Semester:	Winter 2023	Instructor Name:	Mohammad Ahrar
Course Title	Bio. 204 -Human Anatomy	Email:	Mohammad.ahrar@imperial.edu
CRN #:	15078	Webpage (optional):	Meet during Zoom class sessions
Classroom:	Online – live stream	Classes Via Zoom	Live stream Online
Class Dates:	Jan. 3 to Feb. 3, 2023	Office Hours:	By E-mail and Zoom meetings
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		

Basic Course Information

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, 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. 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 functions of the male 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. (or newer 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 and the Zoom.

Course Requirements and Instructional Methods

This Synchronized online class is an intensive course and requires self-discipline and daily studying. The lecture part of the course will be via Zoom and the students who have registered in this synchronized online class must attend all Zoom class sessions.

Lectures - We will be using Zoom for all lecture and lab exercises and students must be present in each Zoom meeting sessions. Teaching will be aided with the use of PowerPoint, based on the materials from your textbook and other related sources.

Lab assignments highlights the information from the lectures and the information from chapters of your textbook. Lab reports includes questions and answers, labeling pictures and graphs, and watching video clips about human body. Completed lab assignments should be posted on Canvas at the end of each class period. Points will be awarded to each completed lab work and the grades will be posted on Canvas. Some of the questions from lab assignments will be used in quizzes and exams. Missed lab assignments will not receive any points. You need to use the following Zoom link to log in and join the class sessions/ https://cccconfer.zoom.us/j/9701876573

Course Grading Based on Course Objectives

Your course grade will be based on quizzes, exams, lab assignments, research project and presentation. Anticipated points awarded toward the final grade include a- Five Exams (100 points each). b- Twenty two lab assignments (5 points each). c- Research project and presentation (40 points), d- five quizzes (20-30 points each). Additional extra credit points (20 to 30 points) may be awarded to all students for doing extra assignments related to the course, such as 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.

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.

Grading scale: A = 90 % or higher, B = 80-89 %, C = 70-79 %, D = 60-69 %, $F = \le 59$ %.

Attendance policy

- We will be using the Zoom for our online class activities. Students are expected to attend all lecture and lab sessions and participate in each class activity. 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 You Tube 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 re-admission be desired, the student's status will be the same as that of any other student in the waiting list or desires to crash the course.
- It is the student's responsibility to drop or officially withdraw from the class. See <u>General Catalog</u> 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.
- <u>Disruptive Students:</u> Students who disrupt or interfere with a class may be dismissed from using the Zoom and should meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the <u>General Catalog</u>.
- <u>Children in the zoom class meeting:</u> Anyone who is not enrolled in the class, including family members, should not be in the Zoom class meetings.

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. Acts of cheating include, but are not limited to, (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person, (d) allowing others to do your assignment or portion of an assignment; (e) using a commercial term paper service, (f) use of cell phone or other electronics, or the media during exams.
- <u>Plagiarism</u> 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.
- <u>Cheating</u> 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 <u>General Catalog</u> for more information on academic dishonesty or other misconduct. You have a unique password to access online software such as 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.

- <u>Blackboard Support Site</u>. The Blackboard Support Site provides a variety of support channels available to students 24 hours per day.
- <u>Learning Services</u>. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your <u>Campus Map</u> for the <u>Math Lab</u>; <u>Reading</u>, <u>Writing & Language Labs</u>; and the <u>Study Skills Center</u>.
- 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 <u>Disabled Student Programs and Services</u> (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.

- <u>Student Health Center</u>. 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 <u>Student Health Center</u> at 760-355-6310 in Room 2109 for more information.
- <u>Mental Health Counseling Services</u>. Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC <u>Mental Health Counseling Services</u> 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 <u>General Catalog</u>.

Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC <u>Library Department</u> provides numerous <u>Information Literacy Tutorials</u> to assist students in this endeavor.

Anticipated Class Schedule/Calendar for the Winter 2023 class is listed below

DATE	Lecture	Laboratory
Tue.	Ch. 1, The study of Human Body	Lab 1- Introduction- Lab safety guidelines.
1/3/2023	Ch. 2, Cytology – The study of cells	The Language of Anatomy, The cell
Wed.	Ch. 3, Histology – The study of tissues	Lab 2- Classification of Tissues. Studying the
1/4/2023		primary tissue types & function.
Thu.	Ch. 5, The Integumentary system	Lab 3- The integumentary system
1/5/2023		Quiz 1 (Ch. 1, 2, 3)
Fri.	Ch. 6, The skeletal system I, Bone tissue	Lab 4- Overview of skeleton: structure of
1/6/2023		bone/cartilage.
		Exam 1 (Ch. 1 to 5) + lab experiments
Mon.	Ch. 7, The skeletal System II- Axial skeleton	Lab 5- The axial skeleton and appendicular
1/9/2023	Ch. 8, The skeletal System III- Appendicular	skeleton.
Tue.	Ch. 9, The skeletal System IV Joints	Lab 6- Joints
1/10/2023	Ch. 10, The muscular system I	Gross anatomy of muscular system.
		Quiz 2 (Ch.5, 6, 7, 8)
Wed.	Ch. 11, The muscular system II- Axial	Lab 7- Muscular system - Axial.
1/11/2023		
Thu.	Ch. 12, The muscular system III- Appendicular	Lab 8- Muscular system – appendicular –
1/12/2023 Eri	Ch. 12. The normany system I. Normany tissue	Lab 0. Cross sustance of brain and sussial
Fri.	Cn. 13, The nervous system I-INErvous tissue	Lab 9- Gross anatomy of brain and cranial
1/13/2023		Even 2 (Ch 6 to 12) \pm leb experiments
Mon	Holiday – No class	No Lab
1/16/2023	Honday No class	
Tue.	Ch. 14 The nervous system II- spinal cord	Lab 10- Nervous system
1/17/2023		
Wed.	Ch. 15, The nervous system III- Brain	Lab 11- Anatomy of brain – exercise
1/18/2023		
Thur.	Ch. 16 The nervous system IV- Autonomics	Lab 12- Autonomic nervous system
1/19/2023		Quiz 3 (Ch. 13, 14, 15)
Fri.	Ch. 17 The nervous system V: Sense organs	Lab 13- Special senses
1/20/2023		
Mon.	Ch. 18, The endocrine system	Lab 14- The endocrine system
1/23/2023		Quiz 4 (Ch. 16, 17)
Tue.	Ch. 19, The circulatory system I – Blood	Lab 15- Blood
1/24/2023		Exam 3 (Ch. 13 to 18) $+$ lab experiments
Wed.	Ch. 20, The circulatory system- II- the heart	Lab 16- Anatomy of the heart
1/25/2023		
Thur.	Ch. 21, The circulatory system III – Blood	Lab 17- Anatomy of blood vessels
1/26/2023	vessels	Quiz 5 (Ch.19, 20)
Fri.	Ch. 22, The lymphatic system and immunity	Lab 18- Lymphatic system
1/27/2023		
	Ch. 23, The respiratory system	Lab 19- Anatomy of Respiratory system
		Quiz 6 (Ch. 21, 22)
Mon.	Ch. 24, The digestive system	Lab 20- Anatomy of the digestive system

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1/30/2023		Exam 4 (Ch. 19 to 23) + lab experiments
Tue.	Ch. 25, The urinary system	Lab 21- Urinary system
1/31/2023		
Wed.	Ch. 26, The reproductive system	Lab 22- Anatomy of reproductive system
2/1/2023		
Thur.	Ch. 4, Human development	Review
2/2/2023		
Fri.	Final Exam (Ch. 4, 24, 25, 26) + experiments	
2/3/2022		

This anticipated class schedule is tentative, and subject to change