

NSG 322: Anatomy and Physiology Lab I for the Health Sciences

Pre-Requisite(s)

Prior or concurrent didactic anatomy and physiology course is recommended.

Co-Requisite(s)

Prior or concurrent didactic anatomy and physiology course is recommended.

Credit Hours

Lab hrs: 1 credit = 2 clock hrs/week (28 hrs/semester)

Course Format

Complete Online Course

Meeting Days, Times, and Locations

Fully online. No required in-class sessions. See course outline for anticipated time of completion. Students should plan on a minimum of six weeks to complete this course.

Course Description

This online, asynchronous course is designed as a stand-alone lab that can be taken concurrently with any anatomy physiology course such as Anatomy and Physiology I and Application to Health (NSG 312). Learners will study the anatomy and physiology of the integumentary, skeletal, muscular, nervous and reproductive systems, while also exploring the interrelationships between systems, from molecular to organ levels, that are critical to the proper function of the dynamic human body. This course also provides learners with the knowledge and skills necessary to conduct laboratory experiments and utilize the scientific method in a home setting.

Student Learning Outcomes

At the conclusion of this course, the student will achieve the following identified outcomes:

1. Conduct lab experiments safely by adhering to proper technique and ethical standards
2. Evaluate lab experiments utilizing the scientific method
3. Classify microscopic and macroscopic anatomical structures by physical characteristics, orientation and location, utilizing correct terminology
4. Describe the functions and major organs of the integumentary, skeletal, muscular, nervous, and reproductive systems
5. Explain physiologic processes of cellular function and the integumentary, skeletal, muscular, nervous, and reproductive systems.
6. Describe interrelationships between body systems at molecular, cellular, tissue and organ levels

Teaching Methods/Activities

This course uses a combination of methods to facilitate learning and mastery of content, including:

- Safety guidelines
- Virtual presentations
- Instructional videos
- Recommended websites
- Practice questions
- Digital Lab Manual
- Hands-on experiments conducted in the student's home setting
- Observation and analysis of laboratory results
- Laboratory reports
- Customer support and service

Evaluation Methods/Learning Outcomes

Course Requirement	Percent of Total Grade	Alignment with Student Learning Outcome(s)
1. Completion of Laboratory Experiments	40%	SLO 1-6
2. Laboratory Reports	40%	SLO 1-6
3. Practice Quizzes	20%	SLO 1-6

The final grade entered is based on School of Nursing grading system. See *Student Handbook* (<https://www.son.rochester.edu/assets/pdf/studenthandbook.pdf>)

Grading System

The student's final numerical grade will be converted to a letter grade based on the following University of Rochester undergraduate student grading criteria:

A	93-100	C	73-76	
A-	90-92	C-	70-72	"C-" is considered unsatisfactory work for undergraduate students; see <i>Student Handbook</i> for implications.
B+	87-89	D+	67-69	
B	83-86	D	63-66	
B-	80-82	D-	60-62	
C+	77-79	E	<60	Failing grade; see <i>Student Handbook</i> for implications.

For both UG and graduate programs: Grades will be rounded up so that 0.5 (and above) rounds to the next whole number (e.g., a grade of 72.5 will round up to a 73; rounding is only to the tenths; for example, 72.47 does not round up to a 72.5).

Required Textbook(s)

eScience Labs, 2nd Edition Anatomy and Physiology Version 1

Required Equipment:

Students will be required to take photographs and/or videos of each lab set-up and upload them to Blackboard. Additional household materials (e.g., bleach, food, measuring cups/spoons) to use throughout the experiments as outlined on the [eScience Labs website](#).

Course Outline

Lab Topic	Lab #	Approximate Time to Complete
Intro Module		60 minutes
Introduction to Science	1	60 minutes Observation and Analysis: 7-10 days
Cell Structure & Function	2	90 minutes 24-hour advanced preparation of agar
Tissue, Glands, and Membranes	3	1 hour
The Integumentary System	4	1 hour
The Skeletal System	5	90 minutes Observation and Analysis: 3-5 days
The Muscular System	6	90 minutes
The Nervous System I	7	30-45 minutes
The Nervous System II	8	30-45 minutes
Reproductive System	9	45-60 minutes
Growth & Hereditary	10	45-60 minutes

ADA Statement and Holidays

See *Student Handbook* (<https://www.son.rochester.edu/assets/pdf/studenthandbook.pdf>)

Academic Honesty Statement

Students are responsible for their own work. Students are expected to have read and to practice principles of academic honesty. See *Student Handbook* (<https://www.son.rochester.edu/assets/pdf/studenthandbook.pdf>)
Student attestation is completed on Blackboard for each course.

Professional Behavior/Civility Statement

The University of Rochester, School of Nursing (SON) seeks to provide an environment for learning and teaching that is respectful of diverse persons and points of view in all classroom, electronic, and clinical settings. Consistent with this goal, it is expected that diverse perspectives and opinions will be expressed and received in a respectful and professional manner. Incivility, intolerance, hate speech, and abusive behaviors are considered professional misconduct and will be acted upon in accordance with the statement in the *Student Handbook*. (<https://www.son.rochester.edu/assets/pdf/studenthandbook.pdf>)

TITLE IX/Sexual Harassment Policy

All members of the University community have the right to learn and work in a safe environment free from all forms of harassment, including harassment on the basis of sex or gender. Students who have been subjected to sexual harassment, including sexual assault, dating/domestic violence or stalking, have the right to receive

academic, housing, transportation or other accommodations, to receive counseling and health services and to make a report about such behavior to the University and to law enforcement. For more information please visit www.rochester.edu/sexualmisconduct.

HIPAA Compliance

Students are to abide by the University of Rochester HIPAA Compliance Guidelines which can be found on the SON website (<http://son.rochester.edu/r/HIPAA-Video>).