COURSE INFORMATION

Course Title: Human Anatomy

Course Number, Section, and CRN: Biol 124, CRN 40460 and 40461

Units: 4

Catalog Description: An examination of the functional anatomy of the human organism. Lectures and laboratories investigate the microscopic and macroscopic structures of the major organ systems. Lecture: 3 hours weekly. Lab 3 hours weekly.

Advisories: BIOL 100 - Introductory Biology; CHEM 120 - Introductory Chemistry; and ENGL 514 -

Writing Skills 4; or eligibility for ENGL 101

Semester and Year: Fall 2022

Meeting Location, Times and Days: Lecture in LVC 2-212 Monday and Wednesday 4:45-6:05pm; Lab for CRN 40460 in LVC 3-101 Monday 6:30-9:35pm; for CRN 40461 in LVC 3-101 Wednesday

6:30-9:35pm

Start Date: 1/23/23 End Date: 05/24/23

Last date to drop with a refund: 02/03/23

Last date to withdraw: 04/21/23

INSTRUCTOR INFORMATION

Name: Timothy Doyle, PhD.

E-mail: timothy.doyle@hancockcollege.edu

Office Phone: N/A
Office Location: N/A

Spring Office Hours: MW 3:30 PM to 4:30 PM LVC 1-102, Zoom by appointment.

Course Welcome

Human anatomy is a look at the complex and wonderful systems of the human body. As you may have noticed already, we have an incredible amount of material to cover in just 16 weeks! Anatomy is a challenging but also a fascinating course with both a lecture and a laboratory component. It is hoped that the following important things to know and helpful hints will guide you to success in this course.

REQUIRED COURSE MATERIALS

McKinley, M., O'Loughlin, V.D. and Pennefather-O'Brien, E.E. 2021. Human Anatomy, **6**th **ed.** (**2**nd, **3**rd, **4**th **and 5**th **editions** of McKinley's text are **OK to use**)

Bondello, M., Perry, M., Miyahara, L. 2015. Laboratory Objectives for Human Anatomy.

4 "green strip" 50 questions per side Scantron computer forms (#882-E)

STUDENT LEARNING OUTCOMES:

After successfully completing Bio 124, the student shall be able to:

- 1. Distinguish the roles of organ system components in maintaining organismic function.
- 2. Recognize the structural and functional characteristics of organ systems involved in support, movement, integration and transport.
- 3. Learn the functional anatomy of respiratory, digestive and urinary systems.
- 4. Distinguish the male and female reproductive systems with respect to their roles in the human reproductive process.

COURSE OBJECTIVES

At the end of the course, the student will be able to:

- 1. compare and contrast the roles of organelles, cells, organs, and organ systems in maintaining organismic function.
- 2. correlate the diverse structure of the integument with its varied functions.
- 3. compare and contrast the structural and functional characteristics of cartilage and bone.
- 4. determine the synergistic structural and functional aspects of the muscular system with respect to biomechanical function.
- 5. compare and contrast the structural and functional characteristics of the nervous and endocrine systems.
- 6. compare and contrast the circulation of blood and lymph.
- 7. describe the functional anatomy of the respiratory, digestive, and renal systems.
- 8. compare and contrast the male and female reproductive systems with respect to their roles in fertilization, prenatal, and postnatal development.

CLASS SPECIFIC RULES

- 1. <u>ATTENDANCE:</u> You may be dropped from the class after a total of 3 absences. Remember, it is ultimately <u>YOUR</u> responsibility to drop the course if you choose not to continue. <u>Do NOT rely on me as your instructor to drop you from the class</u>. Due to recent abuses in requesting exceptions to the class schedules, unless you are severely ill with a physician's note, had a recent death in the immediate family, or other <u>equally</u> SEVERE event in your life, do not ask for a change or exception to the class schedule because the answer will be <u>NO</u>! College is a test to see if you are willing to set your priorities according to the inconveniences of a set schedule. There are also <u>new lab attendance policies</u> that will be listed in your lab schedule.
- MAKE-UP TESTS: There will be NO MAKE-UP TESTS IN LAB.
 Lecture exams may be made-up WITH PRIOR APPROVAL AND AT THE INSTRUCTOR'S
 DISCRETION. Lecture exams must be made-up prior to the next lecture period. This privilege may be used ONLY ONCE during a semester. A 10-point penalty may be assessed.
- 3. <u>FINAL EXAM</u>: The final exam is part of the course and must be taken. *If you miss the final exam, you will be penalized one full grade* for your final course grade.
- 4. No hats, baseball caps or other head coverings with bills will be allowed during lecture or lab exams.
- 6. <u>CHEATING</u>: If you are suspected of cheating in either the lab or the lecture part of the class, you may be required to retake the exam the <u>same day</u>. If you are caught cheating, you will receive a <u>ZERO</u> on that assignment and additional disciplinary action may follow pursuant to the Academic Honesty Policy of the college.

- 7. <u>CELL PHONES</u> are <u>NOT</u> allowed during lecture or lab. <u>Devices</u> are to be put on the "vibrator" mode to avoid disturbing your classmates. <u>NO TEXTING</u> during lecture or lab. A 5 point penalty may be assessed at my discretion. Any student caught with any device with the power on during an exam or quiz will receive a 0 on that exam or quiz.
- 8. FINAL GRADES are based upon points accumulated during the semester and are not negotiable. In addition to total points, you must earn at least 69 points on at least one lecture exam to earn a "C" or higher in the course.**
- 9. See separate laboratory schedule for specific LAB POLICIES.

EVALUATION:

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4 lecture exams @ 100 pts. each = 400 pts.

5 lab exams @ 50 pts. each = 250 pts.

1 Histology/Integumentary quiz@ 25 pts. = 25 pts.

Total possible points = 675 pts.
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FINAL GRADE ASSIGNMENT:

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A = 89.5 - 100\% = 604.0 - 675.0 points

B = 79.5 - 89\% = 536.5 - 603.5 points

C = 69.0 - 79\% = 465.5 - 536.0 points**

D = 59.5 - 68.5\% = 401.5 - 465.0 points

F = < 59.5\% = < 401.5 points
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GOOD LUCK. WORK HARD AND TRY TO HAVE SOME FUN ALONG THE WAY!

STUDENT ACCESSIBILITY SERVICES

The fundamental principles of nondiscrimination and accommodation in academic programs are set forth in Section 504 of the Rehabilitation Act of 1973 the Americans With Disabilities Act of 1990 (ADA), and the ADA Amendments Act of 2008 (ADAAA). Necessary accommodations are those services that allow an individual with a disability to have equal access to college courses, facilities and services. The goal of LAP is to ensure equal access while supporting student independence, integration and self-advocacy.

Contact Information is as follows:

SM Campus: Building A, Room A304 LVC Campus: Building 1, Room 102N SM Phone: 805-922-6966 ext. 3274 LVC Phone: 805-735-3366 ext. 5274

V-Phone: 805-266-7874 -or- 866-327-6218

Website: LAP Website

^{**} In addition to total points, you must earn at least 69 points on at least one lecture exam to earn a "C" in the course.

^{***}Attendance alone does not warrant a passing grade. Failure in the lab portion of the class may result in the failure of the course overall. If you take this class for Pass/No-Pass you must earn a score of 70% or above to receive a Pass for the course

STANDARDS OF STUDENT CONDUCT

Please review the following document for information regarding Standards of Student Conduct guidelines, principles of discipline, standards of conduct, academic and classroom disciplinary procedures, student grievance procedures, and suspension and expulsion.

Please click here to access the Standards of Student Conduct: https://catalog.hancockcollege.edu/current/policies/conduct.php

NON-DISCRIMINATION STATEMENT

The Board of Trustees of the Allan Hancock Joint Community College District recognizes that diversity in the academic environment fosters cultural awareness, mutual understanding and respect, harmony and creativity, while providing positive images for all students. The board commits the district to the active promotion of campus diversity, including recruitment and selection of qualified employees from a wide variety of backgrounds and equal employment opportunities in all aspects of employment, including assignments, promotions, and transfers. In addition, the Board of Trustees recognizes that to be effective, an equal employment opportunity plan must be developed, reviewed and adopted in compliance with Education Code and Title 5 requirements.

Discrimination on the basis of gender, including all forms of sexual harassment, is strictly forbidden by Title VII of the Civil Rights Act, Title IX, and the college policy on sexual harassment. All student discrimination complaints should be addressed to the associate superintendent/vice president of student services, Allan Hancock College, 800 S College Dr, Santa Maria CA, 93454-6399, 1-805-922-6966 ext. 3267. All employee discrimination complaints should be addressed to the director of human resources, Allan Hancock College, 800 S College Dr, Santa Maria CA, 93454-6399, 1-805-922-6966 ext. 3338. The district is also committed to equal access and reasonable accommodations for students with disabilities.

The coordinator for Americans with Disabilities Act (ADA) for students is the director, Learning Assistance Program, Allan Hancock College, 800 S College Dr, Santa Maria CA, 93454-6399, 1-805-922-6966 ext. 3380. All other ADA discrimination complaints should be addressed to the director, human resources, Allan Hancock College, 800 S College Dr, Santa Maria CA, 93454-6399.

COLLEGE POLICIES AND PROCEDURES

Please click here for further information regarding Allan Hancock College Policies and Procedures related to students: https://catalog.hancockcollege.edu/current/policies/

CALENDAR /ASSIGNMENTS AND EXAMS

See separate lecture and lab schedule documents.

Lecture Schedule Bio 124 – Spring 2023

Date	Topic	Chapter
1/23	Introduction	1
1/25	Cell structure and function	2
1/30	Cell's structure and function (cont'd)	2
2/1	Cell reproduction	2
2/6	Tissues	4
2/8	Epidermal structures & Integumentary system	5
2/13	Cartilage and Bone (Exam 2 material)	6, 7#, 8#
2/15	** EXAM 1: Ch. 1-5 **	
2/20	Holiday NO CLASS	
2/22	Osteogenesis & Aging of Bone	6
2/27	Fracture repair; articulations	6, 9
3/1	Muscle Tissue and Organization	10, 11#, 12#
3/6	Muscle Tissue and Organization (cont'd)	10, 11#, 12#, 13#
3/8	Nervous System (Exam 3 material)	14
3/13	** EXAM 2: Ch. 6-13 **	
3/15	Nervous System cont'd	14
3/20	SPRING BREAK NO CLASS	
3/22	SPRING BREAK NO CLASS	
3/27	CNS – Spinal Cord & Brain	15#, 16#, 17
3/29	CNS – Brain (cont'd); PNS	15#, 16#
4/3	Autonomic nervous system	18
4/5	Eye & Ear structure & function	19
4/10	Other senses; Endocrine system	19, 20
4/12	** EXAM 3: Ch. 14-20 **	
4/17	Cardiovascular system – blood	21#
4/19	Cardiovascular system – heart & vasculature	22#, 23#
4/24	Lymphatic system	24

system (cont'd)	26 27
stem	27
ve system	28
ve system (cont'd)	28
ve (cont'd); Development	28, 3
4: Ch. 21-28, 3 ***	
i	ive system ive system (cont'd) ive (cont'd); Development 4: Ch. 21-28, 3 ***

(# indicates topics covered mainly in lab)

Lab Schedule Bio 124 - Spring 2023

Lab Schedule Bio 124 – Spring 2023	
Topic	Objective page(s)
Introduction/Anatomical organization	4
Histology	5
Integumentary System	6
Exam Histology & Integumentary System	
Skeletal System - Appendicular	7-9, 13-15
Skeletal System - Axial	9-12
2/20: NO LAB, 2/22: OPEN LAB	
Exam: Skeletal System	16-18
Muscular System	
Muscular System	16-18
Nervous System	19-21
Spring Break NO LAB	
Brain and Endocrine System	22-25
*Brain and meninges dissection #	
Exam: Muscular System	
Special Senses	26-28
*Eye Dissection #	
Cardiovascular System	29
Start Circulatory System	30-31
*Heart Dissection #	
Exam: Nervous System, Brain, and Special Senses	
Finish Circulatory System	30-31
Respiratory System	32
Digestive System	33-34
	Integumentary System **Exam Histology & Integumentary System** Skeletal System - Appendicular Skeletal System - Axial 2/20: NO LAB, 2/22: OPEN LAB **Exam: Skeletal System** Muscular System Muscular System Nervous System Spring Break NO LAB Brain and Endocrine System *Brain and meninges dissection # **Exam: Muscular System** Special Senses *Eye Dissection # Cardiovascular System Start Circulatory System *Heart Dissection # **Exam: Nervous System, Brain, and Special Senses** Finish Circulatory System Respiratory System

5/1	**Exam: Heart, Circulatory and Respiratory Systems**	
	Urinary System	35
5/8	Reproductive System	36
5/15	**Exam: Digestive, Urinary, and Reproductive System**	
5/18-24	Finals Exams NO LAB	

#: indicates dissection lab

LABORATORY Policies

****NO MAKE-UP LAB EXAMS****

NO FOOD, DRINK, OR OPEN-TOED SHOES IN LAB

LABORATORY: Bring your lab manual to each lab meeting. To make the best use of your time in lab, you should refer to your lab schedule and read the appropriate material before class. This is also a safety issue. Some labs contain hazardous chemicals, biological fluids, and/or animal specimens. Failure to perform the correct procedure may result in injury, damage to lab equipment, or inability to complete the experiment.

Equipment:

Lab safety standards must be strictly followed when doing Lab Dissections or just looking at models. In the lab you must 1) wear a protective lab coat when appropriate, 2) wear long pants and 3) wear closed toe shoes (no sandals). Also, no food, drinks or chewing gum is permitted in the lab area during any of the labs. Lab Coats, gloves and goggles are available as needed.

If you wear contact lenses, it is advisable that you bring your glasses to wear on lab dissection days. Any materials that might splash into your eyes will quickly be carried under the lens by capillary action making it very difficult to clean or flush your eye. Please ask your T.A. or Instructor for a pair of safety goggles as needed.

PENALTIES:

- Taking an exam in another lab period: a 10-point penalty may be assessed (no EC)
- 5-point penalty for either missed lab or abbreviated lab attendance
- 10-point penalty for missed lab on an exam day (either lecture or lab exam).
- There will be two Mandatory Cadaver Inspections ++. 10-point penalty for failure to show.