

# MAYVILLE STATE UNIVERSITY

## Anatomy and Physiology II Lab, BIOL 221L (online)

1 Credit

Spring 2019

**\*\*\*Before starting this online course, students need to check with their current and future programs to determine if this course will be accepted for credit in their programs\*\*\***

**Instructor Name and Contact Information:** Joseph Mehus, SB 134, joseph.mehus@mayvillestate.edu, 701.788.4802

**Hours of Availability:** MWF 11am-Noon CST

**Instruction Mode:** Online asynchronous

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

### 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 developmental 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.

### Purpose of the Course

Labs will vary. Some will consist primarily of material intended to introduce you to the structure and function of organs and/or organ systems. These will be “dry” labs, written exercises in which you will complete online quiz-like activities that will be computer-graded. Quizzes may also include “essay-type” questions. Dissections or “wet” Labs may require Lab Reports, Lab Quizzes, or both. Where required, Lab Reports must be completed and submitted with required photos to the digital drop box. There may also be long-answer questions or data tables, which you will complete and include in the online report. Some labs will use materials found within the home, and there will be a sheep brain, cow eye, and fetal pig, included in the lab kit you must purchase, which will be dissected. For labs, which would normally involve microscopy, the digital images will be provided, with procedures modified to concentrate on interpretation of the visual information. **Lab quizzes may be part of some labs, and when labs are completed, the quiz must be taken. Both labs and lab quizzes have the same due dates/times. So waiting until the last minute will NOT work for you!!! You will need to finish the lab early so that you can take the lab quiz that may follow.** A scoring guide or rubric may be provided for each wet lab, which will help you to understand what is expected in the lab report, and to do well in the lab. The rubric should be reviewed before completing the lab procedure. It is essential that you follow procedures carefully, submit all required photograph in which all required structures are clearly visible, and answer all parts of all questions.

**Course Objectives** and intent of the course are that successful students will:

- Identify structures and functions of the nervous system
- Be able to explain the structures of the special senses
- Understand the organization and functioning of the endocrine organs, including the functions of major hormones.
- Understand the organization and function of the regions of digestive system, including

the roles of different nutrients.

- Understand the organization and functioning of the excretory system, especially the function of the kidney in producing urine.
- Understand the organization and functioning of both the male and female reproductive system, including the processes of ovulation, menstruation, childbirth, and lactation.

### **Program Student Learning Outcomes (SLOs) Addressed in This Course**

As part of Mayville State University's Essential Studies curriculum, this course seeks to prepare students for twenty-first century challenges by gaining: 1) Knowledge of human cultures; 2) Intellectual and practical skills; 3) Personal and social responsibility; 4) Integrative and applied learning.

### **Course Improvements Based on Most Recent Assessment Findings**

During previous offerings of this course, students have done well. Even though students have met expectations in the course, I will be spending more time explaining diagrams that are pertinent to the education of students. I would prefer to see structure identification and function scores to be higher. In addition, oral communication skills of students were assessed for content knowledge, vocabulary, presentation skills and preparation. Students excelled in oral communication as long as they took the time to use their own words to explain terminology.

### **Required/Recommended Materials**

Lab Protocols will be provided to students. Lab kits need to be purchased from Mayville State University Bookstore. It is VERY beneficial to have the textbook (Visual Anatomy and Physiology, Martini, Ober, Nath 3<sup>rd</sup> ed) when filling out lab materials, worksheets, and quizzes. Online sources should be used to fill out lab assignments. Printer, Webcam, 24/7 internet access, computer that meets the university standards (Mac users may have issues, this is a PC campus), and Microsoft Office (Mac programs such as Pages cannot be opened by instructor, MS Office is required and a free copy can be downloaded through the MSU Technology website <http://www.mayvillestate.edu/msu-online/msu-online/getting-started>).

<http://www.mayvillestatebookstore.com/home.aspx>

### **Learning Experiences**

- Read all chapters prior to completing labs or do appropriate research online, including chapters as noted, research articles, etc.
- Assignments will be given in through Blackboard.
- Quizzes in Blackboard are required to be completed on or before designated due dates.
- It is important for you to check your grades in Blackboard. If you find that the instructor has made a mistake while entering your grade, you have one week to bring it to the attention of the instructor. After a ONE WEEK PERIOD, grades will be locked in Blackboard.
- Please refrain from requesting extensions as they will not be granted. Please not this before starting the course and refrain from leaving negative feedback in you miss a deadline and are not granted an extension. Please do not feel disrespected if your request does not receive a reply, by continuing in the course, you accept this rule. This is your formal notification about requests for extensions. **If requesting an extension, you need to have a university excused absence and include DOCUMENTATION in your initial email.**

### **Instructional Technologies Utilized in this Course**

- Blackboard
- Tegrity
- MS Office Suite (no Mac programs)

## Expectations/Protocols

**Labs:** 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 is required for the labs. Labs will vary. Some will consist primarily of material intended to introduce you to the structure and function of organs and/or organ systems. These will be “dry” labs, written exercises in which you will complete online quiz-like activities that will be computer-graded. Quizzes may also include “essay-type” questions. Dissections or “wet” Labs may require Lab Reports, Lab Quizzes, or both. Where required, Lab Reports must be completed and submitted with required photos to the digital drop box. There may also be long-answer questions or data tables, which you will complete and include in the online report. Some labs will use materials found within the home, and there will be a white rat, pig heart included in the lab kit you must purchase, which will be dissected. For labs, which would normally involve microscopy, the digital images will be provided, with procedures modified to concentrate on interpretation of the visual information. **Lab quizzes may be part of some labs, and when labs are completed, the quiz must be taken. Both labs and lab quizzes have the same due dates/times. So waiting until the last minute will NOT work for you!!!** You will need to finish the lab early so that you can take the lab quiz that may follow. A scoring guide or rubric may be provided for each wet lab, which will help you to understand what is expected in the lab report, and to do well in the lab. The rubric should be reviewed before completing the lab procedure. It is essential that you follow procedures carefully, submit all required photograph in which all required structures are clearly visible, and answer all parts of all questions.

**Quizzes:** Each quiz (one for each first five labs) will be posted and available for you in Blackboard when release by the instructor at their discretion (online: these are available as you finish content). You should fill out the 5 question quiz after you have filled out the lab. Quizzes are worth 10 points each. The questions on each of these quizzes are from the content in the lab specified and Tegrity videos. You may use your books or online resources to fill out these quizzes. They are NOT timed so take your time to look up the answers. Quizzes not completed by the deadline given in the classroom or schedule will not be reopened.

## Instructor/Student Communication

- Students are accountable for all academic communications sent to their Mayville State University e-mail address. Students should not use outside email. Instructor is not responsible for emails not received (by instructor themselves or by students) if outside email is used.
- Faculty response time will be up to 72 hours during the work week if a specific question is asked (most questions responded to in 24 hours). If no questions is explicitly asked, a response may not be deemed necessary. Emails will not be checked on the weekends. An email sent on a Friday afternoon may not be responded to until the following Tuesday (or longer if there is a holiday). Please plan ahead accordingly.

## Method of Evaluation/Grading

**1)** Grades for labs, quizzes, lab practical's can be anticipated within 2 weeks of the due date. Turning an assignment in early does not mean grading will be done early. Sometimes, a set of assignments will take longer to grade, especially if the assignment is heavy in text (some labs may fall into this category) and may take an additional week.

**2)** In regards to late submissions, they are not accepted. Make-up practicals, missed labs/quizzes are ONLY permitted if there is a UNIVERSITY EXCUSED ABSENCE AND THERE IS DOCUMENTATION. Being busy, over sleeping, taking an extra shift, or general issues are NOT university excused absences. Please do not ask for extensions based upon these issues. If a university excused absence is in place with documentation, the student has 1 (one) week to complete the activity. This is one week from the day of the due date, NOT a week from when the student returns or contacts the instructor. After 1 (one) week, no points will be awarded. Determination of a university excused absence is 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 (which documentation is required), death in the immediate family (grand parent, parent, sibling, child, aunt/uncle for which you can provide documentation), military deployment (which documentation can be provided for), or legal (such as a court date that documentation can be provided for). Moving or travel is NOT a university excused absence. In terms of attendance and/or participation points, please see section above.

Grades will be TENTATIVELY based on two exams, lab assignments and lab quizzes. ***There will be no make-ups for lab practical exams, except under extreme circumstances (medical, legal or military). You can only make up one exam during the semester and it must be during the exam week. You must take both lab practicals to pass the course.*** The grading scale is the typical 90% = A, 80%=B, 70%=C, 60%=D, <60%=F. **IT IS IMPORTANT FOR YOU TO CHECK YOUR GRADES ON BLACKBOARD. IF YOU FIND THAT I HAVE MADE A MISTAKE WHILE ENTERING YOUR GRADE YOU WILL HAVE ONE WEEK TO BRING IT TO MY ATTENTION, AFTER THAT GRADES ARE LOCKED IN BLACKBOARD.**

Practical Exams	100 (2 worth 50 points)
Lab Quizzes	50 (5 worth 10 points)
Assignments	175 points (5 worth 10 points, 5 worth 25 points)
Total	325 points

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

### Enrollment Verification

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 or she takes an action in Blackboard, such as completing an assignment or a taking a quiz. Logging into Blackboard is **NOT** considered attendance. Please see the enrollment verification activity and complete it by the date indicated. If it is not complete your enrollment in this course will be at risk and you may be removed from the course. Students will be required to submit introductions to confirm their enrollment in the course. These activities are labeled in the Blackboard Course Shell.

### Proctor Notification

This course does NOT use proctors as the instructor is the proctor.

### Late Arrivals

The grading system for students adding this course after the first day of instruction will not be modified. The student will be graded on the activities that transpired from the beginning of the course. Students will be penalized for missed assignments and the student is still responsible for learning the course material that was covered during their initial absence.

### Important Student Information

In the Blackboard course, you will find a document entitled, "Important Student Information," which includes information about:

- ✓ Academic Grievance Concerns and Instructor English Proficiency
- ✓ Starfish - Student Success System
- ✓ Students with Documented Disabilities

- ✓ Academic Honesty
- ✓ Emergency Notification
- ✓ Continuity of Academic Instruction for a Pandemic or Emergency
- ✓ Family Educational Rights and Privacy Act of 1974 (FERPA)
- ✓ Diversity Statement

### Course Timeline/Schedule

All Lab Reports, Lab Quizzes and Lab Practical's must be completed by the scheduled due dates as listed below. Activities will be turned off as of 5pm CST on those due dates and no credit will be available for those activities after the due dates. If an emergency situation occurs, which affects your participation in this course, contact me immediately. Be prepared to provide proof (documentation). Being busy is not an emergency. Do not send an email saying you have a sick child or you have been sick, these assignments are open from day one and you can finish them before the due date. For the purposes of this course an "emergency situation" is an unexpected, unpreventable and significant occurrence, which realistically prevents you from completing required coursework by its due date. You are expected to be aware of due dates and manage the required coursework within your personal schedule and obligations. For example, not submitting any coursework for 3 weeks and then not being able to submit it during week 4 because of an emergency that week is not acceptable.

**NOTE:** This is a **tentative** schedule. It may change based on instructor's schedule.

Lab Topic	Due Dates
Lab 1 - Neurons/Nervous System	1/18/19
Lab 2 - Brain Dissection	1/29/19
Lab 3 - Olfactory, Gustatory, Hearing, Equilibrium	2/9/19
Lab 4 - Ear, Hearing, and Equilibrium will require help from another individual	2/20/19
Lab 5 - Eye Dissection and Vision Once Lab 5 is submitted, Lab Practical 1 opens (Due Date 3/5/19 5pm CST)	3/3/19
Lab 6 - Endocrine System	3/14/19
Lab 7 - Digestive System/Fetal Pig Dissection	3/25/19
Lab 8 - Urinary System/Kidney Dissection	4/5/19
Lab - 9 Male & Female Reproductive Systems	4/16/19
Lab 10 - DNA Extraction (Home Supplies) Lab Final Due (5/1/19 5pm CST)	4/28/19

### Lab Examinations

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 the eye ball dissection, 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 Tegrity recordings 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. **Contact the MSU Bookstore immediately if all items are not present and intact**
- 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**
- Check your Mayville State email and the ANNOUNCEMENTS forum on the course home page a minimum of three times weekly to remain current on course information and changes.

**Additional Information:** This classroom is a place where you will be treated with mutual respect, and the course instructor welcome individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, ability – and other visible or nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming and inclusive environment for every other member of the class. MSU is committed to providing a safe learning environment, free of harassment and discrimination as articulated in our university policies located on our website at <http://www.mayvillestate.edu/about-msu/consumer-information/title-ix/>. MSU’s policies require me as a faculty member to share information about incidents of gender based discrimination and harassment with MSU’s Title IX coordinator, regardless of whether the incidents are stated to me in person or shared by students as part of their coursework.