IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	**Winter 2025**	Instructor Name:	**John B. Horne**
Course Title & #:	**Biology 204 Human Anatomy**	Email:	**John.horne@imperial.edu**
CRN #:	**15017**	Webpage (optional):	
Classroom:	**2736**	Office #:	**2779**
Class Dates:	**Jan 2 – Feb 3**	Office Hours:	**Mon-Thurs 4:30 – 5:30**
Class Days:	**Monday - Friday**	Office Phone #:	**760-355-6148**
Class Times:	**Lecture: 10am – 11:30am**	Emergency Contact:	**Dept Secretary 760 355 6155**
Units:	**4**	Class Format/Modality:	**In person**

Course Description

Lecture and laboratory course designed to study the fundamental principles of the human body structure at the cellular, tissue, organ, and systems level of organization, including the cat and organ dissection, study of the human skeleton, structural-functional relationships, and appreciation of related human diseases and aging.

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

BIOL 100 or BIOL 122 or BIOL 124 or BIOL 180 or BIOL 182 - with grades of "C" or better; or, - successful completion of Intermediate Algebra or appropriate placement as defined by AB 705 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. Display critical thought and competency in communicating information related to topics in human anatomy.
2. Display knowledge of anatomy and dissection competency using mammal and/or human cadaver specimens as subjects.

Course Objectives

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

1. characterize the levels of structural organization in the human body and to describe regional names, directional terms, plains and sections, body cavities and abdominal regions and quadrants.
2. define a cell and explain the structure and functions of its principle parts.
3. identify and discuss the origin, classification, structure, location and function of four major types of tissues.
4. describe the structural and functional characteristics of the various layers of the skin, the epidermal derivatives.
5. describe the gross features of a long bone and the process of bone formation.
6. identify all the bones of the skeleton and their important surface markings.
7. describe the structural and functional classification of the joints and to describe the important characteristics of selected joints.
8. describe the connective tissue components, the motor unit, the neuromuscular junction,and the microscopic anatomy of muscle tissue.

9. describe how the skeletal muscles provide specific movements of the body, and identify the principal skeletal muscles of the body.
10. describe the major surface features of the head, neck, trunk, and upper and lower extremities.
11. describe characteristics of the blood plasma and the formed elements of the blood.
12. describe the general flow of blood through the systemic and pulmonary circulation, the structural and functional features of the heart.
13. contrast the structure and functions of blood vessels and identify the major vessels in the body.
14. trace lymphatic circulation and describe the structure and functions of lymphatic tissues and organs.
15. describe the organization of the nervous system, and contrast the histological characteristics and functions of neurons and neuroglia.
16. describe the anatomy of the spinal cord, the reflexes, and the origin, composition, and branches of spinal nerves and nerve plexuses.
17. identify the principal parts of the brain and cranial nerves, and explain the formation and circulation of cerebrospinal fluid.
18. describe the components of sensations, major characteristics of sensory receptors, the sensory pathways, integration of sensory input and motor input, and the motor pathways.
19. identify the structures of the eyes and the ears, and to describe the neural pathways for olfaction, taste, vision, hearing and equilibrium.
20. compare the structural and functional differences between the somatic and autonomic nervous systems.
21. describe the location, histology, and functions of the major endocrine glands of the body.
22. identify the structures of the respiratory system and the mechanics of pulmonary ventilation.
23. identify and describe the structure and functions of the organs of the gastrointestinal tract and the accessory organs of digestion.
24. identify the features of the kidney, describe the blood supply to the kidney, and describe the location, structure and function of ureters, urinary bladder, and urethra.
25. identify and describe the structure, histology, and functions of the male and female reproductive systems, and to explain the principal events of gametogenesis.
26. describe the major events that occur during pregnancy.
27. demonstrate dissection skills using animals and/or a human cadaver.

Textbooks & Other Resources or Links

Ninth edition Human Anatomy (Smith Marieb and Smith) ISBN-13: 9780135273005 (2019 update)
Alt. *Human Anatomy Custom Lab Manual* ISBN-13: 9780137782116
Anatomy and Physiology Free online ebook: https://openstax.org/details/books/anatomy-and-physiology-2e

Course Requirements and Instructional Methods

Anatomy is a fundamental field of study in the biological and medical sciences. Students wishing to pursue careers in any area of biology or medicine will require a strong background in anatomical terms and concepts.

The principles of anatomy are best taught through meaningful engagement with the study material such as hands-on laboratory projects and weekly course assignments. Such assignments will include quizzes, writing exercises, and in-class discussions, in addition to attendance of all course lectures. Weekly assignments will comprise 20% of the semester grade total.

Satisfactory course completion will require a demonstrated understanding of the material through examination. Students will be expected to take eight exams during the semester, including the final exam, with each test being worth 10% of the grade total.

Updated 01/2025

Extra credit points may be made available throughout the course, as deemed appropriate by the instructor.

Course Grading Based on Course Objectives

Course consists of nine tests each worth 8% of the final grade (72% total).

There are also five major lab assignments each worth 5% of the final grade (25% total)

And one class activity with a participation grade worth 3% of the final grade.

Academic Honesty (Artificial Intelligence -AI)

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.

Accessibility Statement

Imperial Valley College is committed to providing an accessible learning experience for all students, regardless of course modality. Every effort has been made to ensure that this course complies with all state and federal accessibility regulations, including Section 508 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Title 5 of the California Code of Regulations. However, if you encounter any content that is not accessible, please contact your instructor or the area dean for assistance. If you have specific accommodations through ***DSPS***, contact them for additional assistance.

We are here to support you and ensure that you have equal access to all course materials.

Course Policies

Students are expected to attend and be on time for all lectures and labs. Absences and tardies will disadvantage students and may incur other penalties as deemed appropriate by the instructor.

There is a waitlist for this class, so students who do not show up on the first day will be dropped from the class to make room for waitlisted students.

The timely and on-time completion of assignments is required. Late assignments will be penalized. Exceptions are generally not allowed but can be approved under special circumstances.

Other Course Information

Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Makings SAP means that you are maintaining a 2.0 GPA, you have successfully completed 67% of your coursework, and you will graduate on time. If you do not maintain SAP, you may lose your financial aid. If you have questions, please contact financial aid at finaid@imperial.edu.

IMPERIAL VALLEY COLLEGE

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

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 1 January 2-3	Syllabus & Introduction Unit 1 – The Language of Anatomy Unit 2 – Cytology	 Microscopy Lab
Week 2 January 6 - 10	Unit 3 – Histology Unit 4 – Integumentary System Unit 5 – Skeletal System Unit 6 – Muscular System	Exam 1 – Cytology, Histology, and Integumentary System Exam 2 – The Skeletal System Skeletal System Lab
Week 3 January 13 - 17	Unit 6 – Muscular System (cont.) Unit 7 – Nervous System Unit 8 – Sensory Organs Unit 9 – Endocrine System	 Exam 3 – The Muscular System Exam 4 – The Nervous System Dissection 1 – The eye
Week 4 January 21 - 24	Unit 10 – Circulatory System Unit 11 – Respiratory system Unit 12 – Lymphatic System	Exam 5 – Endocrine system Exam 6 – Circulorespiratory Dissection 2 – The heart
Week 5 January 27 - 31	Unit 13 – The Digestive System Unit 14 – The Urinary System Unit 15 – The Reproductive System	Exam 7 – Digestive System Exam 8 – Urinary System Dissection 3 – Body cavity
Week 6 Feb 3	Last Day of Class	Final Exam – Reproductive System

*****Subject to change without prior notice*****