HOCKING COLLEGE

Welcome to Anatomy and Physiology I



This course is the first of a two-semester sequence in which human anatomy and physiology are studied using a body systems approach.

Course Syllabus

Academic Year

2026-2027

Course Name: Anatomy and Physiology I
Course ID: BIOS-1113
Credit Hours: 4
Prerequisites: None
Approved by:

_____
Dean signature Date

Course Learning Objectives

Upon completion of Anatomy and Physiology I, the student will learn to do the following:

- Use and apply descriptive anatomical and directional terminology.
- Explain the basic concept of homeostasis and how homeostatic mechanisms apply to body systems.
- Interrelate basic chemistry principles with anatomy and physiology.
- Explain the structure, function, and regulation of the cell.
- Explain the classification, structure, and function of tissues.
- Describe, identify, and locate the major organs of the integumentary, skeletal, muscular, nervous, and sensory systems.
- Explain the functions of the major organs of the integumentary, skeletal, muscular, nervous, and sensory systems.
- Discuss homeostasis and some clinical considerations that disrupt homeostasis as related to the various body systems.

This course also helps fulfill general education requirements, as well as institutional learning outcomes which include:

- Demonstrate sound critical thinking, information literacy, and technological competency in the production of academic writing and presentations.
- Apply the methods of mathematical, statistical, or analytical reasoning to critically evaluate data, solve problems, and effectively communicate findings.
- Demonstrate a foundational knowledge in the natural sciences based on theory and laboratory skills.
- Cultivate ethical values, personal wellness, and personal learning strategies in the development of the whole person, mind, body, and spirit.
- Integrate content material to application in the workforce and apply discipline-specific knowledge and skills to successfully transfer or effectively meet the expectations of internships, workplace, volunteerism, and/or entrepreneurship endeavors.

Books/Materials You Need

- All students are required to have a laptop or tablet meeting the specifications of the Hocking technical specs policy. Having a computer will ensure you can succeed by staying connected to your college email and having access to course components that are online.
- Provided: Access to OpenStax Anatomy and Physiology digital textbook from Rice University
- **Composition notebook to create your Bone & Muscle Book**
- **100 note cards**
- Access to Google Classroom.
- Notebook, pencils/pens, are highly recommended

What to typically expect when you go to class

Classes are held in our classroom, though may occasionally be held outside or throughout the building as necessary for learning activities. Class time will consist of lecture, individual work, paired, or small-group work, and whole class discussions. Lecture slides and notes will be provided ahead of time with the expectation that students will fill out notes before in-class lecture. This will allow class time to explain topics further in depth, clarify misunderstandings, and to facilitate discussions. **Everyone** is expected to participate in discussions.

Additionally, this course includes laboratory time. Attendance is required for labs. **All labs that are missed due to excused absences will need to be made up within 3 days from return outside of normal class time. This may require students to come in during their study hall or lunch time. Students who miss labs due to unexcused absences may not have the opportunity to make these up for credit.** Students are expected to come to class and to the lab with their laptop, prepared to discuss the material and participate in activities. Additionally, students should wear appropriate protective clothing during lab times. Laboratory time will include hands-on learning of anatomy and physiology concepts. Activities will include examination of models and specimens, dissections, demonstrations, and experimentation.
Safe and professional behavior is expected during all class times. Students may be asked to leave if they exhibit disruptive behavior.

Submission Policies

Late work is discouraged. If an assignment is late, it will result in a 50% grade reduction. All assignments collected after 2 days will receive a zero!

All tests and quizzes must be completed during the window assigned. **In the event of an absence, a make-up exam may be completed within 2 class sessions upon return to school.** Make up tests and quizzes must be completed by the due date set by the instructor. **A missed make up gets a zero with no further opportunities.** It is the responsibility of the student to contact the instructor as soon as possible to request a make-up. **In the event of excessive unexcused absences on test or quiz dates, the instructor reserves the right to deny a student the opportunity to make up the assessment.**

Grading Scale

Hocking College grading scale to be used for all courses.

93% - 100% = A	73% - 76% = C
90% - 92% = A-	70% - 72% = C-
87% - 89% = B+	68% - 69% = D+
83% - 86% = B	66% - 67% = D
80% - 82% = B-	65% = D-
77% - 79% = C+	0% - 64% = F

Types of Assignments/Activities

Projects 15%	There will be multiple projects to assess your understanding throughout the course
Quizzes 20%	Larger units will have quizzes
Case Studies 5%	Each system will have one case study assignment.
Lab Activities 20%	Lab activities will be completed each week as part of lab.
Lab Practical Exam 10%	Comprehensive final lab practical exam.
Bone and Muscle Book 10%	Students will draw and label bones and muscles as specified in a composition book.
Tests 20%	One test for each unit
Course/Instructor Evaluation	Near the end of the course, there will be a survey available to evaluate aspects of the course and instructor. Your feedback is valued and will help drive improvements in the course design, delivery, and instruction.

Signatures: ***Due: 8/21/2026***

I have read this document and I fully understand the course requirements.

Parent/Guardian Signature _____

Student Signature _____

Tips for Succeeding in this Course

- Attend all class sessions
- Come prepared to class and bring your chromebook, learning materials
- Plan ahead to space out your work. Schedule time each day to study and work on assignments.
- Check your grades often on Infinite Campus
- Come to me with any questions, concerns, or clarifications. I am available to schedule time to meet with you in mod 3 as well as briefly after school.

Course Outline

Topics may not be presented in the order they appear.

Unit 1: Fundamental Principles of Anatomy and Physiology

1-Introduction to the Human Body

1.1 Overview of Anatomy and Physiology
1.2 Structural Organization of the Human Body
1.3 Functions of Human Life
1.4 Requirements for Human Life
1.5 Homeostasis
1.6 Anatomical Terminology

2-The Chemical Level of Organization

2.1 Elements and Atoms: The Building Blocks of Matter
2.2 Chemical Bonds
2.3 Chemical Reactions
2.4 Inorganic Compounds Essential to Human Functioning
2.5 Organic Compounds Essential to Human Functioning

3- The Cellular Level of Organization

3.1 The Cell Membrane
3.2 The Cytoplasm and Cellular Organelles
3.3 The Nucleus and DNA Replication
3.4 Protein Synthesis
3.5 Cell Growth and Division
3.6 Cell Differentiation

4- The Tissue Level of Organization

4.1 Types of Tissues
4.2 Epithelial Tissue
4.3 Connective Tissue Supports and Protects

4.4 Muscle Tissue and Motion
4.5 Nervous Tissue and Mediates Perception and Response
4.6 Tissue Injury and Aging

Unit 2: Body Coverings and Movement

5- The Integumentary System

5.1 Layers of the Skin
5.2 Accessory Structures of the Skin
5.3 Functions of the Integumentary System
5.4 Diseases, Disorders, and Injuries of the Integumentary System

6- Bone Tissue and the Skeletal System

6.1 The Functions of the Skeletal System
6.2 Bone Classification
6.3 Bone Structure
6.4 Bone Formation and Development
6.5 Fractures: Bone Repair
6.6 Exercise, Nutrition, Hormones, and Bone Tissue
6.7 Calcium Homeostasis

7- The Axial Skeleton

7.1 Divisions of the Skeletal System
7.2 The Skull
7.3 The Vertebral Column
7.4 The Thoracic Cage
7.5 Embryonic Development of the Axial Skeleton

8- The Appendicular Skeleton

8.1 The Pectoral Girdle
8.2 Bones of the Upper Limb
8.3 The Pelvic Girdle and Pelvis
8.4 Bones of the Lower Limb
8.5 Development of the Appendicular Skeleton

9- Joints

9.1 Classification of Joints
9.2 Fibrous Joints
9.3 Cartilaginous Joints
9.4 Synovial Joints
9.5 Types of Body Movements
9.6 Anatomy of Selected Synovial Joints
9.7 Development of Joints

10- Muscle Tissue

10.1 Overview of Muscle Tissues
10.2 Skeletal Muscle

10.3 Muscle Fiber Contraction and Relaxation
10.4 Nervous System Control of Muscle Tension
10.5 Types of Muscle Fibers
10.6 Exercise and Muscle Performance
10.7 Cardiac Muscle Tissue
10.8 Smooth Muscle
10.9 Development and Regeneration of Muscle Tissue

11- The Muscular System

11.1 Interactions of Skeletal Muscles, Fascicle Arrangement and Lever Systems
11.2 Naming Skeletal Muscles
11.3 Axial Muscles of the Head, Neck, and Back
11.4 Axial Muscles of the Abdominal Wall and Thorax
11.5 Muscles of the Pectoral Girdle and Upper Limbs
11.6 Muscles of the Pelvic Girdle and Lower Limbs

Unit 3: Regulation, Integration, and Control

12-The Nervous System and Nervous Tissue

12.1 Basic Structure and Function of the Nervous System
12.2 Nervous Tissue
12.3 The Function of Nervous Tissue
12.4 The Action Potential
12.5 Communication Between Neurons

13-Anatomy of the Nervous System

13.1 The Embryologic Perspective
13.2 The Central Nervous System
13.3 Circulation and the Central Nervous System
13.4 The Peripheral Nervous System

14-The Somatic Nervous System

14.1 Sensory Perception
14.2 Central Processing
14.3 Motor Responses

Blackboard

All Hocking College courses are delivered in conjunction with our Learning Management System Blackboard. Students are expected to actively log into their Blackboard account and subsequent courses on a regular basis. You will find information about how to contact your professor, assignments, grades, and more for your courses in Blackboard.

You can access your courses in Blackboard in the Hocking College app OR by going to the Hocking College website at www.hocking.edu and clicking the Blackboard link near the top.

Attendance Policy

In support of preparing Hocking College students for the world of work, the following policy has been developed to model work environments they will enter upon graduation.

The expectation is that students attend all classes. In the event of illness or emergency, it may be necessary for a student to miss a class. To report an absence, a student must contact their faculty member in advance and make arrangements to complete all required coursework.

Policy*

In an 8-week course, students have 1 Unexcused Absence
In a 16-week course, students have 2 Unexcused Absences

Unexcused absences greater than the above may result in being administratively DROPPED from the course(s). Students administratively DROPPED from a course(s) will not be re-admitted. They will be required to repeat the course to complete the program and are responsible for all associated charges.

The College is not responsible for the student's failure to follow the official withdraw policy. Students will be responsible for tuition and fees according to the refund policy.

***Selective Intake Programs may have specific and/or different programmatic attendance requirements than stated above. Please check your programmatic Student Handbook for the applicable attendance policy requirements.**

Academic Success Center

The Academic Success Center (ASC) is located on the first floor of Davidson Hall. The ASC houses the Testing Center, Library, Accessibility Resource Office, and Tutoring services.

The Testing Center – Location Davidson Hall Room 108. Testing Center hours are Monday – Friday, 8:00 am – 5:00 pm. Make-up tests are arranged with your instructor and can be taken on a walk-in basis. Standardized tests such as TEAS and ACE, SCANTRON and NOCTI are scheduled through the testing firm or coordinating agency and can be taken in the Hocking Testing Center. Please allow adequate time to complete an exam by the 5:00 pm closing time.

Library services – The Hocking College Library is committed to the advancement of teaching and learning by providing resources and services that support the core values of the college and enriching the experience by creating a community of lifelong learners. The Hocking College Library is an OhioLINK member. All faculty, staff, and currently registered students can borrow books from

the Library or from other OhioLINK member libraries through the OhioLINK Catalog, or on site at other OhioLINK libraries.

Library Hours:	Autumn/Spring Semester:	Summer Semester:
	Monday – Thursday 7:30 am – 9:00 pm	Monday – Friday 8:00 am – 5:00 pm
	Friday 7:30 am – 5:00 pm	
	Saturday – Sunday 12:00 pm – 5:00 pm	

Tutoring – The Academic Success Center offers free academic assistance to all Hocking College students. From tutoring to reinforcing good study habits, they help students overcome difficulties they might have with coursework and collaborate with them in managing the challenges of academic life. Studies show that students who seek academic assistance tend to perform better in their classes and retain more information. Tutoring schedules and locations are listed on the college website here: https://www.hocking.edu/academic-support#tutoring. Students are encouraged to make an appointment for tutoring, but walk-ins are welcome.

Health Resources

Hawks Center for Well-being

Mental health support

Netiquette

Hocking College delivers many courses online, whether wholly or in a blended format. Online communication is expected to be professional and respectful, just as it is in a traditional classroom.

Accommodations Notice

The Accessibility Resources Office located in Davidson Hall (DVD) Room 114 is dedicated to serving the various needs of individuals with documented disabilities and to promoting their full participation in college life.

Disability Accommodations

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 and subsequent Amendments in 2008 ("ADA"), Hocking College will make reasonable modifications to its practices and will provide certain individualized services and accommodations as needed to assure nondiscrimination on the basis of disability. Students or applicants for admission who would like to request disability-related services and

accommodations should contact the Director of Academic Support and Disability Services. The Accessibility Resources Office (Access Center) is located in Davidson Hall, Room 114. Accessibility Resources Office hours are Monday – Friday, 8:00 am – 5:00 pm. Contact information: accessibility@hocking.edu

Religious Accommodations

Students seeking an accommodation for absences permitted under Ohio's Testing Your Faith Act must provide written notice of the specific dates for which the student requires an accommodation and must do so not later than fourteen (14) days after the first day of instruction to accessibility@hocking.edu. Students with questions about their religious accommodations under Ohio's Testing your Faith Act may contact the Vice President of Student Affairs or the Dean of General Studies, Arts & Science. Contact information may be found in the College Directory located at: www.hocking.edu/directory.

Title IX Statement

As an instructor, I'm committed to supporting survivors of sexual misconduct, including sexual assault, sexual harassment, dating violence, domestic violence, and stalking. There are college policies that may require me to report disclosures about sexual misconduct to the Title IX coordinator whose role is to coordinate the Hocking College response to sexual misconduct.

Commitment to Diversity and Inclusion

Our mission is immeasurably enriched by the students, faculty and staff who bring diverse experiences and backgrounds to our campus. We believe that diversity comes in many flavors, not just those typically considered--race, religion, color, age, gender, national origin, sexual orientation, physical challenge, or marital status--but also in thought, political persuasion, physicality, and spirituality.

Hocking College is committed to fostering an inclusive environment where the individual differences among us are understood, respected, recognized as a source of strength, and valued as qualities that enrich the environment in which we work.

Hocking College believes that diversity is a matter of institutional integrity and plays an integral role in educational excellence. Students learn better in a diverse educational

environment, and are better prepared to become active participants in our pluralistic global society.

Our institutional commitment to diversity is made visible through celebration, through opportunities for introspection, and through artistic expression. It is a commitment that never ends, an open and ongoing dedication to creating an environment within which all individuals feel safe, valued and welcomed.

Hocking College expects the members of our campus community to promote this vision as fully and conscientiously as possible.

Academic Grievance Process

Hocking College requires faculty and students to uphold the highest principles of academic integrity and to act in a manner that preserves freedom of inquiry and intellectual exploration. The Hocking College faculty is composed of individuals whose professional skills enhance the learning process and who, by their commitment to advancing knowledge, are expected to apply common principles of good teaching, strong mentoring, and fair evaluation of student performance in a course of study or work experience.

The assessment and evaluation of student performance is the responsibility of the faculty. The faculty member is the sole judge of student performance and only the faculty renders and evaluation of student work and progress in a course or work experience. College grading policies and procedures reflect the quality of performance and achievement of competency by students who complete one or more courses. Students have the right to ask instructors for an explanation of any grade received. A final grade appeal should not be entered lightly by a student nor lightly dismissed by an instructor. It is the responsibility of the instructor to assign a final grade. Students have the responsibility of providing documentation that establishes sufficient grounds for changing a grade.

Simple disagreement with the instructor's professional judgment about the quality of the work does not constitute legitimate grounds for filing a complaint. Before filing an official complaint, students should speak with the faculty member regarding their concerns. This conversation will provide clarification and better understanding and may result in grade mediation and no need to file a formal complaint.

Students who have reason to believe that a violation of professional ethics has occurred or that the assessment of their work was the result of error or capriciousness or was evaluated by criteria other than those stated in the course syllabus or appropriate for the course or work experience have the right to file an academic complaint pursuant the Student Grievance Procedure located at: https://www.hocking.edu/student-affairs

Policy Regarding Honesty

Honesty and integrity are major elements in professional behavior and are expected of each student. This is part of the Success Skill "Maintains a Code of Ethics." All work is assumed to be your own unless special permission is granted from the instructor or sources are appropriately cited. It is expected that you will be honest in all endeavors related to the completion of this course, just as you must be in all activities at work. The definition of academic misconduct that is provided in the Hocking College Student Guide applies to this course and all other courses that you are taking at the College. It is a Code I Offense:

Academic Misconduct refers to dishonesty in examination (cheating); presenting the ideas or writing of someone else's as one's own (plagiarism); knowingly furnishing false information to the college by forgery, alteration, or misuse of college documents, records or identification. Academic dishonesty includes but is not limited to:

1. Permitting another student to plagiarize or cheat from your work,
2. Submitting an academic exercise, written work, project, or computer program that has been prepared totally or in part by another,
3. Improperly acquiring knowledge of the contents of an exam,
4. Using unauthorized material during an exam, to include notes, information, calculators, or other electronic devices or programs during exams or for assignments from which they have been expressly or implicitly prohibited,
5. Submitting the same paper in two different courses without knowledge and consent of all faculty members involved,
6. Obtaining academic material through stealing or other unauthorized means,
7. Falsification of research findings and methodology.

Academic Misconduct is unacceptable behavior in all Hocking College courses. A student observed or found to be engaged in academic misconduct on a test or assignment in this course will be held accountable as described by the academic school policy in addition to the Hocking College student code of conduct. A written report of the incident, signed by the instructor and the student, will be submitted to the Campus Judiciaries Office. The Office of Student Rights and Responsibilities and Judicial Affairs will conduct a judicial proceeding with the accused student, resulting in a finding of "In Violation" or "Not In Violation" of the Hocking College Code of Conduct. The outcome of the judicial process will not be used to modify or validate the specific consequence as decided by the individual faculty/program or academic unit, but may be used to determine future Judicial consequences, in demonstrating a pattern of behavior on the part of the student.

Further information pertaining to Academic Misconduct can be found by contacting the Office of Student Rights and Responsibilities and Judicial Affairs, JL 269, or by referring to the Student Code of Conduct found on the Hocking College website (www.hocking.edu).