



COURSE NUMBER AND TITLE: NR.110.205 Physiology with Lab

CREDITS: 4 Credits

PRE- AND COREQUISITES: NR.110.204 Anatomy with Lab strongly encouraged

COURSE DESCRIPTION:

This course will introduce the functions and regulation of major human body systems. Students will learn how the parts within a body system work together to seamlessly accomplish tasks. There will be discussion of the regulation of organ function, a critical component of physiology. After an introduction on electrolytes, the physiologic processes to be covered include functions of the cardiovascular system, lymphatic system, and digestive system, among others. Upon completion of the course, students will have an understanding of normal healthy anatomical function that will prepare them for professional health programs. This course includes a virtual laboratory component designed to complement lecture topics.

OBJECTIVES:

Upon completion of the course, the student should be able to:

1. Describe the functions and interactions of major organ systems in human body.
2. Explain the mechanism and importance of maintaining water, electrolytes, acid-base balance.
3. Discuss the function of the cardiovascular system.
4. Describe the key purpose of the lymphatic and specific cranial elements.
5. List the functions of the components necessary for respiration, digestion, and urination.
6. Identify the functions of the regulatory elements, i.e. hormones, of the reproductive systems.

HOW WE WILL WORK TOGETHER:

Students will use their personal computer, text, lab website and the course site on Blackboard. This course will assess your knowledge of the materials using online lectures, lab sessions, lab assignments, discussions, quizzes and exams.

TECHNICAL SUPPORT:

For issues related to Blackboard login and access, contact SON Help Desk at 410-614-8800 or email son-helpdesk@jhu.edu

For McGraw-Hill Connect login and access problems, call Connect Customer Support at 800-331-5094 or go to www.mcgrawhillconnect.com/support to report an issue.

For any other issues with course materials, you will find detailed contact information for the instructor, the teaching assistant and others under **Contact Information** section of the Blackboard site. You can also post a thread under the General Discussion Forum. We will get back to you as soon as we can.

SUMMARY OF OPPORTUNITIES TO DEMONSTRATE LEARNING:

The following activities will be evaluated in this course. Corresponding point values and weights are provided. Specific details regarding assignments are provided in the course schedule and on the Blackboard course site.

OPPORTUNITIES TO DEMONSTRATE LEARNING	COURSE OBJECTIVES ADDRESSED	VALUE
Module Graded Quizzes	1, 2, 3, 4, 5, 6	200pts (20%)
Weekly Discussion Boards	1, 2, 3, 4, 5, 6	100pts (15%)
Exams 1, 2 & 3	1, 2, 3, 4, 5, 6	300pts (40%)
Completion of Lab Sessions	1, 2, 3, 4, 5, 6	800pts (25%)
Total		1400pts (100%)

OPPORTUNITIES TO DEMONSTRATE LEARNING:

- *Graded Module Quizzes:* These are timed quizzes that are designed to test your mastery of the material covered in each module and keep you on track in your reading. The quizzes are open book and open notes. One attempt is allowed for

each quiz. There are 10 graded quizzes in total in this course. You will find these quizzes under the “Assessment” section of each module.

- *Lab Sessions:* Lab sessions will be done via LearnSmart Labs by McGraw-Hill. **An average of 60% must be achieved in the lab component of the course in order to for you to pass the course.**
- *Discussion Boards:* Weekly discussions can be accessed from “Discussion Board” link on the left-side menu of the course site, or from within each module. There are 10 discussion boards in this course. Additionally, there is an optional discussion board for lab sessions.
- *Exams:* There are three exams consisting of multiple choice and short answer questions. They are open book, open notes and timed. Only one attempt is allowed for each exam. There are no makeup exams.

Note: Throughout the course, you will find *Knowledge Check* activities after each recorded lecture and *Practice quizzes* under the “Optional Learning Activities” section in each module. In addition, *SmartBook* readings are also available if you prefer to read the textbook online. The Knowledge Check, Practice quizzes and SmartBook reading assignments provide self-assessment of the information presented in the lectures and the textbook and are not graded or counted towards your final course grade.

LATE ASSIGNMENT POLICY:

All course assignments listed in the syllabus must be turned in by the specified due date and time. Once the due date and time have passed, 10% of the total points you have earned on the assignment will be deducted per day (per 24 hour period). There are no makeup or extra credit assignments allowed. Please contact the course instructor prior to the due date in the case of extenuating circumstances.

GRADING SCALE:

RANGE	LETTER GRADE	GRADE POINT
97 – 100	A+	4.0
93 – 96	A	4.0
90 – 92	A-	3.7
87 – 89	B+	3.3
83 – 86	B	3.0
80 – 82	B-	2.7
77 – 79	C+	2.3
73 – 76	C	2.0
70 – 72	C-	1.7
67 – 69	D+	1.3

RANGE	LETTER GRADE	GRADE POINT
63 – 66	D	1.0
60 – 62	D-	0.7
<60	F	0

REQUIRED TEXTBOOKS AND OTHER COURSE MATERIALS:

Textbook: Saladin, K. S. (2014). The unity of form and function, 7th ed. New York, NY: McGraw-Hill Higher Education.

Access to McGraw-Hill Connect Plus with LearnSmart/LearnSmart Labs: Students must purchase access code to Connect Plus in order to access the assessment items and other learning materials for this course. Please do not purchase from any 3rd party vendor before reviewing the information presented in the Blackboard course site.

Access to LearnSmart Labs (LSL): This program will be used mainly for the lab portion of the course. Access to LSL is included in McGraw-Hill Connect Plus describe above. You do not need to purchase a separate access card for this program.

Reliable access to a computer connected to the internet. Students using Windows-based computers should have Windows 8, Windows 7, Windows Vista or Windows XP. Mac users must have Mac OS 10.6 or later. Other operating systems may not support the web browsers and other software necessary for your participation in online course material. See Blackboard course site for detailed system requirements. You may also check your system compatibility at the following:

- **MGH Connect:** <http://connect.customer.mcgraw-hill.com/technical-support/>

ACADEMIC POLICIES

For a full list of academic policies, please see the current academic catalog and handbook at <http://nursing.jhu.edu/catalog>.

HONOR CODE

Students enrolled in the Johns Hopkins University School of Nursing are expected to conduct themselves in a manner that upholds the values of this institution of higher education. Each student is obligated to refrain from violating academic ethics and maintaining high standards of conduct. In addition, the School of Nursing upholds the professional code of ethics established in the Code of Ethics for Nurses (ANA, 2015). Each student is held accountable for adhering to the American Nurses Association Code of Ethics. For the full Johns Hopkins School of Nursing Honor code, please go to <http://nursing.jhu.edu/catalog>.

COMMUNICATION POLICY

Students may communicate with the instructor by email, which is provided in the Contact Information area. The instructor will respond to students within 48 hours. Assignment feedback will be provided to students within one week of submission.

All official communication, notices, & announcements will be distributed through student JHU-SON e-mail accounts via blackboard. The student is accountable for checking this account regularly and for all course communication sent to it.

Students are responsible for reading “Netiquette” which is located under Syllabus & Course Info on the Blackboard site. Netiquette provides simple guidelines for civil on-line discourse & behavior, that participants are to follow and expect of one another.

DISABILITY SERVICES

If you have a disability and may require accommodation in this course, please contact the *Office of Student Affairs* at (410) 955-7545 or SON-StudentAffairs@jhu.edu to discuss your specific needs.

TOPICAL OUTLINE:

Learning activities and assignments will be explained in detail within each learning module under **Course Content** in Blackboard. Unless otherwise noted, all assignments are due on the due date listed in the schedule at **5:00 PM EST/EDT**. Permission for late submission of assignments must be requested from instructor before the due date, and may only be granted under special circumstances.

Module/ Week	Topic	Required Readings	Assignment	Lab Assignments
Prior to term start	Getting Started		Student Introduction Discussion Board Avoiding Plagiarism Module	
Module 1	Cell Form and Function	Chapter 3	Module 1 Graded Quiz Module 1 Discussion Board	LearnSmart Labs: Lab Safety
Module 2	Water, electrolytes, acids & bases	Chapter 24	Module 2 Graded Quiz Module 2 Discussion Board	LearnSmart Labs: Diffusion Osmosis
Module 3	Nervous System	Chapter 12	Module 3 Graded Quiz Module 3 Discussion Board	
Exam	Exam 1 covers course materials from Module 1 to Module 3			
Module 4	Lymphatic System	Chapter 21	Module 4 Graded Quiz Module 4 Discussion Board	
Module 5	Cardiovascular System	Chapter 19	Module 5 Graded Quiz Module 5 Discussion Board	LearnSmart Labs: Heart & ECG Pulse Rate & Blood

Module 6	Respiratory System	Chapter 22	Module 6 Graded Quiz Module 6 Discussion Board	LearnSmart Labs: Respiratory System
Module 7	Brain & Cranial Nerves	Chapter 14	Module 7 Graded Quiz Module 7 Discussion Board	
Exam	Exam 2 covers course materials from Module 4 to Module 7			
Module 8	Digestive System	Chapter 25	Module 8 Graded Quiz Module 8 Discussion Board	LearnSmart Labs: Digestive System
Module 9	Urinary System	Chapter 23	Module 9 Graded Quiz Module 9 Discussion Board	
Module 10	Reproductive System	Chapters 27 & 28	Module 10 Graded Quiz Module 10 Discussion Board	LearnSmart Labs: Mitosis and Meiosis
Exam	Exam 3 covers course materials from Module 8 to Module 10			