

BIOL 106L&L Sections W01-W10
Anatomy and Physiology II - Lecture
Department of Life Sciences
Winter 2012

Course Information

BIOL-106L&L - LEC Sections W01-W10 – Anatomy and Physiology II

Credit Hours: 4 (6 contact hours)
Lecture Hours: 3 per week
Lab Hours: 3 per week
Prerequisites: C or higher in Biology 105
Corequisites: BIOL-106L&L LAB (BIOL 106A)

Catalog Description

This laboratory course is a continuation of Biology 105 for students in nursing and other health-related fields that need an intensive study of the anatomy and physiology of the human organism. Emphasis is on the skeletal, muscular, nervous, digestive, cardiovascular, respiratory, urinary, endocrine and reproductive systems of the human organism. **This course may include the dissection of animals.**

Faculty Information

Professor: Darren Mattone
Office Location: 243-C, Life Science Department
Office Hours: See attached
Telephone: (231) 777-0398
Email: darren.mattone@muskegoncc.edu

Major Course Goals

Upon successful completion of the course, the student will have done the following:

1. Identify the organs and explain the general function of the organs in each major body system.
2. Describe the major physiological processes that occur in the body systems.
3. Relate the anatomical structures of the body systems with the physiological processes that are occurring within each those systems.
4. Analyze the interrelationships between the various body systems and how they work together.
5. Interpret various forms of physiological data.
6. Explain how the body systems maintain homeostasis in the face of continually changing conditions.
7. Make predictions about what might lead to changes in normal homeostatic mechanisms and the different disease states could results form these changes.
8. Use relevant resources to analyze, hypothesize, and justify conclusions about homeostasis and physiological processes.
9. Work cooperatively with peers and learn to appreciate the different values, knowledge, and interpretations that each individual brings to the course.

Required Course Materials

- Saladin, Kenneth. Anatomy and Physiology: The Unity of Form and Function, 6th Ed. ISBN: 9780073378251
- Mattone, Lecture Supplement for Biology 106
- Mattone, Biology 106 Lab Manual
- McGraw-Hill, Connect Code. **Note: A Connect code from Fall 2011 will work for Winter 2012.**
- Amerman, Erin. Exploring Anatomy and Physiology in the Laboratory. ISBN: 9780895827975 **(Note: Do not buy this book if you already have it from Biology 105. If you do not have it, you can purchase a small packet of just the pages that we will be using from this book.**

Recommended Course Materials

- Krieger, Paul. A Visual Analogy Guide to Human Anatomy and Physiology. ISBN: 9780895828019

Grading Policies

The lecture portion of this course will count as approximately 70% of your overall grade, with lab accounting for the remaining 30%. Course grades will be based on the following:

- 5 Lecture exams @ 100 pts = 500 points
- 4 BB lecture exams @ 25 pts = 100 points
- Connect Exercises = 30 points
- 2 Case Studies @ 35 pts = 70 points
- 4 Lab exams @ 50 pts = 200 points
- Miscellaneous lab points = 100 points (quizzes, prelab, BB exercises, Connect exercises, PhILS)

Grading Scale

100 - 92.0	A	79.9 – 78.0	C+	61.9 – 60.0	D-
91.9 - 90.0	A-	77.9 – 72.0	C	59.9 or less	E
89.9 - 88.0	B+	71.9 – 70.0	C-		
87.9 - 82.0	B	69.9 – 68.0	D+		
81.9 - 80.0	B-	67.9 – 62.0	D		

- ***Please note that final grades are not rounded up or down.***

Blackboard

Blackboard will be used extensively during this term. Handouts will be available for download. It is highly recommended that you download these items PRIOR to the lecture and bring them to class. I will not be providing copies of these for you except through Blackboard. Any other handouts, review sheets, rubrics, assignments, etc., will all be distributed through blackboard unless otherwise stated.

To access blackboard:

- Go to <http://blackboard.muskegoncc.edu>
- Your username and password are the same as your network login.

Attendance Policy

While attendance is not required, it will be in your best interests to attend all lectures as this is a very fast-paced course with a significant amount of material to cover in only 15 weeks. If you stop attending class, the instructor reserves the right to automatically drop you from the course.

Exam Make-Up Policy

All exams must be taken on the scheduled date. If you miss exam due to illness or family emergency, you must make up the exam within 24 hours at the testing center. To make up an exam:

- You will need to call the testing center at 231-777-0394 to schedule an appointment.
- You need to email me a confirmation note listing the date and time that you will be making up the exam.

Failure to complete the missed exam within the 24-hour window will result in a zero. Please note that the make-up exam could be all short answer questions, all essay questions, or a completely different version of the exam than the one given during the lecture. Only 1 exam per semester may be made up outside of the regularly scheduled exam time.

Statement on Student Behavior

Muskegon Community College is a community of scholars whose members include students, faculty, staff, and administrators. Mutual respect and civility are expected in the classroom, or other college related academic settings, as well as in any communication. The college has a duty to provide students privileges, opportunities, and protections that best promote learning.

Students have the right to a non-threatening learning environment. Students have the responsibility to refrain from infringing on the right of others to learn or the right of teachers to teach. Any student whose behavior disrupts learning may be subject to disciplinary action as outlined in the Muskegon Community College Student Handbook/Planner. The instructor reserves the right to remove students from class that do not behave in such a manner. Please turn off all cellular phones, pagers, or other electronic devices.

Statement on Academic Dishonesty

Academic Dishonesty consists of, but is not limited to:

- Cheating – Cheating is defined as using or attempting to use, giving or attempting to give, and obtaining or attempting to obtain materials, or information, including computer material pertaining to a quiz, examination or other work that a student is expected to do alone.
- Plagiarism – Plagiarism is defined as the use of another's words or ideas without acknowledgement.

Dishonesty of any kind will NOT be tolerated in this course. Any acts of cheating and/or plagiarism will result in dismissal from the course and a grade of E given at the end of the semester. Taking during exams for any reason to anyone but the instructor will result in an automatic zero for that assessment.

Communications From MCC

All email communication originating from MCC to students will be via their MCC email account. CHECK YOUR MCC EMAIL FREQUENTLY!

Miscellaneous Notes

All student work will be returned to students in a timely manner. All exams will be kept by the instructor and destroyed two weeks into the following semester.

Tentative Course Schedule

The dates for the topics on the calendar below are tentative, as are the exam dates. I will try to adhere to the calendar but situations often arise that prevent the class from following the exact schedule printed on the calendar.

Date	Topic	Readings	Homework	Misc
Jan 9	Membrane Potentials Neuron/nerve action potentials	451-455 455-457		PhILS 8 & 9 via <i>Connect</i>
Jan 11	Refractory Period Signal Transmission	457 457-460		
Jan 16	No Class MLK day: <i>Watch videos on synapses</i> <i>Watch videos on taste</i>	460-467 591-593	Watch videos on BB: Synapses Taste	PhILS 15 & 16 via <i>Connect</i>
Jan 18	Hearing Physiology Vision Physiology	596-605 610-626	Endocrine Case Assigned	
Jan 23	Touch Physiology (general senses) Autonomic NS	585-591 562-581		
Jan 25	Hormone Chemistry and Actions	655-666		
Jan 30	Catch-up Day			
Feb 1	Exam 1 – Chapters 12, 15, 16, 17		Unit 1 BB Exam Due Feb 3	
Feb 6	Skeletal Muscle Contraction	402-416	Endocrine Case Due Muscle Case Assigned	
Feb 8	Behavior of Whole Muscles	418-422		
Feb 13	Bone Development	209-220		
Feb 15	Calcium Homeostasis	220-224		
Feb 20	Catch-Up Day			
Feb 22	Exam 2 – Chapters 7 & 11		Muscle Case Due Feb 23	
Feb 27 to Mar 2	No Class – Mid-Semester Break		Unit 2 BB Exam Due (2/29)	
Mar 5	Cardiac Muscle Contraction	725-731		
Mar 7	Cardiac Cycle	734-740		
Mar 12	Factor Affecting HR & SV	740-44		
Mar 14	Blood Pressure	758-771		
Mar 19	Hemostasis	702-710		
Mar 21	Exam 3 – Chapters 18-21		Unit 3 BB Exam Due Mar 23	
Mar 26	Respiratory Physics & Control of Breathing	866-877		
Mar 28	Gas Transport and Exchange	877-890		
Apr 2	Urinary Physiology 1	904-920		
Apr 4	Urinary Physiology 2			
Apr 9	Exam 4 – Chapter 22 & 23			
Apr 11	Oxidation/Reduction Cellular Respiration – Glycolysis	58-59 1012-1014	Unit 4 BB Exam Due	
Apr 16	Cellular Respiration – Citric Acid Cycle	1014-1016		
Apr 18	Cellular Respiration – Electron Transport Chain Glycogen Metabolism Lipid Metabolism	1016-1018 1018-1019 1020-1021		PhILS 3 via <i>Connect</i>
Apr 23	Cellular Respiration – Misc	423-428		
Apr 25	Catch-Up Day			
TBA	Final Exam			