ZOO 2110 Human Physiology

Semester/Year: Spring 2016

Lecture Hours: 3  Lab Hours: 3  Credit Hours: 4

Class Time: Online  Days: N/A  Room: N/A

Instructor’s Name: Sharyn A. Polley, Ph.D.

Instructor's Contact Information:  Office Phone:  Email:
Cell 307-899-9169  Campus Contact  spolley@caspercollege.edu

Office Hours:
I do not have an office on campus. However, my on campus contact is Renee Sietmann-Hardy in PS 132. I am including her phone number as well as my cell number. Please use my cell number if you have an emergency and need to speak to me right away. You can call or text. I will do my best to get back to you within 24 hours. Appointments can also be made for video conferencing using Google + hangouts.

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. They will be able to describe this function.

Outcomes:
After the successful completion of this course, the students will be able to:
1. Demonstrate effective oral and written communication
2. Use the scientific method
3. Solve problems using critical thinking and creativity
4. Use appropriate technology and information to conduct research

**Course Objectives:**
After the successful completion of this course, the students will be able to:
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 systems 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 principals to describe neural tissue and the propagation of neural signals
7) Use anatomical principles to describe the functional differences of muscle tissue
8) Predict/describe the manifestation of physiologic dysfunction in organ systems

**Warning** — some course content may be considered sensitive by some students.

**Methodology:**
This is a lecture/lab course. You are required to participate in both components in order to receive a passing grade in the course. Lab and lecture will be incorporated into one grade. All testing will be done within MOODLE.

**Evaluation Criteria:**
Your progress in this course will be measured in a variety of ways. One of the most important tools you have as a student is your ability to communicate. Thus, you must be able to clearly articulate in written form your understanding of human anatomy and physiology. You will be evaluated by 4 criteria: performance on 8 lecture quizzes (these may consist of multiple choice, true/false, matching, fill-in-the-blank, and short answer questions), study quizzes, assignments, and discussion postings. In addition to this, I will regularly ask questions of the class. Your ability to participate during these discussions will positively affect your grade (or negatively if you choose not to participate). You may be given additional assignments throughout the course that are intended to reinforce information being covered.

The course grading scale will be as follows:

100-90=A
89-80=B
79-70 = C
69-60 = D
59 or below = F

There will be **NO MAKE-UP EXAMS** in this course. It is your responsibility to check your personal schedule with ALL exam dates and to make adjustments as necessary. All students have the option of taking a cumulative lecture exam during finals week and using it to replace a low or missing lecture exam. In an emergency, an exception will be made as long as proper documentation is provided. See the Casper College Student Handbook for information on how to handle absences due to illness or death in family.

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

**Required Text, Readings, and Materials:**

ZOO 2110: Fox Human Physiology 14th Edition

Two options are available for the text—please choose only one.

- **All Digital:** Connect with LS Labs, APR = 9781259624568 (Students can buy the loose-leaf print version DIRECTLY through Connect for $40)

- **Print + Digital:** Loose-leaf textbook + Connect with LS Labs, APR = 9781259671418

You are also required to purchase an at home lab kit from eScience Labs. This can be done via the bookstore or through the company directly—your choice. However, please order it immediately as we will begin using them during the second week of class. Details for ordering are found within the moodle class shell.

**Class Policies: Last Date to Change to Audit Status or to Withdraw with a W Grade:**

You may withdraw from the course any time prior to April 14\textsuperscript{th}. It is the student’s responsibility to initiate this.

**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.
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/Program Director, the Dean, and lastly the Vice President for Academic Affairs.

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.
All assignments and class communication should be within moodle.

ADA Accommodations Policy:
If you need academic accommodations because of a disability, please inform me as soon as possible. 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. 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.
**Calendar or schedule indicating course content:**

<table>
<thead>
<tr>
<th>Week Beginning</th>
<th>Content</th>
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<tbody>
<tr>
<td>1 Jan 18-24</td>
<td>Getting Started</td>
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<tr>
<td></td>
<td>Go Over Syllabus</td>
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<tr>
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<td>Review Course Resources and Access Supplemental Websites</td>
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<tr>
<td>2 Jan 25-31</td>
<td>Chapter 1: The Study of Body Function</td>
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<td>Chapter 2: Chemical Composition</td>
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<tr>
<td>Jan 31</td>
<td>Exam 1 over chapters 1 and 2 due by 11:55pm</td>
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<tr>
<td>3 Feb 1-7</td>
<td>Chapter 3: Cell Structure and Genetic Control</td>
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<td>Chapter 4: Enzymes and Energy</td>
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<td>4 Feb 8-14</td>
<td>Chapter 5: Cell Respiration and Metabolism</td>
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<td>Chapter 6: Interactions Between Cell and Extracellular Environment</td>
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<tr>
<td>Feb 14</td>
<td>Exam 2 over chapters 3-6 due by 11:55pm</td>
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<tr>
<td>5 Feb 15-21</td>
<td>Chapter 7: Neurons and Synapses</td>
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<td>Chapter 8: CNS</td>
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<td>6 Feb 22-28</td>
<td>Continue with chapters 7 and 8</td>
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<td>Feb 28</td>
<td>Exam 3 over chapters 7 and 8 due by 11:55pm</td>
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<td>7 Feb 29-Mar 6</td>
<td>Chapter 9: ANS</td>
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<td>Chapter 10: Sensory Physiology</td>
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<td>8 Mar 7-13</td>
<td>Chapter 11: Endocrine</td>
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<td>Mar 13</td>
<td>Exam 4 over chapters 9-11 due by 11:55pm</td>
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<td>9 Mar 14-20</td>
<td>Spring Break</td>
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<td>10 Mar 21-27</td>
<td>Chapter 12: Muscles</td>
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<td>11 Mar 28-Apr 3</td>
<td>Continue with chapter 12</td>
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<td>Apr 3</td>
<td>Exam 5 over chapter 12 due by 11:55pm</td>
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<td>12 Apr 4-10</td>
<td>Chapter 13: Blood, Heart and Circulation</td>
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<td>Chapter 14: Cardiac Output, Blood Flow and Blood Pressure</td>
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<td>13 Apr 11-17</td>
<td>Chapter 16: Respiratory Physiology</td>
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<td>Apr 17</td>
<td>Exam 6 over 13, 14 and 16 due by 11:55pm</td>
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<td>14 Apr 18-24</td>
<td>Chapter 15: Immunity</td>
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<tr>
<td>Apr 25-May 1</td>
<td>Chapter 17: Physiology of Kidneys&lt;br&gt;Chapter 18: The Digestive System</td>
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<td>May 1</td>
<td>Exam 7 over chapters 15, 17 and 18 due by 11:55pm</td>
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<td>May 2-8</td>
<td>Chapter 19: Metabolism&lt;br&gt;Chapter 20: Reproduction</td>
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<td>May 9-11</td>
<td>Exam 8 over chapters 19 and 20&lt;br&gt;Optional Final</td>
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