

Basic Course Information

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|-------------------|------------------------------------|---------------------|---|
| Semester: | Fall 2025 | Instructor Name: | Jia Sun |
| Course Title & #: | Human Physiology – BIOL 206 | Email: | jia.sun@imperial.edu |
| CRN #: | 10539 | Webpage (optional): | N/A |
| Classroom: | 2737 | Office #: | 2778 |
| Class Dates: | 8/11/25 – 12/6/25 | Office Hours: | In-person: W 730AM-8AM Via Pronto: MTR 6PM-8PM or by appt. |
| Class Days: | MW | Office Phone #: | (760) 355-6521 |
| Class Times: | 1120-1430 | 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 six (6) equally weighted exams. There will be no cumulative midterm or final exam. However, because no concept in biology is entirely independent, each subsequent exam may require an understanding of material covered in previous units.

Labs: Laboratory experiments will be conducted using Interactive Physiology and/or Labster. Concepts from labs assigned in class will appear on exams; there will be no separate lab exams. A total of twenty-three (23) individual labs will be assigned throughout the semester. The lowest three (3) lab scores will be dropped at the end of the term.

Discussions: Discussions are an important component of many online courses. They replicate face-to-face classroom discussions and can serve as a valuable tool for both exploratory learning and self-assessment. In this class, we will have optional discussions based on lecture topics.

Out-of-Class Assignments: According to U.S. Department of Education policy, one (1) credit hour represents an amount of student work equivalent to one hour of in-class time and two (2) hours of out-of-class work per week over the course of a semester. WASC has adopted a similar standard.

THE LAST DAY TO DROP THE COURSE WITH A 'W' IS 11/1

Course Grading Based on Course Objectives

| | | | |
|-------|----------------|--------|------------|
| Exams | 6 x 60pts | 360pts | |
| Labs | (23-3) x 18pts | 360pts | dropped: 1 |
| | | ----- | |
| | | 720pts | |

The Following grade cutoffs are guaranteed:

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

Course Policies

In an online course, student participation is equal to attendance. 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 attend Zoom class meetings during week one will be dropped from the course.*** After the first week, any students that fail to complete the assigned coursework for two consecutive weeks 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 an online 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 | LECTURE/LAB TOPIC |
|----|--|
| 1 | Neurophysiology I (12-16) |
| 2 | Neurophysiology I (12-16) |
| 3 | Neurophysiology II (12-16) |
| 4 | Neurophysiology II (12-16) |
| 5 | Cardiovascular Physiology (18-20) |
| 6 | Cardiovascular Physiology (18-20) |
| 7 | Cardiovascular Physiology (18-20) |
| 8 | Immunology/Pulmonary Physiology (21/22) |
| 9 | Immunology/Pulmonary Physiology (21/22) |
| 10 | Immunology/Pulmonary Physiology (21/22) |
| 11 | Renal Physiology/Digestion (23-25) |
| 12 | Renal Physiology/Digestion (23-25) <i>LAST DAY TO DROP CLASS WITH A 'W' (11/1)</i> |
| 13 | Renal Physiology/Digestion (23-25) |
| 14 | Endocrinology/Reproductive Physiology (17, 27/28) |
| 15 | Endocrinology/Reproductive Physiology (17, 27/28) <i>THANKSGIVING BREAK 11/24 – 11/29</i> |
| 16 | Endocrinology/Reproductive Physiology (17, 27/28) |

Subject to change without prior notice