

### Basic Course Information

Semester:	Winter 2022	Instructor Name:	Mohammad Ahrar
Course Title	Bio. 204 -Human Anatomy	Email:	Mohammad.ahrar@imperial.edu
CRN #:	15078	Webpage (optional):	See Canvas during the course
Classroom:	Online	Office	Online
Class Dates:	Jan. 3 to Feb. 3, 2022	Office Hours:	By E-mail
Class Days:	M/T/W/R/F	Office Phone #:	760-355-6355
Class & lab Time	12:30 to 6:25 PM	Emergency Contact:	858-774-8184
Units:	4		

### Course Description

This class is offered Real Time (RT) live online (synchronized), which means the students must be present in online class sessions via the Zoom. Lecture and laboratory in the course are designed to study the fundamental principles of the human body structure at the cellular, tissue, organ, and systems level of organization, including the study of the human skeleton, structural-functional relationships, and related human diseases and aging.

**Prerequisite:** BIOL 100 or BIOL 122 or BIOL 124 or BIOL 180 or BIOL 182, 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: Display critical thought related to topics in human anatomy using written forms of expression and examination. (ILO2, ILO3, ILO4), Display critical thought related to topics in human anatomy as it applies to a global perspective. (ILO2, ILO5), Demonstrate competency in communicating information related to the anatomy of the heart. (ILO1, ILO3, ILO4) and other organs of the human body.

### 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, 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. 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.

### **Textbooks & Other Resources or Links**

Textbook: Human Anatomy, 6th Ed. Kenneth S. Saladin- McGraw-Hill Company, 2020  
ISBN 9781260210262.

Lab manual is not required in this online class. All lab assignments will be provided online using the Canvas. All students who take online classes at IVC should be familiar with using the Canvas. Registration with Achieve website via Canvas is required to do your assignments online.

### **Course Requirements and Instructional Methods**

This is an intensive lecture/lab course and requires daily studying. Teaching will be aided with the use of PowerPoint, based on the materials derived from the textbook and other sources. Videos and CD-ROM, graphs and pictures of different organs will be used during lab hours. Lab assignments highlights the information from the chapters of your textbook. Completed lab assignments should be posted at the end of each class. Points will be awarded to each completed lab work and will be depicted in the grades table in the Canvas. Missed labs will not receive any point. Some of the questions from lab assignments will be used in quizzes or tests.

### **Course Grading Based on Course Objectives**

Your course grade will be based on quizzes, exams, lab assignments, research project and oral presentation. Anticipated points awarded toward the final grade include- a- Five Exams (100 points each). b- five quizzes (20 points each). c- Twenty-two lab assignments (5 points each). d- Research project and presentation (40 points), Additional extra credit points (20 to 30 points) may be awarded to all students in the form of answering critical thinking questions or do research on some topics related to the human anatomy. Perfect attendance and no tardiness may receive 10 extra credit points, in addition to the extra credit mentioned above. Check your grades in Canvas to see your progress during the course. How to calculate your final grade? Add all the points earned during the course, divide that value by total possible points, and multiply by 100. Example: if the total points that you earned is 600 points out of 690 possible points, your average grade for the course would be;  $600: 690 \times 100 = 87\%$  which equals the letter grade "B". Grading scale: A = 90 % or higher, B = 80-89 %, C = 70-79 %, D = 60-69 %, F =  $\leq 59$  %.

### **Attendance policy**

- We will be using the Zoom for our online class activities. Students are expected to attend all lecture Zoom sessions and participate in each class discussions. No participation in daily class activities can affect the use of federal aid fund. All students that take synchronized online classes should be familiar with the use of Zoom interface before the online courses start. There are tutorials about the Zoom application on YouTube that you can use if needed.

- Any student who fails to attend the first online class meeting or does not complete the first week class assignments will be dropped by the instructor. Should readmission be desired, the student's status will be the same as that of any other student in the waiting list or who desires to crash the course.
- It is the student's responsibility to drop or officially withdraw from the class. See [General Catalog](#) for details.
- 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**

- Ethical behavior in the Zoom class sessions is required of every student. As a diverse community of learners, students must be respectful of each other in a setting of civility and tolerance..
- [Disruptive Students](#): Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the [General Catalog](#).
- [Children in the classroom](#): Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.
- Perfect observance of classroom etiquette may receive extra credit (mentioned above)

### **Academic Honesty**

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

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- [Plagiarism](#) is using or presenting a material as one's own, while the writings or ideas are of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when preparing written materials and research projects. 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. Please refer to the [General 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 your assignment or portion of an assignment; (e) using a commercial term paper service.
- KEEP YOUR PASSWORDS CONFIDENTIAL. You have a unique password to access online software like Canvas. Never allow someone else to log-in to your account.

### **Additional Student Services**

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- **[Blackboard Support Site](#)**. The Blackboard Support Site provides a variety of support channels available to students 24 hours per day.
- **[Learning Services](#)**. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your [Campus Map](#) for the [Math Lab](#); [Reading, Writing & Language Labs](#); and the [Study Skills Center](#).
- **[Library Services](#)**. There is more to our library than just books. You have access to tutors in the [Study Skills 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. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

### **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- **[Student Health Center](#)**. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District and El Centro Regional Center provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC [Student Health Center](#) at 760-355-6310 in Room 2109 for more information.
- **[Mental Health Counseling Services](#)**. Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC [Mental Health Counseling Services](#) at 760-355-6196 in Room 2109 for more information.

### **Student Rights and Responsibilities**

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC [General Catalog](#).

### **Information Literacy**

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC [Library Department](#) provides numerous [Information Literacy Tutorials](#) to assist students in this endeavor.

### **Anticipated Class Schedule/Calendar, Winter 2022- subject to change**

DATE	Lecture	Lab assignments will be posted on Canvas
Mon. 1/3/2022	Ch. 1, The study of Human Body Ch. 2, Cytology – The study of cells	The Language of Anatomy The cell- Lab assignment and practice 1
Tue. 1/4/2022	Ch. 3, Histology – The study of tissues	Classification of Tissues- lab assignment 2
Wed. 1/5/2022	Ch. 5, The Integumentary system	The integumentary system- lab assignment 3 <b>Quiz 1 (Ch. 1, 2, 3)</b>
Thur. 1/6/2022	Ch. 6, The skeletal system I, Bone tissue	Structure of bone/cartilage- lab assignment 4 <b>Test 1 (Ch. 1 to 5) + lab experiments</b>
Fri. 1/7/2022	Ch. 7, The skeletal System II- Axial skeleton Ch. 8, The skeletal System III- Appendicular	The axial skeleton and appendicular skeleton. lab assignment 5
Mon. 1/10/2022	Ch. 9, The skeletal System IV Joints Ch. 10, The muscular system I	Joints and gross anatomy of muscular system- lab assignment 6 <b>Quiz 2 (Ch.5, 6, 7,8)</b>
Tue. 1/11/2022	Ch. 11, The muscular system II- Axial	Muscular system – axial- lab assignment 7
Wed. 1/12/2022	Ch. 12, The muscular system III- Appendicular	Muscular system – appendicular lab assignment 8
Thur. 1/13/2022	Ch. 13, The nervous system I-Nervous tissue	Anatomy of brain lab assignment 9 <b>Test 2 (Ch. 6 to 12) + lab experiments</b>
Fri. 1/14/2022	Ch. 14 The nervous system II- spinal cord	Spinal cord- lab assignment 10
Mon. 1/17/2022	<b>Holiday – No class</b>	<b>No lab</b>
Tue. 1/18/2022	Ch. 15, The nervous system III- Brain	Anatomy of brain- lab assignment 11
Wed. 1/19/2022	Ch. 16 The nervous system IV- Autonomics	Autonomic nervous system- lab assignment 12 <b>Quiz 3 (Ch.14, 15)</b>
Thur. 1/20/2022	Ch. 17 The nervous system V: Sense organs	Anatomy of the eye, ear, taste, and smell lab assignment 13
Fri. 1/21/2022	Ch. 18, The endocrine system	The endocrine system- lab assignment 14 <b>Quiz 4 (Ch. 16, 17)</b>
Mon. 1/24/2022	Ch. 19, The circulatory system I – Blood	Blood-lab assignment 15 <b>Test 3 (Ch. 13 to 18) + lab experiments</b>
Tue. 1/25/2022	Ch. 20, The circulatory system- II- the heart	Anatomy of the heart- lab assignment 16
Wed. 1/26/2022	Ch. 21, The circulatory system III – Blood vessels	Blood vessels- lab assignment 17 <b>Quiz 5 (Ch.19, 20)</b>
Thur. 1/27/2022	Ch. 22, The lymphatic system and immunity	Lymphatic system- lab assignment 18
Fri. 1/28/2022	Ch. 23, The respiratory system	Respiratory system- lab assignment 19 <b>Quiz 6 (Ch. 21, 22)</b>
Mon. 1/31/2022	Ch. 24, The digestive system	Digestive system – lab assignment 20 <b>Exam 4 (Ch. 19 to 23) + lab experiments</b>

Tue. 2/1/2022	Ch. 25, The urinary system	Urinary system- lab assignment 21
Wed. 2/2/2022	Ch. 26, The reproductive system	Reproductive system- Lab assignment 22
Thur. 2/3/2022	Ch. 4, Human development	Lab assignments
Fri. 2/4/2022	<b>Final Exam (Ch. 4, 24, 25, 26) + experiments</b>	

**\*\*\*Anticipated class schedule is tentative, and subject to change\*\*\***