



Basic Course Information

Semester:	Spring 2021	Instructor Name:	SUSAN MOSS
Course Title & #:	BIOL 204 – Human Anatomy	Email:	SUSAN.MOSS@IMPERIAL.EDU
CRN #:	21207 & 20042	Webpage (optional):	NA
Classroom:	ONLINE	Office #:	NA
Class Dates:	ONLINE	Office Hours:	M-R 10-11 AM
Class Days:	ONLINE	Office Phone #:	7603555760
Class Times:	ONLINE	Emergency Contact:	NA
Units:	4	Class Format:	ONLINE

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. This course may require the use of human cadavers for observation and/or dissection. (CSU) (UC credit limited.)

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

Completion of MATH 090 and BIOL 100 or BIOL 122 or BIOL 180 or BIOL 182, with grades of “C” or better. Or, completion of 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. Display critical thought and competency in communicating information related to topics in human anatomy. (ILO1, ILO2, ILO4)
2. Display knowledge of anatomy and dissection competency using mammal and/or human cadaver specimens as subjects. (ILO1, ILO4) (*Online class relies on diagram-labeling.*)

Course Objectives

1. characterize the levels of structural organization in the human body and to describe regional names, directional terms, planes 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.

Textbook

Human Anatomy, by Ken Saladin, McGraw-Hill Publisher. 2020.

Course Requirements and Instructional Methods

This online course incorporates PowerPoints, videos, simulated labs, and at-home activities related to the understanding of the human body. There will be open-book exams, worksheets, videos to watch, and online labs to complete.



Course Grading Based on Course Objectives

Final grades are calculated using a simple point system. If your test average is $\geq 70.0\%$, your grade will be based on the total points you earn divided by the total points possible. The grading scale will be:

A $\geq 90\%$ B = 80-89% C = 70-79% D = 60-69% F $\leq 59\%$

- ◆ Exams: 50-200 pts. each
- ◆ *Labster* simulated labs: 25 pts each
- ◆ Misc. assignments: 10-15 pts each

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

WEEK	Starts on	EXAMS & ASSIGNMENTS
1	2/14	Introduction to class Ch 1- Language of anatomy Appendix B - word roots Metric
2	2/21	EXAM 1 - language of anatomy; word roots; metric Ch. 1 - Introduction to Anatomy; Microscopy AT-HOME – organ system review LABSTER ASSIGNMENT: Microscopy
3	2/28	EXAM 2 – Intro to Anatomy Ch. 2 - Cells: Structure, Transport & Division LABSTER ASSIGNMENT: Cell Structure
4	3/7	EXAM 3 – Cells Ch 3 - Tissues AT-HOME – diffusion potato experiment LABSTER ASSIGNMENT: Mitosis
5	3/14	EXAM 4 – Tissues Ch 5 – Integumentary System
6	3/21	EXAM 5 – Integument Ch 6-9 - Skeletal System & Joints AT-HOME skeleton craft project
7	3/28	EXAM 6 – Skeletal, Joints and Bone ID Ch 10-12 - Muscles LABSTER ASSIGNMENT: Muscle Tissues

		
8	4/11	EXAM 7 – Muscles Ch 19-21 – Cardiovascular System LABSTER ASSIGNMENT: Hematology
9	4/18	EXAM 8 – Cardiovascular Ch 23 – Respiratory System
10	4/25	EXAM 9 – Respiratory Ch 13-16 - Nervous System LABSTER ASSIGNMENT: Homeostatic Control
11	5/2	EXAM 10 – Nervous Ch 17 – Senses AT-HOME – sensory activities
12	5/9	EXAM 11 – Senses Ch 24 – Digestive System LABSTER ASSIGNMENT: Intro to Food Molecules
13	5/16	EXAM 12 – Digestive Ch 22 - Urinary
14	5/23	EXAM 13 - Urinary Ch - Endocrine & Lymphatic Systems LABSTER ASSIGNMENT: Diabetes
15	5/30	EXAM 14 – Endocrine & Lymphatic Ch 26 – Reproductive System LABSTER ASSIGNMENT: Contraceptives
16	6/6	EXAM 15 – FINAL EXAM (Reproductive)

Subject to change without prior notice