

Basic Course Information

Semester:	Summer 2024	Instructor Name:	Jia Sun
Course Title & #:	Human Physiology – BIOL 206	Email:	jia.sun@imperial.edu
CRN #:	30100	Webpage (optional):	N/A
Classroom:	2737	Office #:	2778
Class Dates:	6/17/24 – 7/25/24	Office Hours:	via Appt.
Class Days:	MTWR	Office Phone #:	(760) 355-6521
Class Times:	1230-1720	Emergency Contact:	jia.sun@imperial.edu
Units:	4	Class Format:	Hybrid

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. (C-ID BIOL 120 B) (CSU) (UC credit limited. See a counselor.)

Course Prerequisite(s) and/or Corequisite(s)

CHEM 100 and BIOL 204 with grades of "C" or better;

or

appropriate placement as defined by AB705, or MATH 098 or MATH 091 with a grade of "C" or better, and current California LVN/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 interpret the results from a urinalysis and an electroencephalogram/electromyogram/electrocardiogram. (ILO 1,2)
2. Demonstrate understanding about the physiology associated with cells, tissues, organs, or organ systems (ILO 1,2)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

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.
15. Demonstrate knowledge of metabolic and physiological disorders of the major organ systems
16. Demonstrate an understanding of the scientific method, experimental design, and the philosophy of science by applying the scientific method to physiological experiments.

Textbooks & Other Resources or Links

J. G. Betts et al. **Anatomy and Physiology** OpenStax, ISBN: 9781938168130

This is an OER textbook, digital access to this textbook is free – do not pay for digital access.

Course Requirements and Instructional Methods

Exams:

The course includes five (5) equally weighted exams. There will be no “cumulative” midterm or final. However, no concept in biology is truly independent, so each subsequent exam might require knowledge of previously covered material.

Labs:

Simulated laboratory experiments will be conducted using Labster and Interactive Physiology. Concept from all labs assigned in class will be present during exams. Sixteen (16) individual labs will be assigned over the course of the semester. The lowest one (1) lab will be dropped at the end of the semester.

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.

THE LAST DAY TO DROP THE COURSE WITH A ‘W’ IS 7/17

Course Grading Based on Course Objectives

Exams	5 x 60pts	300pts	
Labs	(16-1) x 20pts	300pts	dropped: 1

600pts

The Following grade cutoffs are guaranteed:

A: > 90%; B: > 80%; C: > 70%; D: > 60%



Course Policies

In a hybrid course, student participation is equal to attendance for the online portion of the course. Your active participation throughout the course is required both for your success in the class as well as the primary proof of your attendance in the course. In compliance with the campus attendance/participation policy posted below, ***any student that does not complete the required first week's activities can be dropped from the course.*** After the first week, any students that fail to complete assignments for one week, or is absent for one week of labs, may be dropped from the course if I am not notified ahead of time.

Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

As this is a hybrid course, please also review the Netiquette guidelines for online interactions in the Course Logistics folder.

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

- Plagiarism is taking and presenting 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 "cite a source" correctly, 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 that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing 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. 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) using a commercial term paper service.

Artificial Intelligence (A.I.) IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

WK	DATE	LECTURE	LABORATORY
1	6-17	MODULE1: Neurophysiology I (12-16)	CLASS/LAB INTRODUCTION
	6-18	M1	Interactive Physiology (IP)
	6-19	HOLIDAY	HOLIDAY
	6-20	M1	IP
2	6-24	MODULE2: Neurophysiology II (12-16)	EXAM 1 (M1)
	6-25	M2	IP
	6-26	M2	IP
	6-27	M2	IP
3	7-1	MODULE3: Cardiovascular Physiology (18-20)	IP
	7-2	M3	EXAM 2 (M2)
	7-3	M3	IP
	7-4	HOLIDAY	HOLIDAY
4	7-8	MODULE4: Immunology/Pulmonary Physiology (21/22)	IP
	7-9	M4	IP
	7-10	M4	EXAM 3 (M3)
	7-11	M4	IP
5	7-15	MODULE5: Renal Physiology/Digestion (23-25)	IP
	7-16	M5	IP
	7-17	M5	IP <i>*Last day to drop with a 'W'*</i>
	7-18	M5	EXAM 4 (M4)
6	7-22	MODULE6: Endocrinology/Reproductive Physiology (17, 27/28)	IP
	7-23	M6	IP
	7-24	M6	IP
	7-25	M6	EXAM 5 (M5+M6)

Subject to change without prior notice