Oct 26	Chapter 20	Heart
Oct 28	Chapter 21, pgs 707-738,755- 763	Blood Vessels and Circulation
Oct 31	Chapter 22, pgs 764-784	Lymphatic System and Immunity
Nov 2	Chapter 22, pgs 785-812	Lymphatic System and Immunity con't
Nov 4	video	Immune Function
Nov 7	EXAM IV	NONE
Nov 9	Chapter 23, pgs 830-861	Respiratory Physiology
Nov 11	Chapter 24	Digestive System

Nov 14	Chapter 24 con't	Digestive System con't
Nov 16	Chapter 25, pgs 916-928	Metabolism and Energetics
Nov 18	Chapter 25, pgs 928-935, 943- 952	Metabolism and Energetics con't
Nov 21	EXAM V	NONE
Nov 23-25	Thanksgiving Holiday	No Class
Nov 28	Chapter 26, pgs 963-996	Renal Physiology
Nov 30	Chapter 27, pgs 997-1011	Fluid, Electrolyte and Acid-Base Balance
Dec 2	Chapter 27, pgs 1011-1030	Fluid, Electrolyte and Acid-Base Balance con't
Dec 5	Chapter 28	Reproductive System
Dec 7	Chapter 29, pgs 1076-1102	Development
Dec 9	EXAM VI	NONE
Wed. Dec 14	FINAL EXAM Section B	1:00-3:00PM

LABORATORY SCHEDULE

DATE	VIDEO MATERIAL	EXERCISE
Week 1	“Sci Am Frontiers: Life’s Little Questions II”	Osmosis & Diffusion
Week 2	Labor Day week	No lab
Week 3	“Body Story – Broken Arm”	Skeletal Muscle Physiology - PhysioEx
Week 4	“Sci Am Frontiers: Pieces of Mind”	Neurophysiology - PhysioEx
Week 5	“NOVA: Secrets of the Mind”	Special Senses – Handout Optical Illusions
Week 6	“Body Story – Anaphylactic Shock”	Blood Analysis – PhysioEx
Week 7	“Body Story – Heart Attack”, “Sci Am Frontiers: Affairs of the Heart”	Frog Cardiovascular Physiology - PhysioEx
Week 8	Fall Free Days week	No lab
Week 9	“Sci Am Frontiers: Body Building”	Cardiodynamics - PhysioEx
Week 10	“NOVA: Everest in the Death Zone”	Respiratory Physiology – PhysioEx
Week 11	“Body Story: Fat”, “Body Story: Food Poisoning”	Nutrition discussion snacks
Week 12	“Sci Am Frontiers: Never Say Die”	Aging - Handouts
Week 13	Thanksgiving Break	No lab
Week 14	“Joined at Birth”	Renal Physiology - PhysioEx
Week 15	none	Urine lab - Handout

As a Christian liberal arts university, OBU transforms lives by equipping students to pursue academic excellence, integrate faith with all areas of knowledge, engage a diverse world, and live worthy of the high calling of God in Christ.