

**ZOOL 1014**  
**Basic Human Anatomy and Physiology**  
**Term V**

**Dr. Meador/Associate Professor**

**Contact Information**

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**Course Description:** A course in anatomy and physiology wherein the functions of each of the organ systems is studied. Emphasis will be placed on the nervous, musculoskeletal, cardiovascular, respiratory, excretory, and endocrine systems. Designed for majors in medical technology, radiology, home economics, physical education, psychology, and secondary education with teaching emphasis in biology. Lecture three hours. Laboratory three hours.

**Prerequisites:** BIOL 1004 or consent of instructor.

**Text:** Hole's Essentials of Human Anatomy and Physiology, 10 edition, Shier, D., Butler, J., and Lewis, R. McGraw-Hill, New York, NY 10020.

**Other Suggested References:** Online Learning Center [www.mhhe.com/shieress10](http://www.mhhe.com/shieress10). This site contains quizzing, animations and other activities to assist you.

**Evaluation and Grading**

This class consists of both lectures and labs and there is extensive overlap between them. Lecture material will be delivered via WebCt. Students will come to campus for all labs. All testing (lecture and lab) will take place during lab time.

You will need to listen to a minimum of 6 hours of lecture per week. The mp3 files are recordings of actual lectures. They are broken into 20-30 minute segments with an accompanying power point. You will come to lab 6 hours per week. You will need an additional 4-6 hours of study time per week.

You will have detailed outlines, power points and study guides for each test. Tests will consist of multiple choice, matching and written questions. The final exam will have the last lecture test, with some cumulative questions.

- **Source of Grades:** Your grade will be determined by adding all of the points you earn on lecture and laboratory tests, there are no out-of-class assignments. All tests will count toward your final grade. You can earn bonus points (4% of test value) any time a test score exceeds your average by 2%. You can not make bonus points on make-up tests.
- **Grading Scale** A = 90-100% B = 80-89% C = 70-79% D = 60-69% F = below 60%
- **Weight of individual assignments:** Tests are not weighted. They are recorded as points earned, not as a percent of the total.

## Learning Objectives/Course Outline

### ▪ Institutional Learning Outcomes:

*ASU-Beebe is committed to providing students with a broad-based educational experience and focuses, through general education coursework, on five essential learning outcomes: Communication, Critical Thinking, Mathematical Concepts and Application, Scientific Inquiry and Methodology, Society and Self. The learning objectives of all courses are linked to these institutional learning outcomes to ensure that outcomes of individual courses are consistent with the university's institutional goals. These institutional essential learning outcomes can be viewed at [www.asub.edu](http://www.asub.edu).*

**Learning Objectives:** Upon completion of this course the successful student should be able to:

- Learn the basic chemical concepts.
- Learn the structures of cells and their function.
- Describe Epithelial, Connective, Muscle and Nerve Tissues.
- Learn muscle cell and nerve cell components and how they function.
- Be able to name the human muscles and bones.
- Learn the gross anatomy of the Central Nervous System and be able to name the components and their functions.
- Be familiar with the Peripheral Nervous System and Reflex activity.
- Be familiar with the Autonomic Nervous System (Sympathetic and Parasympathetic divisions and their functions.)
- Learn the Special Senses and how they function. (smell, taste, sight, hearing and feel as well as equilibrium)
- Differentiate between Endocrine and Exocrine systems.
- Be able to describe blood and its elements and functions.
- Learn the anatomy of the heart and the functions of its components.
- Learn the structures of the blood vessels in the Cardiovascular System, and how they function.
- Learn the structure and functions of the Lymphatic System.
- Learn the structure and function of the Respiratory System, including gaseous exchange.
- Learn the structure and function of the Digestive System.
- Understand Metabolism and Regulation of Body Temperatures.
- Learn the components of the Urinary System and their functions.
- Be familiar with Acid - Base balance
- Understand the Reproductive System.

**Attendance/Participation Policy:** Students are expected to attend all lectures and participate in all labs. If you miss 2 labs, I can drop you with an F.

- The textbook should be brought to class. Diagrams and pictures from the book are frequently referred to during the laboratory.
- Read and study all chapters and exercise indicated on the general outline.
- Study daily, and review often.
- Do all lab assignments. Make good use of free lab time - use aids such as models, etc., which are not available elsewhere.
- You must, using all the methods above, come to know and understand the subject

matter of each unit. You must be able to respond, IN WRITING, to any question relating to the subject matter. **All terms must be spelled correctly.**

**Make-up/ Late Work Policy:** Students are expected to notify me when circumstances prevent taking a scheduled test. Ordinarily, only one lecture test may be made up. Make up tests must be arranged with me as soon as you return to class. Laboratory exams must be taken on the scheduled day. **If you make-up a laboratory test or more than 1 lecture test, 10% will be deducted from your grade for that test.** You can not make bonus points on make-up tests.

**ACADEMIC HONESTY POLICY:** Cheating in any form - including but not limited to looking at a classmate's test, unauthorized possession of exams, or using unauthorized materials during exams -may result in the student being dropped from the class with an "F" or being suspended from the University. The University's standards for academic honesty are set forth in the Student Handbook.

**Accommodation Statement:** It is the policy of ASU-Beebe to accommodate students with disabilities, pursuant to federal law and state law. Any student with a disability who would like to request accommodations please contact Tisha Marzewski, Counselor/Coordinator of Disability Services at 501-882-8906 at the ASU-Beebe campus. Documentation review and accommodations for all ASU-Beebe system students with disabilities are authorized by the Counselor/Coordinator of Disability Services.

**Disclaimer:** This syllabus represents a "best" plan for the course, but, as with most plans, it is subject to changes made necessary by time, space, and personal constraints. The course outline, as well as exam and assignment dates, may change as the course progresses. Students should attend all class meetings to learn of any schedule changes.

Alert Xpress 501 682-7424. Go to [asub.edu](http://asub.edu) to sign up.

Tornado Shelter Areas

**ASU-Beebe Academic Buildings:**

Advanced Technology & Allied Health-----Hallways away from doors and windows  
Agriculture Technology - John Deere -----Evacuate to Business & Agriculture.  
Business & Agriculture-----Hallways away from doors and windows  
Farm Classroom Building-----Evacuate building and seek shelter in a secure building.  
Howell Music Center -----Classroom 108  
Owen Center -----1<sup>st</sup> Floor hallways away from doors and windows  
Science Building -----1<sup>st</sup> Floor hallway away from doors and windows  
University Center-----East & west hallways  
Veterinary Technology-----Evacuate building and seek shelter in a secure building.  
Walter D. England Center -----Classrooms 101, 111, 113, 115, 117, 123 & 125

WEEK	DATE	LECTURE	LAB
1	5/14	Introduction to A & P Chapt 1 Organization of the Body Cell Chemistry Chapter 2	Bones Chapter 7
2	5/18	Cell Membrane, Organelles Cell Transport , Chapter 3	<b>Bone Test</b>
	5/21		<b>TEST 1 Chapters 1-3</b> Epithelial Tissue
3	5/25	Memorial Day	
	5/28	Epithelial Tissue Glands, Connective Tissue, Chapter 5	Epithelial Cont. Connective Tissue
4	6/1	Skin, Bone, Joints Chapter 6, 7	<b>Lab Test on Tissues</b> Muscle Identification
	6/4		<b>TEST 2</b> Chapters 5-7 Muscle Actions
5	6/8	Muscle Chapter 8 Nervous System Chapter 9 Reflexes, Meninges, Cerebrum Brain, CSF, Spinal Cord & Cranial Nerves	<b>Lab Test on Muscle</b> Brain, spinal cord
	6/11		<b>TEST 3 Chapters 8 &amp; 9</b> Eye & Ear models
6	6/15	Autonomic Nervous System Cardiovascular Chapter 13	<b>Lab Test on Nervous System</b> Heart Models
	6/18	Blood vessels, BP Blood and Blood Clotting Chapter 12	Blood Vessels RBC, WBC

7	6/22		<b>TEST 4 Chapters ANS, 10, 13 &amp; 12</b> <b>Blood Typing</b>
	<b>6/23</b>	<b>Last Day to Drop a Class</b>	
	6/25	WBC, Immunity and Lymphatic System, Chapter 14 Digestion Chapter 15 Respiration Chapter 16	<b>LAB TEST on Cardiovascular System</b> Digestion Models
8	6/29		<b>TEST 5</b> <b>Chapters 14, 15, 16</b> Respiration models/pictures Urinary models
	7/2	Urinary System Chapt 17 Endocrinology Chapt 11 Reproduction Chapt 19	<b>LAB TEST ON Respiration, Digestion</b> Endocrine & Reproductive Models & pictures
9	7/5		<b>LAB TEST on Urinary Endocrine and Reproduction</b>
	7/9	<b>FINAL EXAM</b>	