

Biology 220: Anatomy and Physiology I (Online)

Spring 2017

Details: Online courses will be structured and you will have access to “units” of material as they open. You will NOT be able to finish all of this material in one week. 3 Credits

Instructor: Dr. Joseph Mehus
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Email: joseph.mehus@mayvillestate.edu
Hours of Availability: 10-11am CST MWF or arranged via appointment, if you foresee an upcoming emergency please plan ahead of time. **Email is the preferred means of contact.**
Instruction Mode: Online asynchronous



Greetings Everyone!!! Please take your time while working through the material in this course, but remember that this is a semi-structured course. Before the exams open, you will **need** to have read the chapters, reviewed the lectures, done the study guides and complete the online quizzes. If you have not completed the necessary tasks, the exam will NOT open for you until you have completed the necessary tasks. **Failure to do this will result in missing a test.** Tests will not be re-opened because you were “too busy” to take an exam or finish the necessary materials. It is possible to take a test early if you have finished all prerequisite materials and the test has been uploaded.

This class will test your ability to be responsible. Instructor will not send individual reminders to students to take exams, complete study guides, take quizzes, or review lectures. If an emergency occurs and you miss a test (emergencies count as accidents requiring hospitalization, death of IMMEDIATE (grandparent, parent, spouse, sibling, child) family member, sickness that requires hospitalization, military deployment, legal (court appointments)), it is possible to make up ONE exam. Documentation for all excused absences is REQUIRED. Instructor reserves the right to change the format of the make-up test. **You are 100% responsible for fitting in the course material and meeting deadlines all while maintaining your personal obligations.** Please plan this course accordingly for your successful completion. Failure to notify instructor of missing assignments (quizzes, study guides, exams) may result in missed work in the future. It is the responsibility of the student to notify the instructor if an activity was missed, not the responsibility of the instructor to watch submissions for all students.

Instructor/Student Communication

- Students are accountable for all academic communications sent to their Mayville State University e-mail address. Instructor is not responsible for lost/missing emails because a non-MSU email was used. **ONLY MSU EMAIL WILL BE USED IN THIS COURSE.**
- Faculty response time will be between 24-72 hours based on whether contact was made during the work week or on weekends.
- **Students are REQUIRED to have internet access through the duration of the course and “not having internet access” cannot be used as an excuse for late material.**

Course Description:

This course acquaints students with the structure, function, and disease processes of cellular physiology, homeostasis, integumentary, lymphatic system, immunity, heart, blood, joints, skeletal and muscular systems in the human body. This course also investigates the impact of environmental influences on the human body as well as the effects of the environment and genetics on disease processes. This course assists students in developing a basic understanding of the normal structure and function of the body.

Purpose of the Course:

This course will provide content in the areas related to maintenance of homeostasis within the human body. We will start by covering basic biological concepts such as cell structures and functions and reviewing terminology. The second and third chapters will cover cell organelles and cell chemistry. Chapter four material will be based on histology and study of tissues and the identification of those tissues. Chapter five will discuss the epidermis and accessory organs in addition to their functions. We will also cover bone development, maintenance, and articulations. Muscles will be discussed in terms of physical structure and mode of operation. Production and function of blood cells will be discussed in correlation to immunity. The course will finish by discussing the cardiovascular system to include vessels and path of blood through the body including the pulmonary circuit.

Study Guides:

Study guides will be provided for each chapter. These study guides will be submitted **ONLY** in Microsoft Word format. Study guides will be delivered to students via Moodle. Students may use the textbook or any other resource available to determine the correct answers or to fill out/explain concepts on the study guides. **Every single question/idea answered on a study guide needs to be put into your own words. Copy and paste is plagiarism. Writing word for word from ANY source is plagiarism unless cited properly. Plagiarized materials will get a score of zero, no ifs, ands, or buts. Study guides will be checked for plagiarism.** Study guides for each chapter are to be filled out and submitted into the Moodle “Drop Boxes.” You are **REQUIRED** to fill out study guides before taking chapter quizzes. Once you have submitted the study guide for a chapter, a quiz will open. Take the quizzes and, when you are ready, the exam should be

open for you to take. Remember, you need to proceed through the material in the following order for each unit of this course:

PPTs/Lecture/Video Lecture
Study Guide
Quiz
Exam

Course Objectives and intent of the course are that successful students will be able to:

- Explain the organization of the human body and anatomical terminology
- Explain the chemical basis of life, cell structure and organization
- Explain the characteristics of the four tissue types.
- Explain the organization and function of the skeletal system.
- Be able to identify the bones of the body (from lab).
- Explain muscles, their organization, and how they function.
- Explain the organization and function of the circulatory system, including tracing the path of blood through the heart.
- Explain the organization and function of the lymphatic system and its role in the immune system.
- Explain the inner workings of the immune system and the function of the different cell types.
- Explain the organization and function of the respiratory system in relation to the circulatory system.

Program Student Learning Outcomes Addressed in This Course

The entire Academic Program Student Learning Outcomes (SLO) document can be found in your Moodle course shell. The document has an index so you can quickly find the degree you are pursuing. **These learning objectives are in support of the institutional student learning objectives, especially SLO#4, which have been established for a biology majors and essential studies.**

- SLO #1: Students will demonstrate knowledge of human cultures and the physical and natural world through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts. This is focused by engagement with big questions, both contemporary and enduring.
- SLO #2: Students will demonstrate intellectual and practical skills, practiced extensively across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance.
- SLO #3: Students will demonstrate personal and social responsibility, anchored through active involvement with diverse communities and real-world challenges.
- **SLO #4: Students will demonstrate Integrative and Applied Learning, including synthesis and advanced accomplishment across general and specialized studies. This is demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems.**

Required Texts:

Visual Anatomy and Physiology 2nd ed. Martini & Ober, Pearson Publishing

Moodle Class Material:

We will utilize the Moodle website (<http://lms.ndus.edu/course/view.php?id=6191>) to distribute Powerpoint slides, study guides, and other materials. It will also be used to administer quizzes in addition to exams. All assignments will be submitted through moodle.

Grading:

Grades will be based on exams, quizzes, pop quizzes, and possible critical thinking questions. Quizzes/study guides/supplementary materials/lecture power points/video lectures will be offered through Moodle. Chapters covered on each exam will each have their own quiz. They need to be completed before the exam will open to you. Class activities may include class discussions (in Moodle), where participation will be required. Some activities may be announced in advance and supporting material will be made available. Exams can only be made up in extreme circumstances, and each student is only allowed to make up one exam during the semester. In the event that a makeup is needed, the student must take the exam within one week. Make up exams may be offered in a different format than the original exam, including but not limited to essay or short answer. Late assignments of any kind will not be accepted. **IT IS IMPORTANT FOR YOU TO CHECK YOUR GRADES ON MOODLE. 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 MOODLE.**

Learning Experiences

Describes the actions students will be taking to interact with the content. For example:

- Read all assignments prior to class, including chapters as noted, research articles, etc.

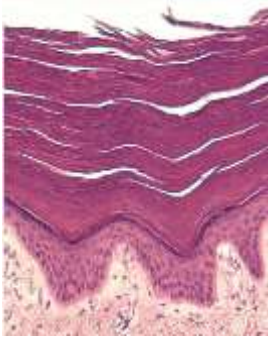
Assignments will be given on moodle. Submit all assignments during the lab period and grades will be given at that time.

Enrollment Verification/Proctor Notification

The enrollment verification for this course consists of two steps. The first step is completion of a syllabus quiz (use the syllabus to determine responses). Students will also be required to submit introductions and Tegrity video statements to confirm their enrollment in the course. This course does NOT use proctors as the instructor is the proctor. Students will record their computer screen, audio and themselves using the Tegrity program found in Moodle. Both of these requirements are used to determine if a student is active in the course. Failure to complete one or both of these will result in an administrative withdrawal from the course and student will be unenrolled and a refund will be processed according to the number of days the student was in the course before reporting takes place.

Grading

The final grade for the semester will be composed of the following:



Exams (5)	500 points
Quizzes (10)	100 points
Study Guides (10)	200 points
Total	800 points

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

Expectations and Protocols:

This is not a course where you can expect to succeed without reading from the textbook. 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/audio lectures as well that are recordings of me giving the lectures during the courses. These videos will help students who want to cover the material but are audio/visual learners. You are expected to utilize either the lectures or the video lectures. They will help when you are filling out the required study guides. Study guides must be completed and submitted to the appropriate Moodle “Drop boxes” before the corresponding exams will open. Likewise, all quizzes in a given section must be taken before the exam will open.

Exams:

There will be 5 exams during this course. Exam 1 will cover chapters 1-2, exam 2 will cover chapters 3-4, exam 3 will cover chapters 5-6, and exam 4 will cover chapters 8-9 and exam 5 will cover chapters 17, 18, & 20. Exam 5 may also contain information from previous chapters, thus being semi-cumulative. Proctors for this course will NOT be used. Instead, we will be using a proctoring tool in Moodle called Tegrity (also the tool used to record lectures). Please see the Tegrity file for instructions for using Tegrity. You will need a valid photo ID prior to taking exams. You are **REQUIRED** to have a webcam for recording yourself while taking exams.

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.

Classroom Environment:

I believe that an open and inviting classroom environment is the best way to promote learning. For that reason I encourage questions and class discussions on Moodle, but I expect everyone to respect one another and each other's opinions. ***Vulgar language/images on message boards in Moodle WILL NOT be tolerated.***

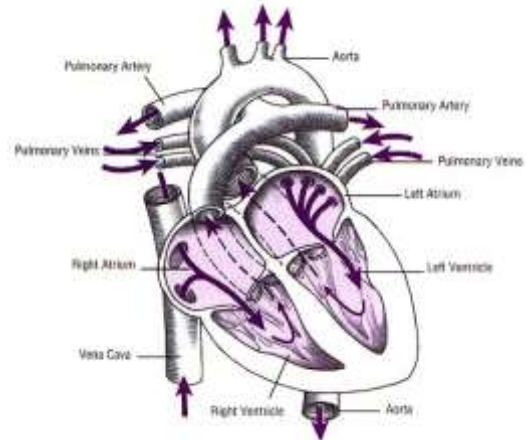
INTASC:

	INTASC PRINCIPLES
1	The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he/she teaches and can create learning experiences that make these aspects of subject matter meaningful for the student.
2	The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social, and personal development.
3	The teacher understands how students differ in their approaches to learning and creates instructional opportunities that are adapted to the diverse learner.
4	The teacher understands and uses a variety of instructional strategies to encourage students' development of critical thinking problem solving, and performance skills.
5	The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.
6	The teacher uses knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.
7	The teacher plans instruction based upon knowledge of subject matter, students, the community, and curriculum goals.
8	The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.
9	The teacher is a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.
10	The teacher fosters relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

Learning Experiences:

Strategies We will use the following methods to assist you in your learning anatomy and physiology. (INTASC 1, 2, 3, 4, 7, 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



Important Student Information

“Important Student Information” can be found in your Moodle course shell.

- ✓ English Proficiency and Other Academic Concerns
- ✓ Students with Disabilities
- ✓ Academic Honesty
- ✓ Emergency Notification
- ✓ Continuity of Academic Instruction for a Pandemic or Emergency
- ✓ Family Educational Rights and Privacy Act of 1974 (FERPA)
- ✓ Starfish

This is a tentative schedule and may change. Students are responsible for checking announcements/emails daily. **TIMES FOR ALL DUE DATES ARE 5PM ON THE LAST DAY SPECIFIED FOR A TOPIC/UNIT. FOR INSTANCE, CHAPTER 1 STUDY GUIDE AND QUIZ ARE DUE AT 5PM CST ON January 22nd.** Exams are due by 5pm CST on dates listed below. Exams will be closed 2 days AFTER the due date for the materials covered in the exam unless otherwise specified in announcements or in the schedule below. For example, Exam 1 is due on or before February 3rd, while chapter 2 content is due February 1st. 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 at least 1 day before the due dates to ensure you do not have any issues. **LATE WORK WILL NOT BE ACCEPTED.** Please refrain from asking for extensions.

DUE DATE **Tentative Course Schedule**

January 15th Syllabus Quiz **REQUIRED** for Enrollment Verification (failure to do this may result in removal from course, required to access course content)

January 22nd: Chapter 1
Study Guide for Chapter 1
Quiz for Chapter 1

February 1st: Chapter 2
Study Guide for Chapter 2
Quiz for Chapter 2

Exam 1 (Chapters 1 & 2) Open until February 3rd 2017, 5pm CST

February 12th: Chapter 3
Study Guide for Chapter 3
Quiz for Chapter 3

February 22nd: Chapter 4
Study Guide for Chapter 4
Quiz for Chapter 4

Exam 2 (Chapters 3 & 4) Open until February 24th 2017, 5pm CST

March 5th: Chapter 5
Study Guide for Chapter 5
Quiz for Chapter 5

March 15th: Chapter 6
Study Guide for Chapter 6
Quiz for Chapter 6

Exam 3 (Ch 5 & 6) Open until March 17th 2017, 5pm CST

March 26th: Chapter 8

April 5th: Study Guide for Chapter 8
Quiz for Chapter 8
Chapter 9
Study Guide for Chapter 9
Quiz for Chapter 9

Exam 4 (Chapters 8 & 9) Open until April 7th 2017, 5pm CST

April 16th: Chapter 17 & 18
Study Guide for Chapter 17 & 18
Quiz for Chapter 17 & 18

April 26th: Chapter 20
Study guide for Chapter 20
Quiz for Chapter 20

*****Semi Cumulative Exam 5 (Chapters 17, 18 & 20) Open until
May 3rd 2017, 5pm CST. This exam may contain
information/concepts from previous chapters.**

Late Arrivals

The grading system for students adding this course after the first day of instruction will not be modified. The student grade will include activities that transpired while the student was not enrolled. 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.