Mayville State University

BIOL 221 – Anatomy and Physiology II (Lecture)

Dr. Joseph Mehus

Fall 2021

3 credits

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

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Contact Information: Primary: Joseph Mehus, Ph.D., joseph.mehus@ndus.edu, 701.788.4802

Hours of Availability: 11am-noon; MWF

Instruction Mode: Online Asynchronous

Time Zone: All times indicated throughout the syllabus and course materials reflect Central Standard Time. All deadlines are set at 5pm CST on all due dates, NOT MIDNIGHT.

How to address your instructor: Dr. Mehus; Professor Mehus

Meeting Times and Location: Online/Email

Course Description

Pre-/Co-requisites: Most students will also need BIOL 221L. This is dependent upon student need.

Purpose of the Course

This course has been developed to lead students through the entirety of the nervous system to include both central and peripheral nervous systems. Hormone cascades will be discussed within the endocrine system. Digestive organs, hormones and gastric juice components will be discussed at length in addition to the accessory organs associated with digestion of food products. Time will be spent discussing kidney structure, ureters, and bladder associated with the urinary system leading to both male and female reproductive structures and functions. The course will finish with fetal development and light discussion of genetics. There are various versions of the textbook being used by students. It is the responsibility of the student to determine which chapter content is being drawn from (example the chapter on the digestive system will depend on which version of the text is being used.)

Course Objectives

• Understand the organization and functioning of the nervous system
• Be able to explain the processes 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 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 (required)

The Academic Program Student Learning Outcomes document can be found in your course shell. It contains all learning outcomes pertaining to Essential Studies courses and all majors and minors. The document has an index, so you can quickly find the degree you are pursuing.

As part of Mayville State's effort to demonstrate continuous improvement in achieving student learning outcomes, this course:

☒ introduces SLO # ☐ reinforces SLO # ☐ masters SLO # For Major / Minor: Biology	☒ introduces SLO # ☐ reinforces SLO # ☐ masters SLO # For Major / Minor: Biology	☒ introduces SLO # ☐ reinforces SLO # ☐ masters SLO # For Major / Minor: Biology	☒ introduces SLO # ☐ reinforces SLO # ☐ masters SLO # For Major / Minor: Biology

As part of Mayville State's effort to demonstrate continuous improvement in achieving Essential Studies Learning Outcomes, this course will assess

ELO # ☒1 ☐2 ☐3 ☐4

as part of the Essential Studies and Capstone Courses. 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 exceled in oral communication if they took the time to use their own words to explain terminology.

This course will be assessed in the future (based on the 2019-2025 assessment curriculum map) and the findings will be reported in this syllabus.

Required/Recommended Materials

Visual Anatomy and Physiology 3rd ed. Martini & Ober Pearson Publishing, 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). Students may be using alternative versions of the text, and this is ok, but just keep in mind that if page numbers are referenced, they may be different. The content is the same in all versions of the text, students just need to locate the material in the text pertinent to the chapter/context discussed. The textbook for this course as well as lab kits for this course must be purchased from the MSU Bookstore online (http://www.mayvillestatebookstore.com/home), and in hand by the first day of the course. **Not having course materials is NOT an acceptable reason for not completing the assignments and no credit will be awarded.** Late enrolling students may miss points that WILL NOT be made up and could negatively affect their grade. If you enroll after the first date of the course you accept these terms.

Instructional Strategies

We will use the following methods to assist you in your learning anatomy and physiology. **(INTASC 1, 2, 3, 4, 8)**

- Direct instruction
- Indirect instruction
- Interactive instruction
- Experimental learning
- Guided and independent study
- Cooperative learning activities
- Class Discussions
- Chapter Exams
- Application
- Inquiry approach
- Simulations
- Questioning skills
- Case Studies
- Instructional strategies

Learning Experiences

- All work in this course is to be completed by the individual student. No group/partnered work is accepted. Study guides, activity assignments, quizzes, and exams are all independent works.
- Read all chapters prior to watching lecture videos, including chapters as noted, research articles, etc.
- Activity assignments will be given in through Blackboard.
- Chapter reviews, activities, quizzes and exams in Blackboard are required to be completed on or before designated due dates.
- There will be 5 exams during this course. Exam 1 will cover chapters 11-12, exam 2 will cover chapters 13-14, exam 3 will cover chapters 15-16, exam 4 will cover chapters 22-24 and exam 5 will cover chapters 26-27. Exam 5 may also contain information from previous chapters, thus being semi-cumulative. Missed exams will not be made up unless a university excused absence has been granted and documentation provided in INITIAL email request for extension. This needs to be communicated with the instructor BEFORE missing the exam.
- PowerPoint lectures have been composed from the textbook that you can use to help you through the reading. These lectures will allow you to focus on main points in the chapters.
- There will be video lectures as well that are recordings of me giving the lectures during the course. These videos will help students who want to cover the material but are audio/visual learners. You are required to utilize the lectures and the video lectures. They will help when you are filling out the bonus study guides and questions from the lectures and videos will appear on exams. Lecture videos are found in Yuja.

- Activity assignments will be found within each unit. Each chapter has 2 activities, and those activities vary in the number of points within each. Activities must be completed when they are opened. Activities must be completed AND submitted by their due dates. Activities may take some time to complete, so do not try complete the activities, quizzes (exams), and study guides all in the same day.
- Chapter reviews are required assignments. Chapter reviews must be completed by their deadlines.
- Study guides are due at the same date/time as the activities and quizzes for each chapter. NO STUDY GUIDES WILL BE ACCEPTED AFTER THE DUE DATE. These are bonus items worth minimal points (2points each, based off successful completion). If any items are blank or filled in with answers that are not correct, no points will be awarded. **There is no partial credit**. By continuing the course, you recognize and accept this policy.
- We will utilize the Blackboard website (http://blackboard.ndus.edu/) to distribute Powerpoint slides, study guides, activity assignments, and other materials. It will also be used to administer quizzes in addition to exams. All assignments will be submitted through Blackboard. Emailed study guides/activities will not be accepted unless requested by the instructor.
- 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 unless documentation is sent in the first email requesting an extension. Please note 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.

Instructional Technologies Utilized in this Course

- Blackboard Ally
- Blackboard Collaborate Ultra
- Blackboard Learn
- Hoonuit
- Skype for Business
- Zoom
- MS Office Suite
- Yuja

Expectations/Protocols

Activity Assignments: Activity assignments are required assignments that are in place to help students retain and absorb content information. Each student needs to complete their own activities by themselves, no group/partner work is accepted. Each activity will vary in terms of what needs to be done to complete the assignment. Some activities focus on vocabulary, others may focus on concept maps or even structure/function identification. Each assignment will have varying numbers of points based upon depth of the activity. For these activities, students may use their book or (when addressed) online resources. Students must complete all these activities before the due dates. After the due dates, the activities will disappear from Blackboard and access will be terminated. NO late work is accepted.

Chapter Reviews: Chapter reviews are required assignments in this course. You may use your book, lecture PowerPoints, and the textbook to complete. The question types vary for each review. These are due at their predetermined due dates and will NOT be accepted late unless a student provides a UNIVERSITY EXCUSED

ABSENCE AND DOCUMENTATION BEFORE THE DUE DATE. These will contain helpful information to prepare for exams, but are NOT the only thing that should be used to prepare for exams. The bonus study guides provide additional test information, but anything covered in the lecture videos and textbook could appear on exams. These are only tools to help you prepare. Answers for chapter reviews will only be provided AFTER the due date to eliminate potential academic dishonesty.

Bonus Study Guides: Study guides should be completed after you have read the chapter. What I'd like from each of you is to fill out the study guide and submit them for credit. Each study guide will be worth up to 2 bonus points. Explain to me what each section means. When the study guide says "Understand…" or "Explain…" you are expected to describe that concept in full, complete sentences. Unless specifically asked to list something, you should not list anything. I am not looking for a 10 page paper, only the basics from the chapter/lecture video for each idea on the study guide. Tell me what you have read from the textbook (of course in your own words). I have read the textbook, so I want you to let me know you comprehend the material. Each student is REQUIRED to produce their own study guides (making sure to use the template provided, any materials used from a previous students or current student will earn zero points). Do not delete or manipulate the format of the study guide except to enter your answers and change the font color of your responses. No study guides should be the exact same from any other student in the course as this would be plagiarism. Plagiarism will result in a zero score. Any content found to be copied from the internet, textbook, or another student is also plagiarism. EVERYTHING IN YOUR OWN WORDS. You will need to put that information into examples that make sense TO YOU. This will make your study guides unique to you and help YOU study for the exams. You paid for the information in the text, you did not pay to take those words as your own. Partial credit for incomplete study guides may be given at the discretion of the instructor. Study guides contain a large amount of test information/ideas/concepts. It is at the student's discretion if they want to take the time to complete them. Study guides need to be submitted by the deadline. Dropboxes for study guides will be removed after the due date. NO late work is accepted. Even if students do not earn the bonus points, these study guides are a HUGE benefit when completed. Because they are bonus points, not completing a study guide does not negatively affect your overall grade, doing them can only improve your grade.

Quizzes: Each quiz (one for each chapter) will be posted and available for you in Blackboard when released 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 study guide for each chapter. Quizzes are worth 5 points each. The questions on each of these quizzes are from the content in the chapter specified and lecture videos. You may use your books 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.

Exams: Exams will be open to each of you as you complete and submit both the activity assignments for each chapter and each of the quizzes from the unit. You should NOT take the exam before submitting each of these components for each chapter. So you will need to submit study guides and quizzes for chapters 11 & 12 before the exam for unit one will open for you. You can take exams early if you have submitted the previous items. Exams will be administered online. You HAVE to use the Yuja tool during the exam which will require you to use a webcam. You will have to show a photo ID to the camera that shows your image as well as your name at the beginning of the exam as proof of identity. Please see the Yuja file in Blackboard for exam instructions.

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 can be up to 72 hours during the work week if a specific question is asked (most emails are answered within 24 hours during the week). 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 accordingly. Any request for an extension REQUIRES a university excused absence and documentation in the initial email. Do not email asking for an extension without including your documentation.

Method of Evaluation/Grading

1) Grades for activity assignments, study guides, quizzes, exams and in-class assignments (on campus only) can be anticipated within 2 weeks of the due date (unless assignments/study guides contain most of the text). 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 (study guides may fall into this category) and may take an additional week.

2) In regard to late submissions, they are not accepted. Make-up exams, missed assignments/study guides/quizzes are ONLY permitted if there is a UNIVERSITY EXCUSED ABSENCE AND THERE IS DOCUMENTATION. Being busy, over sleeping, taking an extra shift at work, moving, travel, 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 to 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), 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.

The final grade for the semester will be tentatively (which means this can change) composed of the following:

Exams (5)	500 points (may not be evenly distributed)
Chapter Reviews (10)	200 points
Activities/Assignments (20)	198 points (approximately)
Quizzes (10)	50 points
Total	948 points (approximately)

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

Lecture and lab for BIOL 221 are NOT combined. They are two unique courses. These limits are hereby preset and by continuing in the course, you recognize these limits and will abide by these limits. Please refrain from sending emails about submitting late work or "redoing" or "reopening" assignments/quizzes/study guides/exams in order to get extra points at the end of the semester. Those requests will be denied and may not warrant a response by the instructor.

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 the LMS, such as completing an assignment or a taking a quiz. Logging into the LMS is **NOT** considered attendance. Please see the enrollment verification activities and complete them by the date indicated. If it is not complete your enrollment in this course will be at risk.

Proctor Notification

This course does NOT use proctors as the instructor is the proctor. Students must record their computer screen, audio and themselves using the Yuja program found in Blackboard. A working webcam is required, and it will record the student, audio, visual, as well as the desktop of the computer. If an exam is taken without using Yuja there will be an automatic zero given and no make-up will be granted.

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

Navigate to Blackboard > MaSU tab > Student Resources tab to 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

TIMES FOR ALL DUE DATES ARE 5PM CST ON THE LAST DAY SPECIFIED FOR A TOPIC/UNIT. FOR INSTANCE, CHAPTER 11 STUDY GUIDE, ACTIVITY ASSIGNMENTS AND QUIZ ARE DUE AT 5PM CST ON September 12th. Exams are due by 5pm CST on dates listed below. Exams will be closed 2 days AFTER the due date for the materials covered on the exam or as specified in the schedule. For example, Exam 1 is due on or before September 24th , while chapter 12 materials are due September 22nd. Do NOT wait until the last minute to access/submit your materials. If you wait until the last minute and run into submission issues, you will be given credit for what is or is not submitted, even if there are technology issues. It is best to try finish the assignment/quiz/exam at least 1 day before the due dates to ensure you do not have any issues. LATE WORK WILL NOT BE ACCEPTED. Because of the 2 week turnaround time, study guide assignments may not be graded before the exam due date, by continuing this course, you acknowledge and accept these conditions. Students are permitted to work ahead, but cannot fall behind.

DUE DATE	****Tentative Course Schedule****
August 31st:	**All Enrollment verification items, pre-content items**
September 12th :	**Nervous Tissue (Chapter 11)**
	Activity 1
	Activity 2
	Nervous Tissue Review
	Study Guide for Nervous Tissue
	Quiz for Nervous Tissue
September 22nd:	**Spinal Cord, Spinal Nerves, and Spinal Reflexes (Chapter 12)**
	Activity 3
	Activity 4
	Chapter Review
	Study Guide for Chapter 12
	Quiz for Chapter 12
	Exam 1: Nervous Tissue and Spinal Cord, Spinal Nerves, and Spinal Reflexes (Chapters 11 & 12)
	Open until September 24th 5pm CST

October 2nd: **The Brain and Cranial Nerves, & Sensory and Motor Pathways (Chapter 13)**

Activity 5

Activity 6

The Brain and Cranial Nerves, & Sensory and Motor Pathways Review

Study Guide for the Brain and Cranial Nerves, & Sensory and Motor Pathways

Quiz for the Brain and Cranial Nerves, & Sensory and Motor Pathways

October 12th: **The Autonomic Nervous System (Chapter 14)**

Activity 7

Activity 8

The Autonomic Nervous System Review

Study Guide for the Autonomic Nervous System

Quiz for the Autonomic Nervous System

Exam 2: The Brain and Cranial Nerves, & Sensory and Motor Pathways and The Autonomic Nervous System (Chapters 13 & 14)

Open until October 14th 5pm CST

October 22nd: **The Special Senses (Chapter 15)**

Activity 9

Activity 10

The Special Senses Review

Study Guide for the Special Senses

Quiz for the Special Senses

November 1st: **The Endocrine System (Chapter 16)**

Activity 11

Activity 12

The Endocrine System Review

Study Guide for the Endocrine System

Quiz for the Endocrine System

Exam 3: The Special Senses and The Endocrine System (Chapters 15 & 16)

Open until November 3rd 5pm CST

November 11th: **The Digestive System (Chapter 22)**

Activity 13

Activity 14

The Digestive System Review

Study Guide for the Digestive System

Quiz for the Digestive System

November 21st: **The Urinary System (Chapter 24)**

Activity 15

Activity 16

The Urinary System Review

Study Guide for the Urinary System

Quiz for the Urinary System

Exam 4: The Digestive System and Urinary System (Chapters 22 & 24)

Open until November 23rd 5pm

December 1st: **The Reproductive System (Chapter 26)**

Activity 17

Activity 18

The Reproductive System Review

Study Guide for the Reproductive System

Quiz for the Reproductive System

December 11th: **Development and Inheritance (Chapter 27)*****

Activity 19

Activity 20

Development and Inheritance Review

Study guide for Development and Inheritance ***

Quiz for Development and Inheritance ***

*****Semi Cumulative Exam 5: The Reproductive System and Development and Inheritance (Chapters 26 & 27 differs depending upon which text is being used, students need to check content and version of text used) Open until December 13th 5pm. This exam may contain information (not questions from previous exams) from previous chapters.**

The best way to work your way through this course is to follow this setup/line up for each unit:

1) **Read the chapter**
2) **Watch the lecture video/fill out study guide and submit for bonus points before due date**
3) **Complete Activities and Chapter Review using your required textbook**
4) **Make sure to take each chapter quiz and use your book**
5) **Do the above steps for each chapter in the unit.**
6) **Before the exam reread and rewatch lecture videos especially for difficult topics/concepts**
7) **Take the exam (with Yuja recording you) in a quiet, distraction free space.**

Additional Information

This classroom is a place where you will be treated with mutual respect, and the course instructors 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.

Starfish Statement:

This class will participate in Starfish Early Alert and Connect, which promotes student success through coordination and communication among students, instructors, advisors, and campus support service departments. If I observe that you are experiencing difficulties in the course (attendance concerns, low test scores or participation, in danger of failing, etc.), I may send an email to your mayvillestate.edu email account through the Starfish system. My message will tell you about my concerns and the next steps to take to resolve the issue. Your advisor, the Director of Student Success, and/or I will work with you to create success strategies to address any difficulties you are having. In addition, if I observe that you are doing well in my course, you may also receive "kudos" from me acknowledging your efforts.

Starfish may involve taking advantage of various campus support services, such as academic tutoring or advising. If I recommend that you use campus support services, I, your advisor, or the Director of Student Success will redirect you to that support office so they will be better prepared to assist you. Starfish provides essential notices by email, so please check your mayvillestate.edu account frequently and respond quickly if you receive an email from Starfish.

Please see the Starfish webpage for additional details: https://mayvillestate.edu/academics/starfish/.