### **Basic Course Information**

Semester	Spring 2017	Instructor Name:	Setareh Madani
Course Title & #	<b>Human Anatomy - BIOL 204</b>	Email:	setareh.madani@imperial.edu
CRN #	20043: MW 8:30-12:45pm 20042: MW 2:00-6:25pm	Webpage (optional):	NA
Classroom:	2737: Lecture and Lab	Office #:	
Class Dates:	2/13/2017 - 6/09/2017	Office Hours:	ТВА
Class Days:	MW	Office Phone #:	760-355-6148
	8:30am-9:35am,9:40am- 12:45pm 2:00pm-3:05pm 3:15-	Emergency	Department Secretary
Class Times:	6:25pm	Contact:	760-355-6155
Units:	4		

## **Course Description**

Lecture and laboratory course designed to introduce the fundamental principles of the human body structure from cellular through organ system levels 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. See a counselor.)

PREREQUISITES: MATH 091 or MATH 090, and BIOL 100 or BIOL 180, BIOL 182 with a minimum grade of C or better or MATH 091 or MATH 090 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 knowledge of anatomy and dissection competency using cat specimens as subjects. (ILO2, ILO3), 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)

## **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

Saladin, K. S. 2017. *Human Anatomy*, 5th Ed. McGraw-Hill Company, ISBN 978-0-07-340370-0 Lab manual: Integrate- Custom library for Anatomy and Physiology. The Pearson Learning Solutions, 2014. ISBN 13: 978-1-269-76300, Available at bookstore

## **Course Requirements and Instructional Methods**

This is an intensive lecture/lab course. Teaching will be aided with the use of PowerPoint, based on the materials derived from the textbook and other sources. **Students need to bring the textbook and the lab manual to each session.** Students will be asked to answer questions relative to materials covered in each chapter. Lab experiments and lab assignments are based on the materials and procedures explained in the lab manual. Models, charts, microscopic specimen, and computer software will be used during lab hours. Lab works will be collected at the end of each lab, and points will be given to each completed lab work. Missed labs will not receive any point.

#### Exams:

- 1. The course includes four (4) equally-weighted exams that cover both lecture and lab materials.
- 2. There are no make-up exams or lab classes.
- 3. While the exams may not be fully cumulative; no concept in biology is truly independent, so each might require knowledge of previously covered material.
- 4. The four exams make up 80% of the final grade.
- 5. The remaining 20% will be based on class attendance, active participation in discussions and questions/answers, lab works, and being on time.

<u>Out of Class Assignments</u>: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time <u>and</u> two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

#### **DATES TO REMEMBER:**

- \* **FEBRUARY 25**: LAST DAY TO DROP THE COURSE WITHOUT OWING FEES AND/OR TO BE ELIGIBLE FOR REFUND.
- \* MAY 12: LAST DAY TO DROP THE COURSE WITH A "W".

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

Final grade will be assigned based on the total points that a student earns in both lecture and laboratory sessions;

Exams	4 x 20pts	80pts
Lab works and class active participation	20pts	20pts
Total		100pts

A: 90-100%, B: 80-89%, C: 70-79%, D: 60-69%, F: Below 60%

#### **Attendance**

• A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who

desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See <u>General Catalog</u> for details.

- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused
  absences exceed the number of hours the class is scheduled to meet per week may be dropped. For
  online courses, students who fail to complete required activities for two consecutive weeks may be
  considered to have excessive absences and may be dropped.
- 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**

- <u>Electronic Devices</u>: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- <u>Food and Drink</u> are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- <u>Disruptive Students</u>: 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 <u>General Catalog</u>.
- <u>Add/Drop</u>: it is the student's responsibility to take the necessary steps to add and/or drop the class by the college deadlines.
- <u>Children in the classroom:</u> Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

## **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 important 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.

- <u>Plagiarism</u> 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.
- <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. 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.

#### **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>Canvas Support Site</u>. The Canvas 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, Writing & Language Labs</u>; and the <u>Study Skills Center</u>.
- <u>Library Services</u>. There is more to our library than just books. You have access to tutors in the <u>Study Skills Center</u>, 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.

- Student Health Center. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC Student Health Center at 760-355-6128 in Room 1536 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 \*\*\*Tentative, subject to change without prior notice\*\*\*

Wk and Date	Lecture	Laboratory
Week 1	Registration and Introduction: Ch. 1	Safety, Anat. terms, lab
Feb 13, Feb 15	Ch. 2: Cell Physiology	procedure, lecture cont.
Week 2	Feb 20: HOLIDAY	Cells; Models, Charts
Feb 22	Introduction to tissues, Tissues (Ch. 3)	Microscopic slides, , etc.
Week 3	Ch.3: Tissues	Tissues; slides and models.
Feb 27, Mar 1	Introduction to Organ Systems	Lab Reviews.
Week 4	EXAM 1	Lecture cont., models and
Mar 6, Mar 8	Ch. 5: Integumentary System	microscopic slides
Week 5	Ch. 6 & 7: Skeletal System	Skeletal System; slides,
Mar 13, Mar 15	•	models, human bones
Week 6	Ch. 8 & 9: Skeletal System	Skeletal System; models
Mar 20, Mar 22		and charts, human bones
Week 7	Ch. 10 & 11: Muscular System	Dissection; Muscles
Mar 27, Mar 29	Ch. 12: Muscular System	Lab Reviews
Week 8	EXAM 2	Joints & Articulations;
Apr 3, Apr 5	Introduction to Nervous System	Dissection, Muscles
Week 9	Ch. 13, 14, 15: Nervous System	Lecture cont.
Apr 10, Apr 12		Dissection; Nervous System
APR 17-APR 22	SPRING BREAK - CAMPUS CLOSED	
Week 10	Ch. 16 & 17: Nervous System	Dissection; Nervous System
Apr 24, Apr 26	Cii. 10 & 17. Nei vous System	Lab Reviews
Week 11	Ch. 20 & 21: Circulatory System	Lecture cont., Dissection
May 1, May 3	Gii. 20 & 21. Girculatory System	Lecture cont., Dissection
Week 12	EXAM 3	Circulatory Sys, Glands;
May 8, May 10	Blood (Ch. 19)	slides, charts, dissection
, , , , , , , , , , , , , , , , , , , ,	Ch. 18: Endocrine System	
Week 13	Ch. 22: Lymphatic System	Lab Reviews, Lymphatic &
May 15, May17	Ch 23: Respiratory System	Respiratory Systems
Week 14	Ch 24: Digestive System	Digestive & Urinary
May 22, May24	Ch 25: Urinary System	Systems, Lab Reviews
Week 15	May 29: HOLIDAY	Reproductive Sys
May 31	Ch 26: Reproductive System	Review; Q&A
Week 16	EXAM 4; FINAL EXAM	Lab Final- Practical
Jun 5- Jun 7		

<sup>\*\*\*</sup> Changes can be made in the course syllabus; students will be informed of any substantial changes concerning exams, schedules, etc.