

**CASPER COLLEGE COURSE SYLLABUS**  
**ZOO 2110-Human Physiology**

**Semester/Year:** Fall 2015

**Lecture Hours:** 3

**Lab Hours:** 2

**Credit Hours:** 4

**Class Time:**

Lecture: 1-1:50 PM

Lab A: 4-6 PM

Lab B: 1-3 PM

**Days:**

MWF

Thursday

Thursday

**Room:**

LS 109

LS 202

LS 202

**Instructor's Name:** Kelly Keenan, M.S.

**Instructor's office location:**

LS 105

**Office Phone:**

(307) 268-2302

**Email:**

kelly.keenan@caspercollge.edu

**Office Hours:** Monday and Wednesday 9-11 am as well as Friday 10-11 am

**Course Description:** This course is a scientific inquiry into the physiology of select organ systems in the human body during homeostasis. Physical exertion, environmental influences and pathological change will also be discussed as they pertain to physiological change in organ system function. Physiologic concepts will be related to anatomical organization.

**Statement of Prerequisites:** none

**Goal:** Students who successfully complete this course will have a basic understanding of the function of human cells, tissues, organs and organ systems. Students will also be able to describe the function of each of the above components.

**Outcomes:** As a result of successful completion of ZOO 2110, students shall be able to:

1. Use the scientific method
2. Solve problems using critical thinking and creativity
3. Use appropriate technology and information to conduct research
4. Use quantitative analytical skills to evaluate and process numerical data

**Course Objectives:**

1. Define physiology and describe its relation to anatomy
2. Name and describe the major organ systems of the body
3. Name and describe the composition and synthesis of the major biomolecules, as well as how the human body utilizes them
4. Describe the responses of the major organ system to exercise and recovery from physical exertion
5. Describe and relate the significance of various physiologic parameters such as heart rate, cardiac output, endocrine secretions, gastrointestinal and renal function
6. Use anatomical principles to describe neural tissue and the propagation of neural signals

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8. Use anatomical principles to describe the functional differences of muscle tissue
9. Predict/ describe the manifestation of physiological dysfunction in organ systems

**Methodology:** This is a lecture/lab course. You are required to attend both components in order to receive a passing grade in the course.

**Evaluation Criteria:** Your progress in this course will be measured by your performance on:

- **4 lecture exams** (these may consist of multiple choice, true/false, matching, fill-in-the-blank, and short answer questions)
- **10 laboratory quizzes** (these will be given weekly and will cover information from the previous laboratory sessions, unless otherwise noted)
- **2 laboratory exams** (these may consist of multiple choice, true/false, matching, fill-in-the-blank, and short answer questions)
- **1 Final Exam**

**Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.**

**Examination Policy:** There will be **NO MAKE-UP EXAMS** in this course\*\*. Exam dates listed on this syllabus are tentative and subject to change. The instructor will notify you at least 2 lecture sessions ahead of time if a change is to be made to the exam schedule. It is your responsibility to check your personal schedule with ALL exam dates and to notify the instructor in advance of the scheduled exam time if there is a conflict. See the Casper College Student Handbook for information on how to handle absences due to illness or death in family. If a student is more than 30 minutes late for an exam they will be considered absent for that date.

*\*\* All students will have the option of taking a cumulative lecture exam during finals week and utilizing the score on that exam to replace a low or missed lecture or lab exam score from earlier in the semester*

**Grading:** Your grade in the course will be assigned based on the percentage of the total points you earn. Points are derived from lecture and lab exams, lab quizzes, as well as from assignments and extra credit opportunities that *may* arise. The point distribution is as follows:

4 lecture exam	100 points each	= 400 points
2 lab exams	100 points each	= 200 points
10 lab quizzes	10 points each	= 100 points
1 final exam	200 points	= 200 points
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	total points	= 900

Grades for this course will be assigned on a percentage bases (90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; <60% = F).

**Recitation:** Recitation is a complement to lecture and lab so that students can Obtain clarification on concepts, facts, and processes covered in lecture and lab. Bring questions you have from lectures based off of your notes or from concepts covered in lab.

**Text, Readings, and Materials:**

Lecture: Human Physiology , 14<sup>th</sup> edition by Stuart Fox

Lab: Handouts provided

**Class Policies:** Students will be allowed to withdraw or change to audit status any time prior to the last exam, but must discuss these changes with the instructor and receive permission to do so. **The institutional withdraw deadline is November 12, 2015.**

**Student Rights and Responsibilities:** Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

Cell phones are to be turned to “vibrate” or silent mode at all times during class.

**Chain of Command:** If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head (Scott Johnson), the Dean (Grant Wilson), and lastly the Vice President for Academic Affairs (Shawn Powell).

**Academic Dishonesty:** (Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

**Official Means of Communication:** Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly. This is also, where you will find course evaluation links during course evaluation periods.

**ADA Accommodations Policy:** If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, [bheuer@caspercollege.edu](mailto:bheuer@caspercollege.edu). The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

## Tentative Lecture Schedule ZOO-2110 Fall 2015

Week #	Week of	Topic	Reading
1	24-Aug	Course Introduction & Syllabus Review Homeostasis, Primary Tissues, Organs and Organ Systems Chemical Composition of the Body	Ch 1 Ch 2
2	31-Aug	Chemical Composition of the Body Cell Structure and Function (Protein Synthesis) Enzymes and Energy	Ch 2 Ch 3 Ch 4
3	7-Sep	Finish material for Exam 1 <b>EXAM 1</b> Cell Respiration	Ch 5
4	14-Sep	Cell Respiration continued Cell Communication and Environment Nervous System Physiology	Ch 5 Ch 6 Ch 7, 8, 9
5	21-Sep	Nervous System Physiology (M,W & F)	Ch 7, 8, 9
6	28-Sep	Nervous System Physiology continued Finish material for Exam 2 <b>EXAM 2</b>	Ch 7, 8, 9
7	5-Oct	Muscular System Physiology (M, W & F)	Ch 12
8	12-Oct	<b>EXAM 3</b> (Exam 3 includes Endocrine System info from Lab 5) Blood Begin Vessels/circulation	Ch 13 Ch 14
9	19-Oct	<b>FALL BREAK (Monday Oct 19)</b> Vessels/circulation Circulation and Heart/Cardiac Cycle	Ch 14
10	26-Oct	Circulation and Heart/Cardiac Cycle <b>EXAM 4A</b> Respiratory System	Ch 14 & 16
11	2-Nov	Respiratory System Renal Physiology (W & F)	Ch 16 & 17
12	9-Nov	Finish material for exam 4B <b>EXAM 4B</b> <b>Advising Day (Friday Nov 6)</b>	
13	16-Nov	Digestive System	Ch 18
14	23-Nov	Digestive System/ Begin Reproductive System <b>THANKSGIVING BREAK (Wed &amp; Fri)</b>	Ch 18 Ch 19
15	30-Nov	Reproductive System	Ch 20
16	7-Dec	Immune System	Ch 15
17	Dec 14-18	<b>FINAL /CUMULATIVE EXAM</b>	

*\* This schedule is subject to change in the event of extenuating circumstances and/or to ensure better learning. Students will be notified in class and in writing in advance to any changes.*

Thursday	Topic	Lab #
Aug 27	<b>NO LAB</b>	
Sep 3	Histology Review & Homeostasis/Negative Feedback	1
10	Osmosis (Lecture = Diffusion, Osmosis & Tonicity)	2
17	Sensory I – Reflex Arcs and Cutaneous Receptors (Chapter 10)	3
24	Sensory II – Special Senses (Chapter 10)	4
Oct 1	Endocrine System (Lecture content covered – Chapter 11)	5
8	Muscular System (Lecture = Mechanism of Contraction)	6
15	<b>LAB EXAM 1</b>	
22	Blood – Hematocrit & Blood Typing (Lecture = Blood Typing)	7
29	Heart - Electrocardiogram and Heart Sounds (Lecture = Reading an ECG)	8
Nov 5	Respiratory System (Lecture = Respiratory Volumes)	9
12	Urinalysis (Lecture = Formation of Urine)	10
19	Digestive System & Metabolism (Analysis of Body Comp. & Metabolic Rates)	11
26	<b>NO LAB-Thanksgiving Day</b>	
Dec 3	Open Lab	
10	<b>LAB EXAM 2</b>	
17	<b>NO LAB-Finals week</b>	