

| Basic Course Information |                      |                     |   |  |  |  |
|--------------------------|----------------------|---------------------|---|--|--|--|
| Semester:                | Spring 2021          | Instructor Name:    | Fatima Villalobos   |  |  |  |
|                          | Human Anatomy – BIOL |                     |   |  |  |  |
| Course Title & #:        | 204                  | Email:              | fatima.villalobos@imperial.edu  |  |  |  |
| CRN #:                   | 21532                | Webpage (optional): | N/A   |  |  |  |
| Classroom:               | Online               | Office #:           | 2777  |  |  |  |
| Class Dates.             | 2/16/21 - 6/11/21    | Office Hours:       | Mon 12:15-1:15pm,<br>Wed/Thurs/Fri 3-4pm via<br>email/Pronto OR_by appt |  |  |  |
| Class Dates:             | 2/10/21 - 0/11/21    | Office Phone #:     | 760 255 57/2  |  |  |  |
| Class Days.              | N/A                  |                     | fatima villalohos@imnerial.edu  |  |  |  |
| Class Times:             | Online               | Emergency Contact:  | or 760.355.5743   |  |  |  |
| Units:                   | 4                    | Class Format:       | Online  |  |  |  |

#### **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 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. (C-ID BIOL 110 B) (CSU) (UC credit limited. See a counselor.) (CSU/UC)

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

BIOL 100 or BIOL 122 or BIOL 124 or BIOL 180 or BIOL 182 with a grade 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:

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)



## **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**

- **Required:** Saladin, K. S. *Human Anatomy*, 6th Ed. McGraw-Hill Company, ISBN 9781260210262 (I will also accept the 5<sup>th</sup> Edition)
- Labster and Other Lab Resources see Canvas Course for details (no purchase necessary)

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

This class an intensive lecture/lab course. The course is designed so that concepts taught in lecture are applied in a laboratory. Teaching will be aided with the use of PowerPoint, based on the materials derived from the textbook and other sources. Students will be asked to answer questions relative to materials covered in each chapter. Models, video dissections, images and the online labs will be used during lab hours. **Missed sessions and late works will not receive any points**.

**Exams:** The course will include approximately eight non-cumulative lecture exams (20-30 pts each) and lab practical exams (10-20pts each), and a cumulative lab final exam. Total Exam points range from 30-50 pts per exam.

**There are NO Make-Up exams or class/ lab activities**\_except for extreme circumstances. If you have a valid, documented reason for missing an exam, it is your responsibility to tell me about it and provide valid documentation by the next class meeting, otherwise you will not have the opportunity to make up the exam and will be given a zero for that exam.

#### Lab assignments

There will be approximately six assigned labs throughout the semester. Simulated laboratory experiments and concept exploration will occur through the use of Labster.

## Labster Hardware Requirements for this Course

Minimum System Requirements: Labster simulations can only be used on laptop or desktop based computers, which meet the following requirements:

- Processor: Dual core 2 GHz or higher
- Memory: 4 GB or more
- Graphic card: Intel HD 3000 / GeForce 6800 GT / Radeon X700 or higher
- OS: Latest version of Windows (64-bit) or Mac OS or ChromeOS
- Supported browsers: Latest version of Firefox and Chrome
- A stable internet Connection

#### iPad/Phone/Tablets not yet supported

Important: Labster simulations do not yet run on mobile devices such as smart phones and tablets. They are working on adding this in the future.



#### **Chromebook Support**

Labster's virtual lab simulations are accessible on Chromebooks that meet the minimum specifications above. Since there are many different Chromebooks, it can be difficult to determine if your specific Chromebook meets those specifications.

For more information on Technology Support and Requirements, see our Canvas class page.

### **Discussions**

There will be approximately 10-12 assigned Discussions/Related Assignments in the semester. Discussions will require a well thought out and supported response to a specific question, as well as responses to classmates' posts that result in collaborative conversations.

### **Project/Presentation**

Students will record and submit an oral mini presentation on Disorders of a Body System. Details to follow on CANVAS.

Out of Class Assignments: 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 and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

### What if I need to borrow technology or access to WIFI?

- 1. To request a loaner laptop, MYFI device, or other electronic device, please submit your request here: <u>https://imperial.edu/students/student-equity-and-achievement/</u>
- 2. If you'd like access the WIFI at the IVC campus, you can park in parking lots "I & J". Students must log into the IVC student WIFI by using their IVC email and password. The parking lots will be open Monday through Friday from 8:00 a.m. to 7:00 p.m.

Guidelines for using parking WIFI:

-Park in every other space (empty space BETWEEN vehicles)

-Must have facemask available

-For best reception park near buildings

-Only park at marked student spaces

-Only owners of a valid disabled placard may use disabled parking spaces

-Only members of the same household in each vehicle

-Occupants **MUST** remain in vehicles

-Restrooms and other on-campus services not available

-College campus safety will monitor the parking lot

-Student code of conduct and all other parking guidelines are in effect

-Please do not leave any trash behind

-No parking permit required

If you have any questions about using parking WIFI, please call Student Affairs at 760- 355-6455.

#### DATES TO REMEMBER: (please check Imperial Valley College Important Dates & Deadlines)



- February 28, 2021: Last day to drop WITHOUT "W"
- April 5-11, 2021: Spring Recess. No classes.
- May 15, 2021 (Saturday): Last day to drop WITH "W"
- May 31, 2021: Holiday Memorial Day. No classes.

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

Your course grade will be based on exams, lab assignments, discussions, reading assignments and research project/oral presentation. Anticipated points awarded toward the final grade include:

| •     | 8 Non-Cumulative Exams/Lab Practicals | 8 x 30 (avg) p | ts = | 240 pts |
|-------|---------------------------------------|----------------|------|---------|
| •     | Final Cumulative Lab Practical        | 1 x 30 pts     | =    | 30 pts  |
| •     | Labs                                  | 6 x 20 pts     | =    | 120 pts |
| •     | Discussions/Assignments               | 12 x 10 pts    | =    | 120 pts |
| •     | Presentation/Project                  | 1 x 30 pts     | =    | 30 pts  |
| TOTAL |                                       |                |      | 540 pts |

For example, if Total possible points = 480 points. Calculating Grade Point; To calculate your 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 400 points out of 480 possible points, your average grade for the course would be; (400/480) x 100 = 83% which equals the letter grade "B". Extra Credit <u>may</u> be awarded in the form of critical thinking questions or bonus questions <u>on exam</u>.

Grading scale:  $A \ge 90$  %  $B \ge 80$ %  $C \ge 70$ %  $D \ge 60$ %

#### **Course Policies**

#### 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 General Catalog 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.

#### What does it mean to "attend" an online class?



Attendance is critical to student success and for IVC to use federal aid funds. Acceptable indications of attendance are:

- Student submission of an academic assignment
- Student submission of an exam
- Student participation in an instructor-led Zoom conference
- Documented student interaction with class postings, such as an interactive tutorial or computerassisted instruction via modules
- A posting by the student showing the student's participation in an assignment created by the instructor
- A posting by the student in a discussion forum showing the student's participation in an online discussion about academic matters
- An email from the student or other documentation showing that the student has initiated contact with a faculty member to ask a question about an academic subject studied in the course.

Logging onto Canvas alone is <u>NOT</u> adequate to demonstrate academic attendance by the student.

### **Online Netiquette**

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

## How am I expected to act in an online "classroom" (especially Zoom)?

Attending a virtual meeting can be a challenge when there are many students on one conference call. Participating in such meetings may count as class attendance, but disruptive behavior may also result in you not being admitted to future meetings. Follow the tips below for best results:

## 1) Be RESPECTFUL

- a. Your written, verbal, and non-verbal communications should be respectful and focused on the learning topics of the class.
- 2) Find a QUIET LOCATION & SILENCE YOUR PHONE (if zooming)
  - **a.** People walking around and pets barking can be a distraction.
- 3) EAT AT A DIFFERENT TIME.
  - a. Crunching food or chugging drinks is distracting for others.
  - b. Synchronous zoom times are set in advance so reserve meals for outside class meetings.

## 4) ADJUST YOUR LIGHTING SO THAT OTHERS CAN SEE YOU

a. It is hard to see you in dim lighting so find a location with light.



b. If your back is to a bright window, you will be what is called "backlit" and not only is it hard on the eyes (glare) but you look like a silhouette.

# 5) POSITION THE CAMERA SO THAT YOUR FACE AND EYES ARE SHOWING

- a. If you are using the camera, show your face; it helps others see your non-verbal cues.
- b. You may be at home, but meeting in pajamas or shirtless is not appropriate so dress suitably. Comb your hair, clean your teeth, fix your clothes, etc. before your meeting time to show self-respect and respect for others.

# 6) Be READY TO LEARN AND PAY ATTENTION

- a. Catch up on other emails or other work later.
- b. If you are Zooming, silence your phone and put it away.
- c. If you are in a room with a TV turn it off.

# 7) USE YOUR MUTE BUTTON WHEN IN LOUD PLACES OR FOR DISTRACTIONS

a. Pets barking, children crying, sneezing, coughing, etc. can happen unexpectedly. It's best if you conference in a private space, but if you can't find a quiet place, when noises arise **MUTE** your laptop.

## 8) REMEMBER TO UNMUTE WHEN SPEAKING

- a. Follow your instructor's directions about using the **"raise hand"** icon or chat function to be recognized and to speak, but make sure you have unmuted your device.
- b. Do not speak when someone else is speaking.

# 9) REMAIN FOCUSED AND PARTICIPATE IN THE MEETING

- a. Especially when the camera is on YOU, we can all see your actions. Engage in the meeting. Look at the camera. Listen to instruction. Answer questions when asked.
- b. Do not use the Zoom meeting to meet with your peers or put on a "show" for them.

# 10) PAUSE YOUR VIDEO IF MOVING OR DOING SOMETHING DISTRACTING

a. Emergencies happen. If you need to leave the room or get up and move about, stop your video.

# 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.

- Plagiarism 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.
- 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 an assignment or portion of an assignment; (e) using a commercial term paper service.

## How do I show academic honesty and integrity in an online "classroom"?

# • 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.

## • COMPLETE YOUR OWN COURSEWORK.

• When you register for an online class and log-in to Canvas, you do so with the understanding that you will produce your own work, take your own exams, and <u>will do so</u> <u>without the assistance of others</u> (unless directed by the instructor).

## Examples of Academic Dishonesty that can occur in an online environment:

- Copying from others on a quiz, test, examination, or assignment;
- Allowing someone else to copy your answers on a quiz, test, exam, or assignment;
- Having someone else take an exam or quiz for you;
- Conferring with others during a test or quiz (if the instructor didn't explicitly say it was a group project, then he/she expects you to do the work without conferring with others);
- Buying or using a term paper or research paper from an internet source or other company or taking any work of another, even with permission, and presenting the work as your own;
- Excessive revising or editing by others that substantially alters your final work;
- Sharing information that allows other students an advantage on an exam (such as telling a peer what to expect on a make-up exam or prepping a student for a test in another section of the same class);
- Taking and using the words, work, or ideas of others and presenting any of these as your own work is plagiarism. This applies to all work generated by another, whether it be oral, written, or artistic work. Plagiarism may either be deliberate or unintentional.

#### **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 <u>http://www.imperial.edu/studentresources</u> or click the heart icon in Canvas.



# Anticipated Class Schedule/Calendar

| Week                     | Start<br>Date | Lecture Topic & Exams  | Related<br>Chapter     | Labs, Discussions, Assignments   |  |
|--------------------------|---------------|--|------------------------|--|--|
| 1                        | 2/14          | Syllabus, Introduction<br>The Study of Anatomy   | Ch. 1                  | Intro Discussion & Survey Assignment   |  |
| 2                        | 2/21          | Terminology<br>Cytology & Histology- Part 1&2  | Ch. 1<br>Ch 2,3        | Labster: Cell Structure<br>Labster: Cell Membrane  |  |
| 3                        | 2/28          | EXAM 1: (Ch. 1,2 & Terminology + Lab<br>practical)<br>Histology- Part 3, & 4<br>The Integumentary System | Ch 3<br>Ch 5           | Discussion<br>Labster: Microscopy  |  |
| 4                        | 3/7           | EXAM 2: (Ch. 3&5 + Lab practical)<br>The skeletal system I, Bone tissue                                  | Ch 6                   | Presentation Topic Deadline  |  |
| 5                        | 3/14          | Skeletal System II<br>Skeletal System III & IV; joints   | Ch. 7<br>Ch. 8,9       | Discussion   |  |
| 6                        | 3/21          | EXAM 3: (Ch. 6-9 + Lab practical)<br>Muscular System I & II  | Ch.10,11               | Labster: Muscle Tissues  |  |
| 7                        | 3/28          | Muscular System III<br>EXAM 4: (Ch. 10-12 + Lab practical)   | Ch. 12                 | Discussion/Assignment  |  |
| No Classes/Spring Recess |               |  |                        |  |  |
| 8                        | 4/8           | Nervous System, Part 1 &2<br>Nervous System, Part 2&3  | Ch. 13-16<br>Ch. 13-16 | Sheep Brain-Dissection Video   |  |
| 9                        | 4/18          | Nervous System, Part 4<br>Endocrine System   | Ch. 17<br>Ch. 18       | <b>Discussion</b><br>Eye – Dissection Video<br>Cell/Integument-Pres due                      |  |
| 10                       | 4/25          | Blood<br>The Heart<br><u>EXAM 5: (13-18 + Lab practical)</u>   | Ch. 19<br>Ch. 20       | Discussion<br>Heart – Dissection Video<br>Labster: Hematology<br>Skeletal/Muscular- Pres due |  |
| 11                       | 5/2           | Blood Vessels<br>Respiratory System  | Ch. 21<br>Ch. 23       | Discussion<br>Endocrine/Nervous System – Pres due  |  |
| 12                       | 5/9           | Exam 6: (19-21, & 23 + Lab<br>practical)<br>Lymphatic System & Immunity                                  | Ch. 22                 | Discussion<br>Heart/Blood/Respiratory System- Pres due                                       |  |
| 13                       | 5/16          | Digestive System Part 1<br>Digestive System Part 2   | Ch. 24                 | Discussion<br>Digestive/Immune System – Pres due   |  |
| 14                       | 5/23          | Exam 7: (22, 24 + Lab Practical)<br>Urinary System   | Ch. 25                 | Discussion<br>Urinary/Repro/Birth Defects – Pres due   |  |
| 15                       | 5/30          | Reproductive System<br>Review for Final  | Ch. 26                 | Discussion<br>Labster: Meiosis   |  |
| 16                       | 6/6           | FINAL EXAM (Exam 8: Ch 25 & 26)  |                        | LAB FINAL EXAM - Cumulative Lab Practical  |  |

# \*\*\*Tentative, subject to change without prior notice\*\*\*