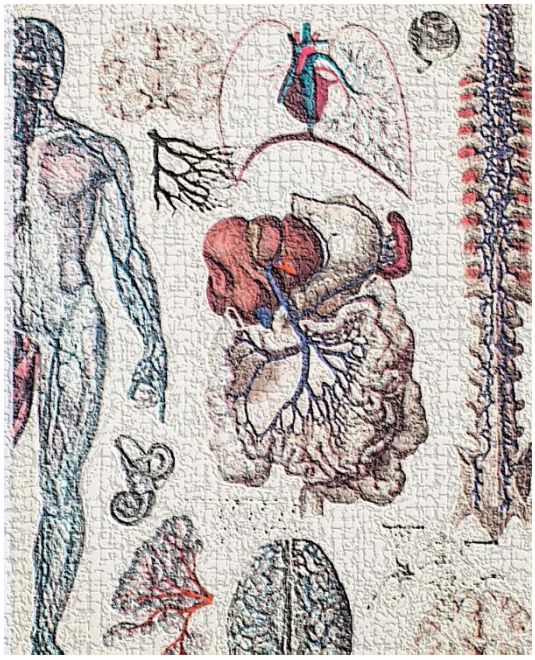


Human Anatomy (Biology 230)
Section 83693
Spring 2026 Course Syllabus

Instructor: Dr. Marie McMahon, Ph.D.
Class Times: MW 1:00pm to 5:20pm, Rm S6-209.
Office Phone (voicemail): (619) 388-7497
Office Hours: MW 11:30am to 12:30pm, +T/Th 4:00pm to 5:30pm Rm S6-115L.

Email: mmcmahon@sdccd.edu
Faculty Website: https://sdmiramar.edu/faculty/marie-mcmahon
Course Prerequisites: A passing (or credit) grade of "C" or better in BIOL 107 or equivalent.

Text and Materials: Any college level "Human Anatomy" textbook. The Anatomy Lab Manual (McMahon, Spring '26) is available from Mira Mesa Copy & Print, 9705 Carroll Centre Rd. #101, San Diego ph: (858) 578-0941.

Deadlines: Important dates for adding or dropping a class: See Spring 2026 Schedule for more information.

Feb 13, 2026 Last day to add with instructor's permission and to drop without receiving a "W"
Feb 13, 2026 Last day to drop and be eligible for a refund and/or non-resident tuition.
Apr 17, 2026 Last day to file a petition for Pass/No Pass Option.
Apr 17, 2026 Last day to withdraw from the course with an option of "W" grade.

Scope of Course: Biology 230 is the study of Human Anatomy, using a systemic approach. The lectures cover functional anatomy within specific systems. The lab sessions are a "hands on" experience in identifying anatomical structures both microscopically (with a microscope) and with our naked eyes (gross anatomy). The progression of topics through this course will build on the levels of organization:

Cells > Tissues > Organs > Organ Systems > Organism

The 4 primary tissues of the human body, Epithelium, Connective, Muscular, and Nervous, are studied in detail. How they contribute to the structures of the human body will be studied throughout this course and the following topics are specifically covered in this order:

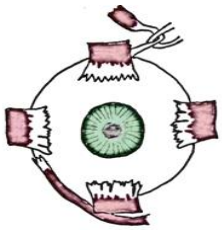
a. Anatomical Terminology
b. Histology (Microscopy)
c. Integumentary System
d. Skeletal System
e. Articular System
f. Musculature System
g. Nervous System
h. Sensory System
i. Circulatory System
j. Respiratory System
k. Digestive System
l. Endocrine System
m. Urinary System
n. Reproductive System

Student Learning Outcome (SLO) for this Course. Students should be able to:

- Describe and identify the structure and function of the four primary tissues of the human body. The additional objectives below support this central SLO stated.
- Identify macroscopic (gross) and microscopic (histological) anatomical structures of the human body.
- Understand how the concepts of structure (anatomy) contribute to the function of living systems.
- Identify the importance of current research and integrate this with the information we discuss in class.
- Become familiar with an interactive learning environment where we step away from 'rote' memorization and find meaning in the new material (often Greek and Latin words) we are learning.

This course can be challenging and demanding, **it requires time and persistence**. It is always possible to do very well in this course. It is my job to ensure a reasonable pace with clear and comprehensible delivery. Furthermore, Anatomy is enjoyable! I want every student to succeed in this course, so we must all do our part in order for that to happen. Here are some helpful tips you may want to think about:

- Attend lectures and labs, take notes, **be present** and prepared to think about the issues presented.
- **Stay caught up** with lecture & lab material. Study every day in order to avoid cramming.
- Create a study group as early as possible and discuss class issues with other students.
- Answer questions in the study guide and don't hesitate to **ask me questions** – that's why I'm here.
- Organize yourself and try to work out a system of studying that is effective for you. It may take trying a few different methods. Don't be afraid to change a study method if it is not working for you.

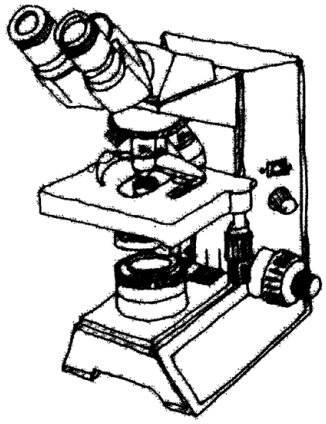


Spelling: Students will be *expected to spell correctly and points will be deducted for spelling errors* in the lab exams. But have no fear… Spelling Insurance is available for laboratory exams for those who wish to participate. The guidelines are as follows:

For any word you wish to have 'covered', it must be ***handwritten*** and spelled correctly 25 times on a piece of paper and submitted to me before the exam. You can use columns and both sides of the paper. Please include your Name on the first page of your Spelling Insurance and please staple multiple papers together.

Lectures: 1:00pm to 1:50pm MW

The lecture content presents the aspects of ***functional anatomy*** of this course. Many of the concepts introduced and discussed in lecture are reinforced during the laboratory practical sessions that immediately follow lecture.



Exams – there will be **5 Lecture Exams** (65 to 80pts), and the **Final** (90pts) is *not cumulative*. Exams are based on material covered in lecture, and are a mixture of multiple choice, fill in, matching and short answer/essay questions. They are returned to me after the class has had an opportunity to review them. A 50 question scantron is needed, the back of an old scantron is fine. Exams will be taken in person on days set by the class schedule (below). All features of the exam process will be clearly explained each time to reduce anxiety or stress!

Quizzes – will be based on the recent topics completed during a specific section. They are multiple choice and **10pts** each. **There are no make-ups for quizzes**. There never have been, this will not change. The lowest quiz score will be dropped. You will also need the same long scantron (the 882-E) for quizzes.

Class Activities and Study Guide Questions – Class activities, such as questions, in class assignments, etymology pages, etc., *may be given at any time in class, Lecture and Lab*, and are **only available to students who are present in class on time**! No Exceptions. The ***Study Guide Questions*** are designed to help direct students to the fundamental issues presented in lecture. Understanding how to answer study guide questions is very helpful in preparing students for the lecture exam corresponding to that section.

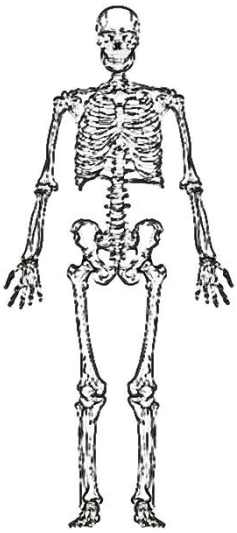
Class Materials – There is no personal protective equipment (PPE) required for this class. Class resources are made available to all students on the instructor's Website: **https://sdmiramar.edu/faculty/marie-mcmahon**. This course also has a canvas shell with other resources there and a up to date grade sheet.

Laboratories: 2:00pm to 5:20pm MW

The laboratory component is for instruction of anatomical features with a 'hands on' approach and an opportunity for students to use models and microscopes to examine structures and histology (tissue) slides, charts and diagrams, as well as preserved materials including cadavers.

Lab Exams – there will be **5 major Laboratory Practical Exams** (the 1st one is **50pts**, all others are **100pts**).

In-Lab Work Assignments – there will be lab assignments to be completed and periodically handed in for points during the practical laboratory component of the class. **Any assignment turned in late will be penalized 10%, and a further 10% for every additional day it is late**.



General Policies

Lecture Make Up Exams – If, due to illness or an emergency you miss an exam, there will be an opportunity to make-up a Lecture exam. There may be a **10%** penalty applied to any grade on a make-up exam, regardless of the reason for missing the exam. These make up exams may be different to the original. *Always try to let me know of a "situation" (work, family, health, etc.) that may arise **beforehand** if possible, so that something fair can be worked out.* We can collaborate and resolve issues, easy!

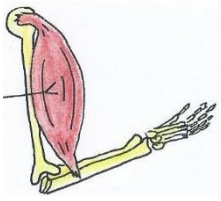
There are No Make Up Exams for Lab Practicals – Please do not miss a lab exam as **there will be no opportunity to make up any missed lab exams**. They require extensive time and an entire lab area to set up. Once they are over, they are removed and no longer accessible! Do not miss a lab exam, you will receive **zero** for it.

Attendance Policy – Absences in excess of two classes (which includes arriving late and leaving early) **will result in the student being dropped from this class**: It's also the student's responsibility to drop the course. As an enrolled student you have agreed to this schedule. Please organize yourself so you are not late for lectures, labs, exams and quizzes. If you arrive late for any exam or quiz, you will not be given extra time and you may not be allowed to take it at all, depending on how disruptive it is for all, myself included.

Please note: There will be **10 points** deducted from a student's total point any time that their phone rings or they send or read text/email/phone messages or use unauthorized technology during class. So …

Please turn off or silent your cell phones/technology while in class.
Sending, reading text or using devices is not allowed in class. ***Thank You!***

Academic Integrity – Integrity and honesty are essential in any realm, including the academic process, thus **it is imperative that the work you submit is your own**. Students found cheating will receive an **F** (zero) for that assignment or exam. This can affect your performance in the entire course. "Cheating" includes but is not limited to: revealing test questions or soliciting another person to reveal test questions, copying another person's work or allowing someone to copy your work, using unauthorized materials, such as notes, books, computers, tablets, phones, etc.



Conduct and Behavior – Any significant issues of concern or disruptive behavior will not be tolerated, those students will be asked to leave the classroom in accordance with our **BP 5500 Policy**. If anything is going on that I can help with, let me know so we can find the best solution. Our aim is to work out any issues that may arise.

Disability Services – Any student with a disability who may need academic accommodation or advice should contact the instructor and the Disability Support Programs and Services (DSPS) Office during the first week of class. Refer to the Miramar College 2025-26 Catalog for more information.
Other Info that may be useful:

Student Services	https://www.sdmiramar.edu/campus/counseling
Academic Support and Tutoring	https://www.sdmiramar.edu/campus/asc

Grading Policy – The final grade is based solely on the total number of points accumulated from quizzes, tests, assignments activities and exams. The lecture and lab components are combined for one total. The grades are calculated as a percentage of your scores over the total available points, as follows:

90-100% = A; 80-89% = B; 70-79 = C; 69-55% = D; ↓ 54% = F

There is **no** extra credit work. There is already enough to learn in this course without the *extra* work!

Student Facilities – There are tutors, Anatomy Models and Microscopes available for students at the **Academic Success Center**, in the Library and Independent Learning Center (ILC) room **L-101**, and The **STEM Center** in **S6-110**. These facilities are here for you as students to use – please take advantage of them.

Laboratory Health, Safety and Responsibilities – During the first lab meeting, students will be given a handout explaining the department's policies and guidelines regarding safety in the laboratory and breakage of lab materials. The students will discuss those procedures in class with the instructor. Before the second lab class begins, all students must sign the required form stating that they understand and accept the department's Lab Safety policies.
Good lab practices, such as responsible handling of equipment, models, slides and chemicals, in addition to appropriate cleaning up and wiping down of all lab tables after each and every lab, are expected of every student. Points will be awarded for good lab etiquette and class participation.

*Student Care of the Microscopes and Anatomy Lab Models – Taking good care of the lab equipment is very important. This is particularly relevant for the **Microscopes** and the **Anatomical Models** in our lab.*

- There are explicit instructions for the proper storage and use of the microscopes in the lab manual and on the door of the microscope cabinets. These rules must be followed by all students.

- Each anatomy model in our lab has a unique number on it and has an exact space where it sits in the model cabinets. At the end of each lab session, all models must be placed back in their correct space.

Lab Clean Up Check List: Each class is responsible for safeguarding the standards of organization in the lab and at the end of each lab session, the instructor will process the official Lab Check List to ensure that all equipment is put away properly (Microscopes, Anatomical Models) and tables are cleaned. Points are involved for proper Student Lab etiquette.

Student Grade Recording

All points from lecture and lab are combined into one total for the entire class. Updated grades are displayed on our canvas course shell, and anyone can check their grade with the professor's spreadsheet. The total points available in this class is from 900 to 1,000 pts.

Lecture Schedule* for Human Anatomy (CRN: 23541), Spring 2026

Week	Date	Lecture Topic *Tentative	Section
1	M 2/2	Introduction; Review Cells. Anatomical Position, Body Planes	
	W 2/4	Tissues: Epithelial and Connective Tissues	
2	M 2/9	Tissue Histology; Membranes; Fasciae	
	W 2/11	Integumentary System	
3	M 2/16	**President's Day Holiday**	
	W 2/18	Integumentary System: Accessory Structures; Burns	
4	M 2/23	Bone Structure, Development, Growth and Maintenance	
	W 2/24	**Exam I**: (See Lecture Notes online)	
5	M 3/2	Bone Terminology, Classification; Axial Skeleton	
	W 3/4	Axial and Appendicular Skeleton: Articulations (Joints)	
6	M 3/9	Anatomy and Functions of Skeletal Muscle, Terminology	
	W 3/11	Levers in the Body; Axial and Appendicular Musculature	
7	M 3/16	Muscle Action, Origin, Insertion and Innervation	
	W 3/18	**Exam II**: (See Lecture Notes online)	
8	M 3/23	Nervous System Overview: Neurons and Glial Cells	
	W 3/25	Nervous System: Spinal Cord; CNS and PNS	
	M/W 3/30-4/4	**Spring Break**	
9	M 4/6	Cranial and Spinal Nerves; Cranial and Spinal Meninges	
	W 4/8	Autonomic Nervous System: Special Senses: Endocrine	
10	M 4/13	Special Senses: The Eyes/Vision and Ears/Hearing	
	W 4/15	**Exam III**: (See Lecture Notes online)	
11	M 4/20	Cardiovascular System, The Heart	
	W 4/22	Systemic and Pulmonary Systems; Arteries and Veins	
12	M 4/27	Circulatory System: The Lymphatic System	
	W 4/29	Respiratory System	
13	M 5/4	Histology of the Respiratory System	
	W 5/6	**Exam IV**: (See Lecture Notes online)	
14	M 5/11	Digestive System: The Gastrointestinal Tract	
	W 5/13	Digestive System: Histology/Accessory Structures of G.I. Tract	
15	M 5/18	Urinary (Renal) System	
	W 5/20	Male and Female Reproductive Systems	
16	M 5/25	**Memorial Day Holiday**	
	W 5/27-6/1	Final Exams (See Lecture Notes online) **Final Lecture Exam**	

Laboratory Schedule* for Human Anatomy (CRN: 23541), Spring 2026

Week	Date	Laboratory Exercise *Tentative	Reading
1	M 2/2	Unit 1: Terms, Cells, Microscopy	Lab Manual
	W 2/4	Unit 1: Tissue Histology: Epithelial and Connective Tissues	
2	M 2/9	Unit 1: Integumentary; Unit 2: Skeletal System Histology	Lab Manual
	W 2/11	Unit 2: Skeletal System and Bone Histology	Lab Manual
3	M 2/16	**President's Day Holiday**	
	W 2/18	**Lab Practical Exam I**: (Unit 1)	
4	M 2/23	Unit 2: Skeletal System and Bone Structures (Bony-Landmarks)	Lab Manual
	W 2/25	Unit 2: Skeletal System and Bone Structures	
5	M 3/2	Unit 2: Skeletal System and Bone Structures	
	W 3/4	Articulations (Joint Structure)	
6	M 3/9	Unit 3A: Human Muscular System	
	W 3/11	**Lab Practical Exam II**: (Unit 2)	
7	M 3/16	Muscular System: Histology: Cat Dissection	
	W 3/18	Unit 3B: Cat Dissection, Models, and Cadavers	Lab Manual
8	M 3/23	Cat Dissection, Models, Cadavers	Lab Manual
	W 3/25	Unit 4A: The Nervous System	
	M/W 3/30 - 4/4	**Spring Break**	
9	M 4/6	Unit 4A: Histology of The Nervous System	Lab Manual
	W 4/8	**Lab Practical Exam III**: (Units 3A, B and 4A)	
10	M 4/13	Unit 4A: Spinal Nerves and Cranial Nerves	Lab Manual
	W 4/15	Unit 4B: Special Senses; The Eyes and Vision	Lab Manual
11	M 4/20	Unit 4B: Special Senses; Ears and Hearing	
	W 4/22	Unit 5A: Cardiovascular System, The Heart	Lab Manual
12	M 4/27	Cardiovascular System: Sheep Heart Dissection	Lab Manual
	W 4/29	**Lab Practical Exam IV**: (Units 4A, B and 5A)	Lab Manual
13	M 5/4	Blood Vessels and the Lymphatic System	
	W 5/6	Unit 5B: Respiratory System	
14	M 5/11	Unit 6A: Digestive System Histology	
	W 5/13	Unit 6A: Digestive System Histology (Cat Dissection)	
15	M 5/18	Unit 6B: Urinary (Renal) System	
	W 5/20	Unit 6B: Male and Female Reproductive System	
16	M 5/25	**Memorial Day Holiday**	
	W 5/27 – 6/1	Final Exams (Units 5A B, 6A, B) **Lab Practical Exam V**: (Units 5B, 6A, B)	