

Basic Course Information



Semester	Fall 2014	Instructor's Name	Dr. Tom Morrell
Course Title & #	Human Physiology I BIOL 206	Instructor's Email	thomas.morrell@imperial.edu
CRN #	10857	Personal Webpage	http://spaces.imperial.edu/thomas.morrell/
Room	2737	Office	410
Class Dates	7/19/14 to 12/11/14	Office Hours	Monday: 6:50 – 7:20 pm Tuesday: 5:45 – 6:45 pm Wednesday: 6:50 – 7:20 pm Thursday: 11:20 am -12:20 pm & 5:45 – 6:45 pm
Class Days	Monday & Wednesday	Office Phone # (PT may use dept. number)	760 355 6148
Class Times	Lecture: 9:10 – 10:05 am Lab: 10:15 am – 1:25 pm	Who students should contact if emergency or other absence	Department Secretary 760 355 6155
Units	4		

Course Description

Lecture and laboratory course designed to introduce the function of the human body from cellular through organ system levels of organization. Emphasis will be on integration of body systems and interrelationships for maintaining homeostasis. The practical applications of the basic concepts are presented. This course may require the use of human cadavers for observation and/or dissection. (CSU) (UC credit limited. See a counselor.) PREREQUISITES: MATH 091 or MATH 090 and CHEM 100 with a minimum grade of C or better and BIOL 204 with a minimum grade of C or better or MATH 091 or MATH 090 with a grade of "C" or better and Current California LVN or RN license

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Conduct and analyze an electroencephalogram, electromyogram, or electrocardiogram performed on another person. (ILO 1, 2)
2. Conduct and interpret the results of a urinalysis (ILO 1,2)
3. Demonstrate understanding about the physiology associated with cells, tissues, organs, or organ systems (ILO 1, 2)
4. Monitor the fertilization of an egg by a sperm and the subsequent zygotic development (ILO 1, 2)

Course Objectives

1. Describe homeostasis and the mechanisms to maintain homeostasis.
2. Discuss the chemical aspect of the human body.
3. Describe cell structure and function.
4. Discuss control of enzyme activity and bioenergetics.
5. List nervous system divisions and components and describe their basic functions.
6. Discuss the special senses and their nervous control.
7. Discuss the function of the endocrine system and major regulation hormones, especially the hormones of the anterior pituitary.

8. Discuss muscle function and understand the similarities and differences between different muscle types.
9. Discuss the regulation and functions of the cardiovascular system.
10. Describe the mechanism immunity.
11. Describe the functions of the respiratory system and the environmental effects.
12. Describe the kidney function and urine formation.
13. Distinguish between physical and chemical digestion and describe the functions of the digestive tract and accessory digestive organs.
14. Describe the male and female reproductive physiology and the female cyclic changes.

Required Textbooks (online textbooks can be used online Lab manuals may not be used)

Sherwood, L. 2013. Human Physiology: From Cells to Systems, 8th Ed. Brooks/Cole Cengage Learning. Belmont, CA
ISBN: 13:978-1-111-57743-8
ISBN: 10: 1-111-57743-9

Course Requirements and Instructional Methods

This is an intensive lecture/lab course. Students will be called to answer questions during lectures. Students will utilize textbooks, lab manuals, models, and computer software during labs. Homework assignments will be given at the end of each day of instruction. Homework will involve drawing figures, answering questions, and composing essays.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Grading Based on Course Objectives

Your course grade will be based on 5 lecture/lab exams, lab and lecture quizzes (some unannounced), lab and out of class assignments, and discretionary course participation points. There will be approximately 8 - 10 lab and homework assignments, and 3-10 quizzes (10-20 points each approximately).

Total = 650 to 750 (approximate)

Grades will be assigned according to the following scale:

- >90% = A
- 80 - 89.9% = B
- 70 - 79.9% = C
- 60 - 69.9% = D
- <59.9% = F

I do not accept late homework without a signed legal or medical excuse.

It is the responsibility of the student to fill out the necessary paperwork if he/she no longer attends the class. In order for a student to "officially" drop the course he/she must fill out the proper paperwork. If this is not done a semester grade of "F" will be assigned.

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- If for some reason you can't attend a lecture, quiz or an exam, it is your responsibility to approach me as soon as possible to determine if you have missed something important, and whether you can make it up. In order to make up missed opportunities you must provide a signed medical or legal excuse to document your absence. Students must realize that some labs, "in-class lab assignments," and **particularly lab practical exams CANNOT be made up**

(regardless of the activity that resulted in the absence, or whether its an excused absence). Some labs and lab practical exams require numerous hours to prepare and/or require cooperative student participation. Thus, attendance is mandatory at all labs.

- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- IVC catalog states "disruption of a class can result in disciplinary action." I consider coming into class tardy - a disruption. Thus, if I have started my lecture - you cannot enter the class. Wait for the class to take the next "break" and then enter. This includes being tardy following any announced breaks during class or lab. Again, do not enter the class if lecture has already started. Wait outside of class until the class takes a break. Please note that personal issues, such as family obligations, family situations, border slowdowns, babysitters, railroad crossings, job interviews, car problems, taking family members to appointments, and work schedules are not acceptable excuses for an absence or a tardy. Additionally, leaving class or lab before it has been officially dismissed will be regarded as an unexcused absence. Should you miss both components of a given lecture you will be recorded as absent (even if you attend the lab).
- **Cell Phones:** If I see you checking your cell phone for **ANY** reason, or if your cell phone rings, vibrates, buzzes, flashes or blinks during lecture or during lab (even if it is in your backpack, pocket, or purse!) I will ask you to leave the class for that day and you will be recorded as absent. Rest assured, I will provide you plenty of breaks that enable you to address all of your cell phone and social networking needs. You can provide your children's day care, and/or family health care providers the number of the IVC front office, and the front office can contact you in class in the event of an emergency.
- **Food and Drink:** are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs.
- Recording my lecture is okay if you use a recorder. You cannot use your cell phone or an I pod (or similar device) to record my lectures.
- In order to participate in lab you must read and submit the lab safety form.

Rules of Professional Conduct in This Class: Health care professionals are expected to conduct themselves professionally. If health care professionals engage in unethical or unprofessional conduct, they can receive discipline ranging from being fired to losing their license. The following rules of professional conduct are not exclusive. Think about the policy that drives these rules and what other behavior not explicitly mentioned falls within the rules. Unprofessional behavior that is disruptive to the learning environment may result in removal from the class.

1. No rudeness.

Think about what you say before you say it. Treat everyone the way you would like to be treated. Do not behave as though you are entitled to anything. Be respectful of other people's gender, cultures, and beliefs. **Do not swear.**

2. Be deferential to those in authority. Think before you speak.

3. Walk into class aware that you make an impression, as you will when you are a health care professional, the moment you walk into the room.

4. Unless otherwise instructed, put your cell phone away before class begins. See above rules regarding cell phones.

Why? Several reasons. Successful health care professionals have exemplary social skills, including the ability to establish rapport with patients and co-workers. If you are focused on your phone instead of the person to whom you

are speaking, you cannot establish rapport. Further, good manners require that when a patient, coworker, boss, or professor speaks to you, you devote your full attention to the speaker.

5. Everyone present in class deserves your respect and consideration. You will distract others if you enter the room after class has begun or leave the room after class has begun. It is rude to rustle belongings while another student or the professor is speaking. Be prepared for class when it starts.
6. During lecture others can hear you when you talk to your neighbor. It distracts them. It distracts me. Do not ask your neighbor about something you did not hear during lecture. Raise your hand and ask me. Passing notes is also distracting. Don't do it.
7. You impress others at all times.

Appear engaged, even if you are not. No slouching, open yawning, eye rolling, resting your head on the table, or displaying any other behavior that is disrespectful to your classmates or to the professor.

8. Take responsibility for your work.

Do not blame others. Welcome criticism, try not to be defensive, and understand that if you do not correct your errors now, you will have to correct them when the stakes are much higher, like when you are working.

9. Be prepared for class before I start to lecture. The beginning of my lecture (or during my lecture) is not the appropriate time to start getting ready for class. That is, do not unwrap things or rummage around your backpack or purse once I have started lecture.
10. If you realize you've been rude, apologize. Avoid the conditional apology, which is "I am sorry if I offended you." A conditional apology is arguably worse than no apology.

Academic Honesty

- Plagiarism is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment ;(c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service

Additional Help – Discretionary Section and Language

- Blackboard support center: <http://bberm.edusupportcenter.com/ics/support/default.asp?deptID=8543>
- Learning Labs: There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Learning Services (library). Please speak to the instructor about labs unique to your specific program
- Library Services: There is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups, and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. If you feel you need to be evaluated for educational accommodations, the DSP&S office is located in Building 2100, telephone 760-355-6313.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see <http://www.imperial.edu/students/student-health-center/>. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at http://www.imperial.edu/index.php?option=com_docman&task=doc_download&gid=4516&Itemid=762

Information Literacy

Imperial Valley College is dedicated to help students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at <http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/>

Anticipated Class Schedule / Calendar

WK	DAY	DATE	LECTURE	MATERIALS NEEDED
1	Tues.	8-19	Orientation	Nothing Needed
	Thur.	8-21	Cha. 1 Intro to Physiology	Nothing Needed
2	Tues.	8-26	Appendix A: Chemical Principles	Nothing Needed
	Thur.	8-28	Cha. 2 Cell Physiology	Interactive Physiology
3	Tues.	9-2	Cha 2 & Cha. 3 Plasma Membrane & Membrane Potential	Microscopes, clean slides, H ₂ O water eye droppers, and cover slips., 400 ml physiologic solution divided into 4 containers. Thistle tube Osmosis Experiment: 400 ml 5% sodium chloride solution divided into 5 containers, distilled water. 10 500 ml beakers, dialysis tubing and thread, Disposable water droppers. All previous labs.
	Thur.	9-4	Mitosis & Meiosis	Review
4	Tues.	9-9	EXAM 1	
	Thur.	9-11	Cha. 4 Neurons	Interactive Physiology CD
5	Tues.	9-16	Cha. 5 Central Nervous System	BIOPAC (Brainwaves)
	Thur.	9-18	Cha. 5 CNS & Cha. 6 Peripheral NS	Sensory stimuli: rubber hammers, tuning forks, pen lights, two-point touch discrimination pins, 25 q-tips, color blind books, eye model, tuning forks, 3 600 ml beakers, ice, hot plate, eye chart, 6 reaction time rulers, 6 field of vision forehead evaluators
6	Tues.	9-23	Cha. 6 & Cha. 7 Autonomic NS	Sensory stimuli: rubber hammers, tuning forks, pen lights, two-point touch discrimination pins, 25 q-tips, color blind books, eye model, tuning forks, 3 600 ml beakers, ice, hot plate, eye chart, 6 reaction time rulers, 6 field of vision forehead evaluators
	Thur.	9-25	Cha. 8 Muscle Physiology	Review

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7	Tues.	9-30	Exam 2	
	Thur.	10-2	Cha. 9 Cardiac Physiology	BIOPAC (ECG)
WK		DATE	LECTURE	MATERIALS NEEDED
8	Tues.	10-7	Cha. 10 Blood Vessels & BP	Sphygmomanometers, Stethoscopes
	Thur.	10-9	Cha. 11 Blood	Blood typing kits
9	Tues.	10-14	Cha. 12 Immunity	Review
	Thur.	10-16	Exam 3	
10	Tues.	10-21	Cha. 12 Immunity	Nothing needed
	Thur.	10-23	Cha 13 Respiratory	Interactive CD
11	Tues.	10-28	Cha. 13 Respiratory & Cha. 14 Urinary	BIOPAC (respiratory volumes)
	Thur.	10-30	Cha. 14 Urinary	Urinalysis Strips
12	Tues.	11-4	Cha. 16 Digestion	Review
	Thur.	11-6	Exam 4	
13	Tues.	11-11	Veterans Day –No Class - Yippee	Interactive Physiology
	Thur.	11-13	Cha. 16 Digestion	Interactive Physiology
14	Tues.	11-18	Cha. 19 Endocrine System (Central))	Interactive Physiology
	Thur.	11-20	Cha. 18 Endocrine System (Peripheral)	Interactive Physiology
15	Tues.	12-2	Cha. 20 Male Reproduction	
	Thur.	12-4	Cha. 20 Female Reproduction	Urchin Development Lab
16	Tues.	12-9	Review	Nothing Needed
	Thur.	12-11	FINAL EXAM	Nothing Needed