

Human Anatomy and Physiology Lab II
Syllabus
221L (1 cr) Online Spring 2011

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I. Course Description and Objectives:

This is a general overview of the course Biology 221L ("lab") and the activities associated with the course. A detailed listing of topics and activities follows.

A. Your Learning Objectives: To successfully complete this lab course, you must be able to

- identify the organs found primarily but not only within the abdominopelvic cavity, the systems to which they belong, and their functions.
- explain the overall homeostatic functions of the organs and their systems within our bodies.
- apply your knowledge of general chemical procedures and reactions to the specific activities carried out by the organs and organ systems studied
- compare the similarities and differences of the animal specimens dissected with those found within the human body.

Your learning in these and other areas will be assessed in the submitted lab reports, quizzes, and exams.

B. Communication and completion:

A detailed list of assignments with the recommended completion target dates and required due dates is available on the Help Sites and Procedures page site accessed through the [course home page](#) on the course Moodle site. It is recommended that you complete the lab procedures in sequence. **One attempt of all required assignments listed before the midterm or final exam must be completed prior to taking that exam.**

You are welcome to call us any time if there is a situation requiring an immediate solution. If it is possible, please call us morning or late afternoon. Check our location on the course home page before trying to call, since we will be available at different locations at different times. We do not have or use voicemail since we are available extended hours. If you cannot reach us by phone because of hour or our availability, please email us, including a phone number, and we'll call back as soon as we can.

It is important that we communicate with each other about the course, and that you let us know about life situations which have an impact on your participation. It is recommended that you use the email account provided to you as an online Mayville State University student, rather than changing that communication tool in your personal profile in the Moodle system. Mayville State University does not condone use of another email address or the forwarding of email to a personal email account, as this practice may compromise the security of your identity and personal information. If you find that you receive frequent emails which do not pertain to you, there are steps shown in the [MASU DSO 100 - Distance Student Orientation Course Outline](#) page which can help to eliminate some of the incoming messages and manage those that you do in fact want to receive.

C. Integrated Laboratory Activities.

A series of lab activities have been designed which will allow you to experience some of the activities available to on-campus students. Some of the materials needed for dissections or other activities will be sent from

the bookstore (lab kit). Other materials will be things commonly found in your kitchen. We'll provide specific instructions in their use in the content area of MOODLE, so there'll be no need to purchase a lab manual. For a few lab activities, we will send photomicrographs taken in our lab for you to interpret. All "wet" labs where a dissection or other lab procedure is completed by you require the submission of digital photos taken during the lab procedure. The photos will include "portraits" of you with your lab specimen at the beginning of the lab, and at points during the lab process as directed in the lab procedure. These portraits are to be full face photos of you, of such clarity that you and the specimen with the structure requested are clearly identifiable. No credit for any part of a "wet" lab will be given without the submission of the required photos. Depending upon the specific lab, there will be either written lab reports or lab quizzes to be completed, and some labs contain both activities. Lab reports and photos for the activities should be completed and returned to us through the submission boxes (i.e. Lab 20 Kidney Dissection Rpt and Photo Box) for evaluation and grading. Lab quizzes are completed online using the quizzing tools in Moodle and must be completed individually. See below for information about completing labs with a partner.

The preparatory materials and activities should give you a fair understanding of what would be a normally expected result in a lab activity. Look at the lab directions and your recorded results. You will likely be asked what happened and why. You are expected to explain what happened, including what process occurred, what initiated it, where it happened, what mechanisms were involved and what its end result was.

It is important to state what your actual results are. This will tell us a great deal, including whether our instructions are clear. If you do not think that your results are what they should be, say that in the report. Explain what you think should have happened and why. Attempt to problem solve and explain what may have happened to cause those results. It is possible to get the wrong result and full credit if you provide this information.

D. Lab Partners:

"Wet" lab (dissection) activities may be completed with a partner and a lab kit may be shared. If you plan to do this, you **MUST** email your name, your lab partner's name, the date that you order your lab kit from the bookstore and the name that it is ordered in, to john.lankow@mayvillestate.edu or nancy.lankow@mayvillestate.edu. The dissection tasks must be shared. If a Lab Report is required, the reports must be individually written and submitted; the objective data would be the same while the questions would be individually answered, showing your individual understanding and interpretation of the data. You will certainly want to discuss results and their interpretation, but the write-up is part of the learning process for each of you. You may wish to include a brief discussion of any differences of opinion and the reasoning involved. A photo must be taken of both students together holding the specimen at the beginning of the lab, prior to any dissection, and together in the picture of requesting the student's portrait, indicating with a probe the location of the structure as required by the lab procedure. All other required pictures for the lab must be taken and submitted for each person according to the directions for the lab.

II. Instructional Strategies : The following instructional strategies will be employed to help you learn the material:

- Indirect instruction
- Direct instruction
- Interactive instruction
- Experimental learning
- Guided and independent study
- Practice Exams
- Inquiry approach
- Simulations
- Questioning skills
- Downloaded animations
- Crossword puzzles
- Application

III. Materials Required

- **Text :** Hole's Human Anatomy and Physiology 12th Ed.; Shier, Butler, & Lewis, McGraw-Hill Publishing
The text is not required for the lab course alone, but having a text available is highly recommended!

- We will utilize Moodle learning management system at <http://lms.ndus.edu/course/view.php?id=4487> to distribute lab procedures and other printed materials. It will also be used to administer exams and the lab quizzes. **There is no lab book required.** A lab fee of \$15.00 has been assessed to partially defray the costs of some of the laboratory materials which are used and provided during the course. Other lab materials are purchased as a **lab kit** through our bookstore. **You should order the lab kit as soon as you register for the course.**
- **Lab Materials: Specimens and other materials needed for lab activities must be purchased from the MSU Book Store in the lab kit** and will be shipped to you at the beginning of the semester along with the text book if you've purchased it from our bookstore. If you have the book from some other source, **you will still need to contact the bookstore for the required lab materials.** Lab procedures, which you will download from the Moodle website, have primarily been written using Microsoft Word.
 - **Note:** If you have Word on your computer, you should be able to work on the documents with no difficulty. If you use another word-processing program which does not have the translator for Word documents, the instructor will attempt to provide you with the documents in a form which you can use. As a student, you are eligible to purchase the Microsoft Office Suite (Educational Version) for approximately \$150. It's REALLY worth the price!) We will utilize Moodle to electronically distribute study guides, laboratory procedures and other printed materials. One other option is to download the OpenOffice suite (<http://www.openoffice.org>), which is **free** and very similar to Office.
- **Interactive physiology CD:** The A.D.A.M. 10-module interactive physiology CD is available from the University Bookstore (www.mayvillestatebookstore.com), and will be shown in the Course Materials area of the bookstore's site. It is not required if you are taking only the labs, but is very highly recommended. Its approach to explaining how many of the body's systems function will greatly improve your overall understanding of human physiology! It is required if you are also taking the lecture portion of the course, and will provide the basis for a number of questions in the examinations.
- **Camera:** A digital camera is needed to record lab activities including dissections. **The photo documentation and illustration is required in order for you to receive credit for any part of "wet" lab activities as stated above.**

IV. Content (Labs, Lab Quizzes, and Lab Reports):

A. General Information:

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. Dissections or "wet" Labs may require Lab Reports, Lab Quizzes, or both. Where required, Lab Reports must be completed and turned in with accompanying photos to the digital drop box. There may also be long-answer questions which you should complete and then copy-and-paste into the online report. Some labs will use materials found within the home, and there will be a sheep heart, a sheep kidney, a fetal pig and a pregnant white rat which will be dissected. For labs which normally would involve microscopy, the digital images will be provided, with procedures modified to concentrate on interpretation of the visual information. The individual labs vary in value on the basis of the amounts of material covered and work required. If a lab quiz is part of the assignment, you may take it twice, with the highest score being recorded.

B. List of Submitted (graded) Lab Activities

- Endocrine Glands and Hormones Lab Quiz
- Cardiovascular System and Heart Dissection
 - Heart Lab Photo Report
 - Online Cardiovascular System Lab Quiz
- Lymphatic and Immune System Lab Quiz
- Digestive System Lab Quiz
- Respiratory System
 - Respiratory Lab Quiz

- 2) Control of Respiration Lab Report
- f. Urinary System
 - 1) Kidney Dissection Photo Lab Report
 - 2) Urinary System Lab Quiz
- g. Reproductive System
 - 1) Reproductive Lab Quiz
 - 2) Dissection of Pregnant White Rat Photo Lab Report
- h. Fetal Pig Dissection
 - 1) Photo Lab Report
 - 2) Fetal Pig Lab Quiz
- i. Introduction to Human Genetics Lab Quiz
- j. DNA Lab Extraction Photo Lab Report

C. 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 respiratory system, 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 as well as applications associated with the structures and systems studied.

D. Final Grade:

The scores for each of the assignments has been individually weighted to correspond to their complexity and difficulty. Your individual scores will be visible in the grades area. The lab reports and lab quizzes will make up 60% of your total grade, with the two exams each constituting 20% of your grade.

In order to get an “A”, you should achieve an overall percentage of 88%, and to get a “B”, 78% overall. A grade of “C” requires 68%, and a D 60% of the available points

V. Applicable MSU Policy Statements

English Proficiency

The State Board of Higher Education requires that all faculty members and teaching assistants in the NDUS have appropriate communications skills, including the ability to speak English clearly and with good pronunciation. Students who experience problems have the following obligation:

- Discuss the situation with the instructor to see if resolution can be reached.
- If the problem is still not resolved, contact the instructor’s Division Chair for assistance.
- Situations still not resolved should be brought to the attention of the Vice President for Academic Affairs.

Student → Instructor → Chairperson → VPAA

In the unlikely event that a situation has not been resolved through this procedure, students may contact the President of the University for final resolution.

VI. Students with Disabilities:

If you need accommodations in this course because of a disability, need special arrangements in case the building must be evacuated, or if you have emergency medical information to share, please inform your instructor as soon as possible. Students needing disability accommodations must submit documentation of the disability to Greta Kylo, Coordinator of Academic Support, in CB109, 800-437-4104 ext. 34720. Academic requirements will be modified on a case-by-case basis to afford qualified students with disabilities an equal educational opportunity.

VII. Academic Honesty: *“Academic integrity is of the utmost importance.”*

Definitions: Academic dishonesty consists of cheating on tests, quizzes, oral presentations, general coursework, fabrication of data, and plagiarism. Academic dishonesty also includes allowing someone else to copy your work (including computer programs, research data, or any other assignment) and submit it as his or her own. Plagiarism is representing the words or ideas of another as one’s own in any academic endeavor.

Examples: This includes, but is not limited to, the following:

- Copying another student’s assignment (hard copy or electronic files),

- Working with another person when both submit similar work to satisfy an individual, not group, assignment,
- Using an author's writing without proper documentation or reference, whether intentional or unintentional,
- Copying any source, book, periodical, database, or computer program without proper credit, whether quoted, paraphrased, or summarized.
- Presenting information in lab reports or quizzes in such a way as to state or imply completion of a lab which was not actually completed by the student.
- Representing photographs, or other information obtained from the internet, another student or other sources, without citation, as products of the submitting student's work.

Consequences: When a student commits academic dishonesty, he/she may be answerable to one or more of the following consequences:

- receive an "F" for the assignment with no opportunity to redo it
- receive an "F" for the course
- referral of the Vice President for Academic Affairs for further disciplinary action

VIII. Emergency Notification

The State Board of Higher Education requires that all faculty and teaching assistants in the NDUS adhere to SBHE Policy 1902 regarding the emergency notification system. Students are allowed to leave 'NotiFind' registered cell phones on during class to receive emergency notifications unless instructed otherwise by faculty. If a faculty member instructs students to turn off their cell phones, the faculty member must be able to receive emergency notifications by one of the following methods:

- 'NotiFind' registered personal cell phone that is turned on
- 'NotiFind' registered campus email when a computer or other electronic communication device is active
- Campus classroom intercom or phone
- Nearby office personnel instructed to notify faculty

IX. Emergency Course Modifications:

In the event of a major campus emergency resulting in temporary suspension of classes or early ending to the semester; the course requirements, deadlines, and grading percentages on the official syllabus are subject to change. We will notify you of such changes by email and/or by the campus learning management system (LMS) currently Moodle.