

BI410L -- Advanced Human Physiology: Nutrition and Metabolism

Fall 2018

Syllabus

Instructor: Dr. Michael Weichhaus
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Office Hours: Tue: 12:00-3:00 pm, Wed: 1:00-3:00 pm Thu: 1:00-2:00 pm
Class Hours: M or F 14:30-17:20 Henry Hall Lab 2

Required Text:

- PhysioEx 9.1, Pearson, Benjamin Cummings. (<http://physioex.com/login.html>)

Prerequisite: BI 308/BI 308L

COURSE DESCRIPTION AND GOALS: BI 410L aims to provide the student with the environment to design and conduct a research project on Human Physiology, thus allowing student groups to undertake the responsibility of experimental design based upon scientific methodology. Furthermore, students will learn physiological concepts during virtual lab sessions.

Course Learning Outcomes	Program Learning Outcomes
Develop your ability to interpret physiological data and present reasonable explanations for any observations	#1) An understanding of the scientific method and the ability to design and test a hypothesis. #2) Ability to visualize, statistically evaluate, validate and interpret scientific data, and to communicate science effectively both orally and in writing. #3) The ability to acquire and comprehend information from published scientific literature and to employ computational resources in the resolution of biological problems.
Develop proficiency in designing, carrying out, interpreting and presenting scientific data	#2) ability to visualize, statistically evaluate, validate and interpret scientific data, and to communicate science effectively both orally and in writing. #3) The ability to acquire and comprehend information from published scientific literature and to employ computational resources in the resolution of biological problems.

Develop your ability to carry out accurate scientific design methodology	#2) ability to visualize, statistically evaluate, validate and interpret scientific data, and to communicate science effectively both orally and in writing #4) An understanding of the chemical and physical principles that unite all life forms, and of biological organization at the molecular, cellular, tissue, organ, organism & systems level.
Design experiments for future research course(s) and graduate work	#7) An understanding of the entry requirements, career pathways and progression for the major post-graduate fields of research, education and health professions
Work comfortably in a laboratory setting manipulating data and setting up apparatus.	#7) An understanding of the entry requirements, career pathways and progression for the major post-graduate fields of research, education and health professions
Have the ability to work in a group setting	#7) An understanding of the entry requirements, career pathways and progression for the major post-graduate fields of research, education and health professions

Course Content:

This course is designed for you to develop a scientific experiment based on a question. You will have four weeks to develop and present your project and then have the rest of the time to gather your data, which will need to be presented in a final report. Your progress throughout the semester needs to be documented by keeping an up-to-date lab notebook.

Grade Determination:

1. Separate grades will be given for lecture and laboratory. It is possible to receive different grades for lecture and laboratory.
2. You are required to complete the 12 PhysioEx exercises by the due date noted below and perform the virtual labs. You are expected to complete this activity as a homework assignment on canvas.
3. Attendance is necessary and will form part of your grade.
4. The rest of the grade will be assessed from different parts of your project. The report and the lab notebook will be assessed on an individual basis. The final presentation will be a group presentation and will consist of the same grade for all group members. Further instructions will be provided on an individual group level and depend on the project you chose to undertake
5. The laboratory grade will be determined in the following manner:

PhysioEx Activities	36 percent
Attendance	10 percent
Group presentation/Materials/Protocol	22 percent
Final Report	22 percent
Final Lab notebook	<u>10 percent</u>
Total	100 percent

Grading scale:

A	90 – 100%
B	80 – 89%
C	70 – 79%
D	50 - 69%
F	less than 50%

Late Work Policy

There are no make-ups for exams, unless a physician's note documents your absence during exams. Late service learning, food tracker and ATI active learning sheets may receive a zero, except in special circumstances determined by the instructor.

Student Expectations

1. Disability Access

Pursuant to several federal and state laws, including the Americans with Disabilities Act of 1990, as amended by the ADA Amendments Act of 2008, and Section 504 of the Rehabilitation Act of 1973, all qualified students with disabilities are protected from discrimination on basis of disability and are eligible for reasonable accommodations or modifications in the academic environment to enable them to enjoy equal access to academic programs, services, or activities. The Chaminade Counseling Center is located in the Student Support Services Building. For referrals and questions, contact Dr. June Yasuhara at (808) 735-4845 or counselingcenter@chaminade.edu.

2. Title IX Compliance

Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual

misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. Should you want to speak to a confidential source you may contact the following:

- Chaminade Counseling Center 808 735-4845.
- Any priest serving as a sacramental confessor or any ordained religious leader serving in the sacred confidence role.

3. Attendance Policy

In college courses you are responsible for your learning. Attendance during lecture is one way to familiarize yourself with the learning material, however you may by now have discovered more effective ways of learning. As such attendance during lecture is not enforced in this course. You are responsible to familiarize yourself on all topics/material covered during your absence. Please note that official University policy mandates your attendance in all classes and I may report continued absence to Advising and/or the dean of students. (see [University catalogue](#), p.57)

4. Academic Conduct Policy

The success of the Honor Code is made possible only with the acceptance and cooperation of every student. Each student is expected to maintain the principles of the Code. Example of Honor Code violations include, but are not limited to:

- Giving or receiving information from another student during an examination;
- Using unauthorized sources for answers during an examination;
- Illegally obtained test questions before the test;
- Any and all forms of plagiarism – submit all or part of someone else's work or ideas as your own;
- The destruction and/or confiscation of school and/or personal property.

Violations of the Honor Code are serious. They harm other students, your professor, and the integrity of the University. Alleged violations will be referred to the Office of Judicial Affairs. If found guilty of plagiarism, a student might receive a range of penalties, including failure of an assignment, failure of an assignment and withholding of the final course grade until a paper is turned in on the topic of plagiarism, failure of the course, or suspension from the University.

Violations of Academic Integrity: Violations of the principle include, but are not limited to:

- Cheating: Intentionally using or attempting to use unauthorized materials, information, notes, study aids, or other devices in an academic exercise.

- Fabrication and Falsification: Intentional and unauthorized alteration or invention of any information or citation in an academic exercise. Falsification is a matter of inventing or counterfeiting information for use in any academic exercise.
- Multiple Submissions: The submission of substantial portions of the same academic work for credit (including oral reports) more than once without authorization.
- Plagiarism: Intentionally or knowingly presenting the work of another as one's own (i.e., without proper acknowledgment of the source).
- Abuse of Academic Materials: Intentionally or knowingly destroying, stealing, or making inaccessible library or other academic resource materials.
- Complicity in Academic Dishonesty: Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.

Plagiarism includes, but is not limited to:

- Complete or partial copying directly from a published or unpublished source without proper acknowledgement to the author. Minor changes in wording or syntax are not sufficient to avoid charges of plagiarism. Proper acknowledgement of the source of a text is always mandatory.
- Paraphrasing the work of another without proper author acknowledgement.
- Submitting as one's own original work, however freely given or purchased, the original exam, research paper, manuscript, report, computer file, or other assignment that has been prepared by another individual.

Consequences of academic honesty violations:

In the cases of alleged academic dishonesty, such as plagiarism, cheating, claiming work not done by the student, or lying, where a faculty member observes or discovers the dishonesty, the faculty members may choose to confront the student and handle the matter between the faculty member and the student, or the faculty member may choose to refer the incident to the Dean or Graduate Program Director. If the faculty member chooses to confront the situation and it is not satisfactorily resolved between the faculty member and the student, the matter may then be referred or appealed to the Dean or Director.

Questions of academic dishonesty in a particular class are first reviewed by the instructor, who must make a report with recommendations to the Dean of the Academic Division. Punishment for academic dishonesty will be determined by the instructor and the Dean of Academic Division and may include an "F" grade for the work in question, an

“F” grade for the course, suspension, or dismissal from the University. ([University catalogue](#) p. 57)

Additional information on student conduct can be found in the [student handbook](#).

On-Campus Tutoring

- Retention, Advising, and Career Preparation offers free, one-on-one tutoring for all undergraduate students at Chaminade. Subjects tutored include, but are not limited to: biology, chemistry, math, nursing, English, etc. The tutoring corps consists of trained Peer and Professional Tutors.
- Tutoring is available by appointment only. Tutoring takes place in the Student Support Services building during the hours of 8:30 a.m. to 4:30 p.m., Monday to Friday.
- The Chaminade Tutoring Center is located in the Student Support Services Building. Contact the Tutor Coordinator, Amanda Lunday, at (808) 739-8305, for more information.

Online Tutoring through Smarthinking

- All CUH students are eligible to use Smarthinking, an online tutoring system. Students are able to access Smarthinking via their Canvas account.
- Through Smarthinking, students are able to connect in real-time with an expert educator in a variety of subjects using a virtual whiteboard technology. Students also have an option to schedule a 30-minute appointment with a tutor of their choice. The Online Writing Lab provides students with the ability to receive a detailed, personalized critique of any written assignment through a formal critique process.
- All sessions are archived and available for students to review at any time for studying or test preparation.

LAB OUTLINE:

Date	Experiment	Assignments due
Week 1	Lab Rules/Projects/PhysioEx	
Week 2	Group Work on project	
Week 3	Monday, Labor Day Holiday - No Lab	
Week 4	Group Presentations (9/10) and (9/14)	

Week 5	Students begin project	
Week 6		
Week 7		
Week 8	Monday, Columbus Day Holiday - No Lab	
Week 9	Student projects continue	
Week 10		
Week 11		
Week 12		
Week 13	Monday, Veterans' Day - No Lab	
Week 14	Friday, Thanksgiving recess - No Lab	
Week 15	Final Reports due/Lab book due	