

Peru State College  
**BIOL 312 – HUMAN PHYSIOLOGY**  
Syllabus – Spring – 2010

**Instructor:** Dr. John Hnida

**Office Hours:** MW 9:30 – 10:30; T 9:30 – 10:30; F 10:00 – 12:00

**Office Telephone:** 872-2231

**Email Address:** [jhnida@peru.edu](mailto:jhnida@peru.edu)

**Course Meets:** Lecture TR 8:00 – 9:15; Lab R 9:30 – 11:15

**Required Textbooks:**

Marieb, E.N. and Hoehn, K. 2008. *Anatomy & Physiology*, 3<sup>rd</sup> edition. Benjamin/Cummings.

I will bring handouts to the laboratory to supplement our work. Bring the lecture text to lab, because it has useful figures and information.

**Course Description:** An examination of the functions and interactions of the organ systems of humans, with an emphasis on the body's homeostatic control mechanisms.

**Prerequisites:** BIOL 102 and 210

**Objectives:** Upon completion of this course you should be able to:

1. Understand the basic concepts of human physiology
2. Know and use the vocabulary of physiology, thereby becoming familiar with basic medical terminology
3. Understand the physiological basis of some pathological conditions in humans and other mammals

At the beginning of the course, we will discuss how these objectives fit into the College's and School's mission and goals.

**Instructional Approach & Expectations**

The instructional approach will include classroom lectures and hands-on laboratory exercises.

Because attendance and participation are vital to learning, you are expected to be at all lectures and labs having read the assigned material beforehand and prepared to participate in the coursework. You are also expected to be on time. To foster a learning environment, please join me in treating your classmates and yourselves with respect. I encourage you to ask questions, to seek help when needed, and to help your classmates understand the material.

**Assessment, Grading and Attendance**

Lecture Exams: There will be 2 in-class exams; each will be worth 100 points and will consist of short-answer, definition, and multiple-choice questions. The final exam (150 points) will include some of the materials covered in previous exams. Exam questions will come from homework, lectures, *and* reading assignments. You will be tested on the reading assignments, regardless of whether or not they have been discussed in class.

Laboratory

Quizzes: Lab quizzes will be worth 20 points each, and will consist of short-answer questions based on lab material, lecture material, and readings from the text and journal articles.

**Oral Presentation:** Use the resources of the PSC Library to find a paper that relates to a subject covered in the text, lecture or laboratory exercises. The paper must be physiology-related, and **must** be from a science journal, e.g., American Scientist, Canadian Journal of Zoology, Nature, Science, Scientific American, etc.

Once you have a prospective paper, give me the article's title, author's name(s), date, journal of publication, and page numbers; this information will be used to prevent the same paper from being presented by more than one student. This information must be given to me **at least 1 week prior** to your presentation so that I can have a photocopy of the article on reserve at the library for everyone to read. If you get the article on interlibrary loan, bring it to me so that I can make photocopies of it to place on reserve.

The presentation must be 15-20 minutes long. Feel free to use Powerpoint, overheads, or other visual aids to enhance your presentation. Do the following (note that #4 is optional):

- 1) Summarize the main points of the paper *in your own words* and in a clear and concise manner. Be thorough, as the summary is worth **15 points**.
- 2) Describe, in detail, how information in the article relates to appropriate information that is presented in the textbook. This must also be done in your own words, and is worth **15 points**.
- 3) Critique the article, i.e., assess its strengths and weaknesses. For instance, if you selected a research paper, assess the strengths and weaknesses of the methods used, the interpretation of the results, etc. This is worth **10 points**, so be sure to do a thorough critical review of the paper.
- 4) If thinking about the paper affects the way you see yourself, other people, your intended career, etc., take some time to tell us about it. This part of the presentation is optional.
- 5) Be sure that your presentation is well-organized and that you pay close attention to grammar, spelling, pronunciation, etc. because **10 of the 50 points** will be based on how well you present the material.

Lecture exams (2):	200
Final exam:	150
Lab quizzes (4):	80
Presentation:	50
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	480 total

**Grading Scale:** A = 90-100%; B+ = 85-89%; B = 80-84%; C+ = 75-79%; C = 70-74%; D+ = 65-69%; D = 60-64%; F = 59% or below

**Attendance Policy:** As stated above, students are expected to attend lecture and lab regularly and to arrive punctually. Lectures will not be repeated and one cannot make up a missed lab. Attendance is a privilege and a responsibility represented by not only the student's investment, but also by a significant investment by the State of Nebraska.

Active cell phones are not allowed in lecture or lab without my permission for extenuating circumstances (e.g., first-response on-call, etc.). Please turn off your cell phones prior to entering the lecture or laboratory and leave them off until after you have left the lecture or lab.

**Makeup exams/quizzes:** Permission to take a makeup exam or quiz must be obtained from the instructor *prior* to the day of the exam/quiz, otherwise you will receive a zero. Leaving a phone or e-mail message does not constitute prior permission. Unless you have personally received permission from me it will not be granted once the exam or quiz has been given. Makeup exams/quizzes: a) must be taken within 1 week of the scheduled test, b) will be given at a time that fits within my schedule (e.g., during office hours), & c) will be in essay format in the case of makeup lecture exams.

**Homework Assignments:** Homework assignments are for your benefit and will not be graded. Do them in a timely fashion; do not wait until exam or quiz time to cram—cramming will likely cause undue stress and a poor grade.

### College's Incomplete Coursework Policy

To designate a student's work in a course as incomplete at the end of a term, the instructor records the incomplete grade (I). Students may receive this grade only when serious illness, hardship, death in the immediate family, or military service during the semester in which they are registered prevents them from completing course requirements. In addition, to receive an incomplete, a student must have completed substantially all of the course's major requirements.

Unless extenuating circumstances dictate otherwise, students must initiate requests for an incomplete by filling out an Incomplete Grade Completion Contract, which requires the signature of the student, instructor, and Dean. The Incomplete Grade Completion contract cites the reason(s) for the incomplete and details the specific obligations the student must meet to change the incomplete to a letter grade. The date by which the student agrees to complete required work must appear in the contract. The Dean, the instructor, and the student receive signed copies of the Incomplete Grade Completion Contract.

Even if the student does not attend Peru State College, all incomplete course work must be finished by the end of the subsequent semester. Unless the appropriate Dean approves an extension and if the student does not fulfill contract obligations in the allotted time, the incomplete grade automatically becomes an F.

### College's Academic Integrity Policy

The College expects all students to conduct themselves in a manner that supports an honest assessment of student learning outcomes and the assignment of grades that appropriately reflect student performance. It is ultimately the student's responsibility to understand and comply with instructions regarding the completion of assignments, exams, and other academic activities. At a minimum, students should assume that at each assessment opportunity they are expected to do their own original academic work and/or clearly acknowledge in an appropriate fashion the intellectual work of others, when such contributions are allowed. Students helping others to circumvent honest assessments of learning outcomes, or who fail to report instances of academic dishonesty, are also subject to the sanctions defined in this policy.

Instances of academic dishonesty may be discovered in a variety of ways. Faculty members who assign written work ordinarily check citations for accuracy, run data base and online checks, and/or may simply recognize familiar passages that are not cited. They may observe students in the act of cheating or may become aware of instances of cheating from the statements of others. All persons who observe or otherwise know about instances of cheating are expected to report such instances to the proper instructor or Dean.

In order to promote academic integrity, the College subscribes to an electronic service to review papers for the appropriate citations and originality. Key elements of submitted papers are stored electronically in a limited access database and thus become a permanent part of the material to which future submissions are compared. Submission of an application and continued enrollment signifies your permission for this use of your written work.

NSCS Board of Trustees Policy 4220 states that each College “. . . will establish a distance learning assessment policy that will include, at a minimum, a substantial culminating experience that is proctored.” Peru State College's policy is that each course that is offered entirely online will feature a proctored final exam that substantially measures the extent the course's stated learning objectives are achieved. Online course syllabi will clearly state that, regardless of grades earned previously, the proctored final exam must be passed in order to receive credit for the course. Courses which feature graded site-based activities (e.g., teaching demonstrations) and/or video-taped presentations that occur near the end of the term, and that are designed to substantially assess the achievement of learning objectives, can be considered in compliance with this policy. Project-based capstone and graduate courses utilizing real-time discussions held by web-cam, phone or in person with the faculty member as part of the assessment process can also be considered in compliance with this policy.

Should an occurrence of academic misconduct occur, the faculty member may assign a failing grade for the assignment or a failing grade for the course. Each incident of academic misconduct should be reported to the Dean and the Vice President for Academic Affairs (VPAA).

The VPAA may suspend students for two semesters found to be responsible for multiple instances of academic dishonesty. The reason for the suspension will be noted on the student's transcript.

A faculty member need present only basic evidence of academic dishonesty. There is no requirement for proof of intent. Students are responsible for understanding these tenets of academic honesty and integrity. Students may appeal penalties for academic dishonesty using the process established for grades appeals.

#### Title IX Compliance Notice

Peru State College is an equal opportunity institution. PSC does not discriminate against any student, employee or applicant on the basis of race, color, national origin, sex, disability, religion, or age in employment and education opportunities, including but not limited to admission decisions. The College has designated an individual to coordinate the College's nondiscrimination efforts to comply with regulations implementing Title VI, VII, IX, and Section 504. Inquiries regarding non-discrimination policies and practices may be directed to Eulanda Cade, Director of Human Resources, Title VI, VII, IX Compliance Coordinator, Peru State College, PO Box 10, Peru, NE 68421-0010, (402) 872-2230.

Students requesting reasonable accommodation and tutoring services should contact the Center for Achievement and Transition Services (CATS).

## Tentative Lecture Schedule

<u>Week of</u>	<u>Topics</u>	<u>Chapters Assigned</u>
Jan 11	Levels of Organization; Homeostasis; Fluids	1; 25 (in part)
Jan 18	Cell Membranes: Functions	3
Jan 25	Neuronal Physiology	11
Feb 1	Central Nervous System	12
Feb 8	Central Nervous System	12
Feb 15	Autonomic Nervous System	14
Feb 22	Sensory Physiology	13
Mar 1	Sensory Physiology	13
Mar 15	Endocrinology	15
Mar 22	Cardiovascular Physiology	16, 17, 18
Mar 29	Immunology	20
Apr 5	Respiratory Physiology	21
Apr 12	Digestive Physiology	22
Apr 19	Renal Physiology	24
Apr 26	Reproductive Physiology	26
May 3	Final Exam: Tuesday, May 4; 08:00-10:00	

## Tentative Lab Schedule

<u>Date</u>	<u>Lab Exercise</u>
Jan 14	Lab organization; library databases
Jan 21	Homeostasis and negative feedback
Jan 28	Diffusion, osmosis & tonicity
Feb 4	<b>Quiz;</b> Oral Presentations
Feb 11	Reflex physiology, part 1
Feb 18	Reflex physiology, part 2
Feb 25	<b>Quiz;</b> Oral Presentations
Mar 4	Sensory physiology
Mar 18	Histology of endocrine glands
Mar 25	<b>Quiz;</b> Oral Presentations
Apr 1	Formed elements of the blood
Apr 8	Pulse & blood pressure determination
Apr 15	<b>Quiz;</b> Renal function
Apr 22	No lab
Apr 29	Oral Presentations

**Caveat:** The above schedules are subject to change in the event of extenuating circumstances. Modifications will be communicated to the students as soon as possible.