

# Mayville State University

## BIOL 221L - Anatomy and Physiology II Lab

Spring 2025  
1 Credit Hour

### Course and Instructor Information

**Email:** michael.kjelland@mayvillestate.edu

**Office Phone:** 701-788-4733

**Hours of Availability:** Office SB 140, Wednesday 10:50 am – 11:50 am CST, or by appointment

**Instruction Mode:** Online, asynchronous

**Time Zone:** All times indicated throughout this syllabus reflect Central Standard Time (CST)

**How to address your instructor:** Dr. Kjelland

**Zoom link:** The Zoom link will be provided if necessary.

### Course Materials and Technologies

#### Required

Students are required to purchase a lab kit for this course from the [Mayville State University Bookstore](#)

Printer

24/7 internet access

Computer that meets the [Mayville State University technology requirements](#)

Mac/PC users will need a computer with a USB port or a dongle USB adaptor

Microscope (this is part of the lab kit for the course, if you have previously take AP1 with us, you do not need to buy a second microscope), your microscope needs to attach to your computer via USB

Microsoft Office (Mac programs such as Pages will not suffice)

Lab protocols will be provided to students in Blackboard.

Digital camera (a good cell phone camera will work)

#### Recommended

VERY beneficial to have the Visual Anatomy and Physiology, Martini Ober, Nath, 3<sup>rd</sup> Ed. Textbook.

### Course Description

Two laboratory hours per week. Laboratory topics to be covered are designed to complement the materials studied in BIOL 221. Topics include activities related to the nervous, endocrine, digestive, urinary, and reproductive systems. Genetics and development topics will be reviewed. Microscopic specimens will be examined as appropriate. Animal specimens will be dissected, and activities related to the study of human physiology are also included.

**Pre-/Co-requisites:** No Pre-/Co-requisites are required. However, most students will also need BIOL 221 for their programs.

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## Course Objectives

- Learner will be able to identify structures and functions of the nervous system
- Learner will be able to explain and identify the structures associated with the special senses
- Learner will be able to describe the organization and functioning of the endocrine organs, including the functions of major hormones
- Learner will be able to explain the organization and functions of the regions of the digestive system, including the role of nutrients and enzymes
- Learner will be able to describe the organization and functioning of the excretory system, especially the function of the kidney in urine production
- Learner will understand the structures and functions of both male and female reproductive systems, including the processes of spermatogenesis, oogenesis, ovulation, menstruation, childbirth, and lactation.

## Course Expectations

### Instructor/Student Communication

Students are accountable for all academic communications sent to their Mayville State University email address. Students should not use outside email to communicate with the instructor. Instructor is not responsible for emails not received if outside email is used.

Faculty response time can be up to 72 hours during the work week if a specific question is asked (most emails are answered within 24 hours). If no question is explicitly asked, a response may not be deemed necessary. Emails will not be checked on the weekend. An email sent on a Friday afternoon may not get a response until the following work week. Any request for an extension requires a university excused absence and documentation in the INITIAL email. Please do not ask for an extension without including documentation.

### Assignments and Assessments

Labs are distributed via Blackboard. Labs need to be completed and submitted before the due date listed in the schedule below. A printer and camera are required for lab. Lab activities will vary. Some will consist primarily of material intended to introduce you to the structure and function of organs and/or organ systems. There may be “dry” labs, written exercises in which you will complete activities that will be automatically graded. Lab reports that have been provided in Blackboard will require you to fill them out, edit and insert photographs, and complete various questions or complete data tables.

Some labs will require students to provide materials that cannot be shipped either due to federal regulations, cost, or viability of materials. All animal specimen will be provided within the lab kit.

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Any labs that have crossword puzzles (CWPs) REQUIRE you to print the document, fill it out, then photograph the completed assignment and upload it into the dropbox.

## Evaluation and Grading

### Grading Policies

Grades for labs and lab practicals can be anticipated within 2 weeks of the due date. Turning in an assignment early does not mean that the assignment will be graded before the due date. At times, a set of assignments may take longer to grade, especially if the lab is long, requires multiple photos and labels, or is text heavy. These activities may take additional time. Late submissions may be put into the dropbox, however, that does not mean it will earn points. Only items submitted by the due date will earn points.

Being busy, over sleeping, taking an extra shift, moving, or other general issues are not considered university excused absences. Determination of a university excused absence based upon being sick and having gone to a medical professional who can provide documentation, university sporting event in which you are actively participating in, a death in the immediate family (grandparent, parent, sibling, child, aunt/uncle) for which you can provide documentation, military deployment or legal situations (such as a court date).

### Attendance/Participation Policies

There are no attendance or participation points awarded to students. Students will earn points based on the activities discussed previously.

### Grading Scale

The course utilizes the following grading scale:

90-100%	A
80-89%	B
70-79%	C
60-69%	D
<60%	F

### Breakdown of Grades

Practical Exams	100 points	(2 worth 50 points)
Assignments	220 points	(11 worth 20 points)
<b>Total</b>	<b>320 points</b>	

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## Enrollment Verification

### Online Course Statement

The U.S. Department of Education requires instructors of online courses to provide an activity which will validate student enrollment in this course. The only way to verify that a student has been in this course is if he, she, or they perform an action in the LMS, such as completing an assignment or taking a quiz.

Logging into the LMS is **NOT** considered active course participation. Enrollment verification items are found in the "Enrollment Verification" folder. All items must be completed for course content to open. If it is not complete your enrollment in this course will be at risk.

## Proctor Notification

No proctors are required for this course.

## Important Student Information

In the Announcements section of the Blackboard Institution Page, you can view and download the Important Student Information document for the current academic year. It includes information about:

- ✓ Land Acknowledgement Statement
- ✓ Academic Grievance Concerns and Instructor English Proficiency
- ✓ NetTutor - Online Tutoring Program
- ✓ Starfish - Student Success System
- ✓ Students with Documented Disabilities
- ✓ Student Learning Outcomes / Essential Learning Outcomes
- ✓ Academic Honesty
- ✓ Emergency Notification
- ✓ Continuity of Academic Instruction for a Pandemic or Emergency
- ✓ Family Educational Rights and Privacy Act of 1974 (FERPA)
- ✓ Diversity Statement (Title IX)

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## Course Timeline/Schedule

**NOTE:** This is a **tentative** schedule. It may change as needed by the instructors.

Lab Topic	Due Dates
Lab 1 - Enrollment Verifications	1/17/2025
Lab 2 – Neurons/Nervous System/Microscopy	1/24/2025
Lab 3 – Gross Anatomy of the Central Nervous System	1/31/2025
Lab 4 – Brain Dissection	2/14/2025
Lab 5 – Reflex and Sensory will require help from another individual If no help is shown in photos no credit given	2/28/2025
Lab 6 – Eye Dissection and Vision Once Lab 6 is submitted, Lab Practical 1 opens (Practical Due Date 3/14 5pm CST)	3/14/2025
Lab 7 – Endocrine System	3/28/2025
Lab 8 – Digestive System	4/11/2025
Lab 9 – Urinary System/Kidney Dissection	4/18/2025
Lab 10 – Reproductive System/Fetal Pig Dissection	5/2/2025
Lab 11 – Genetics/Genomics DNA Extraction Once Lab 11 is submitted, Lab Practical 2 opens (Practical Due Date 5/9 5pm CST)	5/9/2025

### Lab Practicals

Two open-book exams must be completed during the semester. The first will be associated with materials covered in the labs up to and including tissues, and the final exam will cover the remaining labs. Materials to be considered in writing the exams will include both objective materials learned during the labs, and applications associated with the structures and systems studied. Identification of structures in photographs and line art is included in the exams. **You do NOT need to make a Yuja recording for Lab Exams.**

### *As a student you are expected to:*

- Begin the lab course when the semester begins.
- Order your lab kits from the MSU Bookstore BEFORE the course starts. Check your lab kit for all enclosed items when it arrives.
- Answer questions appropriately: Some lab report answers may be given without full sentence structure where appropriate to the questions asked, but must clearly answer all parts for the question, contain correct spelling and display appropriate grammar and word usage. Answers to other questions, such as essay questions or short answer questions, which ask students to “explain”, “compare” or “describe”, should display appropriate sentence structure and logical development of thought. **Every single answer needs to be put into your own words. Copy and paste is plagiarism and will receive a score of ZERO.**

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- Check your Mayville State email and the ANNOUNCEMENTS forum on the course home page a minimum of once daily to remain current on course information and changes.