



Basic Course Information

Semester:	Spring 2024	Instructor Name:	Lennie Saeid Bashiri
Course Title & #:	Human Anatomy & Physiology II / Bio 202	Email:	lennine.bashiri@imperial.edu
CRN #:	20027	Webpage (optional):	N/A
Classroom:	Building 2700/ Room 2736	Office #:	2779
Class Dates:	02/12/2024 – 06/07/2024	Office Hours:	By the appointment
Class Days:	T-TR	Office Phone #:	760 355 6148
Class Times:	8:30 – 09:35 9:40-12:50	Emergency Contact:	Department Secretary: 760 355 6155
Units:	4	Class Format:	Face-to-Face/On Ground

Course Description

Part two of a two semester study of the structure and function of the human organism, from the molecular to the gross level. This course may require the use of human cadavers for observation and/or dissection. Preparatory for RN program and paramedical programs. (C-ID: BIOL 115 B with BIOL 200 & BIOL 202) (CSU, UC credit limited. See a counselor.)

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

PREREQUISITES: BIOL 200 - with a grade of "C" or better; or - successful completion of Intermediate Algebra or appropriate placement as defined by AB705 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 related to key concepts in human anatomy and physiology using written and/or oral forms of expression and examination. (ILO1, ILO2, ILO5)
2. Identify basic anatomy and physiological processes related to the human body. (ILO1 ILO2)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

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1. Describe the structures and functions of the endocrine system, including the major endocrine glands and hormones.
2. Describe the structures of the heart, the physiology of the cardiac cycle, blood components, and factors relating to blood pressure and blood clotting.
3. Describe the structures and functions of the lymphatic system and the components of the body's immune system and defenses.
4. Describe the structures and functions of the respiratory system and explain gas exchange and transport.
5. Describe the structures and functions of the urinary system, formation of urine, fluid and electrolytic balance, and acid-base balance.
6. Describe the structures and functions of the digestive system, including enzymatic processes, absorption and excretion.
7. Describe the utilization of nutrients for proper system functioning and ATP production.
8. Describe the structures and functions of the male and female reproductive systems, including egg and sperm production.
9. Discuss human heredity and the developmental stages from fertilization to birth.
10. Discuss changes within the human organism due to the aging process.
11. Demonstrate dissection skills using animals and/or a human cadaver.

Textbooks & Other Resources or Links

Option #1: OpenStax College. (updated 2023). Anatomy and Physiology 2e. OpenStax College, Retrieved from <https://openstax.org/details/books/anatomy-and-physiology> (Links to an external site.) Your book is available in **web view and PDF for free**. (in our Canvas course). Option #2: Saladin, K. 2024. Anatomy and Physiology: The Unity of Form and Function, 10th Ed. McGraw-Hill Education. **ISBN: 9781265328627** Also acceptable: 7th, 8th, and 9th Editions

Course Requirements and Instructional Methods

Method of teaching:

Using PowerPoint effectively improves classroom instruction and learning. Active learning and question-and-answer sessions will also be part of the lecture in this class.

Exams:

Except for the final exam, there will be FIVE (5) cumulative lecture exams. A total of **50%** will be earned, with **10%** going toward each exam. There will be true-or-false, multiple-choice, and brief essay questions in the exam format. All tests will come with study guides. To do well on the tests, you must provide thorough answers to the questions in your study guides.

No make-up test will be provided.

Laboratory Exams

There will be five (5) laboratory exams on the material covered during the class period.

No make-up test will be provided.

Course Grading Based on Course Objective

Five equally weighted cumulative Lecture Exams	5X10%	50%
Five equally weighted Laboratory exam	4X 7%	28%
Weekly assignments, Case study, Critical thinking, Quizzes	? X 15%	12%

Final Exam

The final exam will be cumulative including 100 questions	1X10	10%.
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Total **100%**

A: 90 – 100 %

B: 80 – 89.9 %

C: 70 – 79.9 %

D: 60 – 69.9 %

Optional exam: MAY BE?

The optional exam may be provided to replace the lowest grade you received in any of the five exams (excluding the final exam). This exam is not mandatory, but you can take it if you have a low grade in any of the four exams.

- Instructions and announcements will be posted on Canvas on a weekly basis, and it is your responsibility to periodically check your email and announcements on Canvas. No excuses will be accepted for missing announcements.

Important Note:

- All exams and assignments will have due dates. **It is your responsibility** to read the instructions carefully and check the due dates to make sure you submit the assignments on time and before they are due. Missed weekly assignments/exams will get a zero.
- If you have a valid reason for missing a due date, **It is your responsibility** to let your instructor know about it as soon as possible, otherwise you will get a zero for the missing assignment.
- It is your responsibility to frequently check and read the new announcements thoroughly on Canvas.

Academic Honesty (Artificial Intelligence -AI)

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 taking and presenting as one's owned 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



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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 Dean of Student Affairs, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action.

Acts of cheating include, but are not limited to, the following:

- Plagiarism
- Copying or attempting to copy from others during an examination or on an assignment.
- Communicating test information with another person during an examination
- allowing others to do an assignment or a portion of an assignment.

using a commercial term paper service.

Please refer to the [General Catalog Links to an external site.](#) for more information on academic dishonesty or other misconduct.

Course Policies

Attendance:

Active participation throughout the semester is critical to your success and is required for IVC to use federal aid funds.

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.**

- **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.**



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Other Course Information

Classroom Policies

- **Electronic Devices:** Cell phones and electronic devices must be turned off and put away during class unless otherwise directed by the instructor.
- **Food and Drink:** Food and drink 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.
- **Disruptive Students:** Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Dean of Student Affairs 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, only students enrolled in the class may attend; children are not allowed.

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

Subject to change without prior notice

Exercise	Activity
Exercise 27 Functional Anatomy of the Endocrine Glands	1 Identifying the Endocrine Organs 2 Examining the Microscopic Structure of Endocrine glands
Exercise 29 Blood	2 Examining the Formed Elements of Blood Microscopically – students identify the different formed elements 7 Typing for ABO and Rh Blood Groups
Exercise 30 Anatomy of the Heart	1 Using the heart model to Study Heart Anatomy 2 Tracing the Path of Blood through the Heart 3 Using the Heart Model to Study Cardiac Circulation 4 Examining the Cardiac Muscle Tissue Anatomy
Exercise 32 Anatomy of Blood Vessels	1 Examining the Microscopic Structure of arteries and Veins 2 Locating Arteries on an Anatomical Chart or Model 3 Identifying the systemic Veins 4 Identifying Vessels of the Pulmonary Circulation
Exercise 33 Human Cardiovascular Physiology: Blood Pressure and Pulse Determinations	1 Auscultating Heart Sounds 2 Palpating Superficial Pulse Points 5 Using a Sphygmomanometer to Measure Arterial Blood pressure
Exercise 35 The Lymphatic System and Immune Response	1 Identifying the Organs of the Lymphatic System 2 Studying the Microscopic Anatomy of a Lymph node, the Spleen, and Tonsil
Exercise 36 Anatomy of the Respiratory System	1 Identifying Respiratory System organs. 2 Demonstrating Lung Inflation in Pig Pluck 3 Examining Prepared Slides of Trachea and Lung Tissue



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Exercise 37 Respiratory System Physiology	3 Measuring Respiratory Volumes Using Spirometers
Exercise 38 Anatomy of the Digestive System	1 Identifying Alimentary Canal Organs 2 Studying the Histologic Structure of the Stomach and the Gastroesophageal Junction 3 Observing the Histologic Structure of the Small Intestine 4 Examining the Histologic Structure of the Large Intestine 5 Identifying the Teeth 7 Examining the Salivary Gland 8 Examining the Histology of the Liver
Exercise 40 Anatomy of the Urinary System	1 Identifying Urinary Organs 2 Studying Nephron Structure 3 studying Bladder Structure
Exercise 41 Urinalysis	1 Analyzing Urine Samples
Exercise 42 Anatomy of the Reproductive System	1 Identifying Male Reproductive Organs 5 Identifying Female Reproductive Organs Refer to pages 654 and 657 for histology of seminiferous tubules and ovary



LECTURE AND LAB TENTATIVE SCHEDULE

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Anatomy and Physiology 202

Spring 2024

DATE	LECTURE TOPICS	LABORATORY EXERCISES
Week 1 Feb 12 - 16	Introduction Chapter 16 Endocrine System	Lab Safety
Week 2 Feb 19 - 23	Chapter 16 Endocrine System, Blood chapter 17	Lab I Exercise 27 Endocrine System
Week 3 Feb 26 - Mar 1	Chapter 17 Blood	Quiz Endocrine Sys. (Ex 27 Lab 1) Lab II Endocrine System
Week 4 Mar 4 - 8	Exam I Chapters 16, 17 Chapter 18 Cardiovascular System	Lab Exercise 29 Blood
Week 5 Mar 11 - 15	Chapter 18 (Continued) Chapter 19 Blood Vessels	Lab Practical I Endocrine System & Blood (Ex 27, 29) Lab Exercise 30 Anatomy of the Heart
Week 6 Mar 18 - 22	Lecture Chapter 19 (Continued) Chapter 20 Lymphatic System	Lab Exercise 30 Anatomy of the Heart
Week 7 Mar 25 - 29	Exam II Chapters 18, 19 and 20 Chapter 21 Immune System	Quiz Heart (Ex 30) Lab Exercise 32 & 33 Anatomy of Blood Vessels and Pulse Points Lab Exercise 35 Lymphatic System
Week 8 Apr 1 - 6	Spring Break	Spring Break
Week 9 Apr 8 - 12	Chapter 21 Immune System (Continued) Chapter 22 Respiratory System	Lab Practical II Heart, Blood Vessels (Ex 29 - 33 not 31 & 35) Lab 36-37 Anatomy of the Respiratory System & Respiratory Volumes
Week 10 Apr 15 - 19	Chapters 22 Respiratory and Chapter 25 Urinary System	Quiz Respiratory system (Ex 35)
Week 11 Apr 22 - 26	Exam III Chapters 21, 22, 25 Chapter 23 Digestive System	Quiz Respiratory System (Ex 36-37) Lab Exercises 40 & 41 Anatomy of the Urinary System
Week 12 Apr 29 - May 3	Chapter 23 Digestive System (continued) Chapter 24 Nutrition, Metabolism, and Body Temperature Regulation	Lab Practical III (Ex 35-38) Lymphatic, Respiratory and Urinary system Ex 38 Digestive System
Week 13 May 6 - 10	Chapter 24 Nutrition, Metabolism, and Body Temperature Regulation Chapter 26 Fluid, Electrolyte and Acid-Base Balance	Lab Practical IV (Ex 38 Digestive System)
Week 14 May 13 - 17	Exam IV Chapters 23, 24 Chapter 27 Reproductive System	Lab Exercises 42 Reproductive Sys Male and Female, Lab Exercises 42



Week 15 May 20 - 24	Chapter 27 Reproductive System (continued)	Physiology of Reproductive system male and female Exercises 43
Week 16 May 27 - 31	Exam V Ch -26, 27, 28	Lab Practical V Reproductive Sys Male Lab Exercises 42 Reproductive system female Exercises 43 Paper and Presentation
Week 17 Jue 3 - 7	Final Exams (Comprehensive)	