

INSTRUCTIONAL SYLLABUS
Angelina College Science and Mathematics Division
BIOL 2404 - General Anatomy and Physiology Lecture (MW)

I. BASIC COURSE INFORMATION

- A. Course Description (as stated in the bulletin, including necessary pre-requisite courses, credit hours)
Biology 2404. General Anatomy and Physiology. Four hours credit. A study of the basic anatomical and physiological principles of the skeletal, integumentary, muscular, respiratory, cardiovascular, lymphatic, digestive, urinary, reproductive, nervous, and endocrine systems. Three lecture and two laboratory hours each week (Lab fee required).
- B. Intended Audience: The intended audiences are students majoring in a health career field such as respiratory care or radiography and others needing a sophomore level course in the natural sciences that emphasizes laboratory-based coursework.
- C. Instructor: Instructor Name: Farmer
Email Address: tfarmer@angelina.edu
Office: S110
Office Phone: (936) 633-5469
Office Hours: TR 10:50a - 1:20p; Friday by appointment
- D. Time/Location: Lecture: MW, 8-9:20a, S215
Lab: MW, 9:30-10:50p, S125

II. INTENDED STUDENT OUTCOMES

- A. Core Competencies (Basic Intellectual Competencies)
1. Critical Thinking: To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
 2. Communication: To include effective development, interpretation and expression of ideas through written, oral and visual communication.
 3. Empirical and Quantitative Skills: To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.
 4. Teamwork: To include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.
- B. Course Learning Outcomes for all Sections.
1. Describe, analyze, and obtain a basic understanding of chemistry and biochemistry's influence on human anatomy and physiology.
 2. Compare, describe, and identify the structures and functions of various types of cells and cellular organelles in the human body.
 3. Compare, describe, and identify the structures and functions of tissue types in the human body.
 4. Describe, analyze, and obtain a basic understanding of the anatomy and physiology of organ systems in the human body, including specific structures and functions of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, reproductive, digestive, respiratory, and urinary systems.
 5. Demonstrate comprehension of the interconnectivity of organ systems of the body, and how they contribute to organismal health, as well as potential consequences and health concerns when one or more of the structures associated with organ systems of the body fail to operate properly.

III. ASSESSMENT MEASURES:

- A. Assessments for the Core Objectives
1. Critical Thinking: Students will evaluate and analyze a subject related worksheet that is presented to them during a physiology topic. They will then answer essay questions on the worksheet, and the Angelina College (AC) Critical Thinking Rubric will be used to assess each student's critical thinking skills and correctness.

2. Communication: Students will work in groups will write a report to communicate information about a disease/disorder related to physiology. The Angelina College (AC) Communication Rubric will be used to assess each student's communication skills and correctness.
3. Empirical & Quantitative Skills: Students will work in groups to analyze an assigned physiology subject. They will then answer questions through elementary calculations, and the Angelina College (AC) Empirical & Quantitative Skills Rubric will be used to assess each student's empirical and quantitative skills and correctness.
4. Teamwork: Students will work in groups will write a report to communicate information about a disease/disorder related to physiology. The Angelina College (AC) Teamwork Rubric will be used to assess each student's teamwork skills and correctness.

IV. INSTRUCTIONAL PROCEDURES

This course will be taught using a combination of lectures and laboratory exercises that complement and supplement lecture material. Audio-visual materials, models, and laboratory experiments will be employed to enhance lecture and laboratory presentations.

V. COURSE REQUIREMENTS AND POLICIES

A. Required Textbooks, Materials, and Equipment

1. Essentials of Human Anatomy and Physiology, (Pearson). 12th Edition, Marieb.
2. Laboratory Manual to Accompany Essentials of Human Anatomy and Physiology, (Pearson). 7th Edition. Marieb.
3. All lecture notes, power point presentations, & supplementary materials necessary for the course will be available via blackboard.

C. Course Policies – This course conforms to the policies stated in the AC Handbook.

VI. ACADEMIC ASSISTANCE

Educational Accommodations – If you have a disability (as cited in Section 504 of the Rehabilitation Act of 1973 or Title II of the Americans with Disabilities Act of 1990) that may affect your participation in this class, you may fill out the Educational Accommodations application within your AC Portal, under the “Student Services” tab. A Student Success team member will contact you once the application is received. At a post-secondary institution, you must self-identify as a person with a disability in order to receive services; for questions regarding the application process you can visit the Office of Student Success and Inclusion in the Student Center (Room 200) or email access@angelina.edu. To report any complaints related to accommodations, you should contact Annie Allen, Director of Student Success & Inclusion, in Room 200 of the Student Center. You may also contact Ms. Allen by calling (936) 633-4509 or by emailing aallen@angelina.edu. To report discrimination of any type, contact Steve Hudman, Dean of Student Affairs, at (936) 633-5292 or shudman@angelina.edu.

Attendance – All students are expected to attend all scheduled classes and examinations and to be on time. Students who know they will be absent in advance should contact the instructor as soon as possible by e-mail or telephone. The instructor will determine whether or not an absence is excused. **IT IS THE STUDENT'S RESPONSIBILITY TO DROP THE COURSE** to avoid a potentially failing grade, however any student with 3 consecutive, or 4 cumulative absences may be dropped by the instructor regardless of the potential end of semester grade. The last day to drop the course with a “W” is (insert drop date).

Course Conduct

1. Absolutely no cell phone use is allowed during labs or class.
2. No Food, drinks, or tobacco in class.
3. Courteous and respectful behavior will be expected in class at all times.

VII. COURSE OUTLINE: Description of the Course Activities including due dates, schedules, and deadlines.

Lecture Schedule

Date	Topic & Graded Assignments	Chapter
14-Jan	Introduction, The Human Body	1
16-Jan	Chemistry	2
23-Jan	Chemistry	2
28-Jan	Cells	3
30-Jan	Cells, Skin & Body Membranes	4
4-Feb	Exam 1	
6-Feb	Skeletal System	5
11-Feb	Skeletal System	5
13-Feb	Muscle System	6
18-Feb	Muscle System	6
20-Feb	Nervous System	7
25-Feb	Nervous System	7
27-Feb	Exam 2	
4-Mar	Endocrine System	9
6-Mar	Endocrine System	9
18-Mar	Blood	10
20-Mar	Cardiovascular	11
25-Mar	Cardiovascular	11
27-Mar	Lymphatic System	12
1-Apr	Exam 3	
3-Apr	Respiratory System	13
8-Apr	Respiratory System	13
10-Apr	Digestive System	14
15-Apr	Digestive System	14
17-Apr	Urinary System	15
22-Apr	Urinary/Reproductive System	15
24-Apr	Reproductive System	16
29-Apr	Exam 4	
1-May	Review	
6-May	Final Exam - See Final Ex Schedule	

Lab Schedule

Date	Topic & Graded Assignments	Activity	Chapter
14-Jan	Lab Safety & Language of Anatomy	Safety contract, Muscle models	1
16-Jan	Organ Systems and Cells	Muscle Models	2, 3
23-Jan	Classification of Tissues	Introduction to the microscope / histology slides	5
28-Jan	Tissues Continued, Skin	Histology slides, Skin model	5, 6
30-Jan	Exam 1		
4-Feb	Skeleton Overview	Skeleton models / Bone box	7
6-Feb	Axial Skeleton	Skeleton models / Bone box	8
11-Feb	Appendicular Skeleton	Skeleton models / Bone box	9
13-Feb	Joints and Body Movements	Handout	10
18-Feb	Muscular System	Muscle models	12
20-Feb	Muscles/Nervous System	Muscle models, Brain models	12, 13
25-Feb	Nervous System (Brain Dissection)	Brain dissection	13, 14
27-Feb	Exam 2		
4-Mar	Special Senses (Eye Dissection)	Eye models, Ear models, Eye dissection	17
6-Mar	Endocrine System (Handout)	Endocrine Physiology Handout	18
18-Mar	Blood (Blood Typing)	Blood typing	19
20-Mar	Cardiovascular (Heart Dissection)	Heart models, Heart dissection	20
25-Mar	Cardiovascular (Blood Pressure)	Blood pressure and pulse lab	22
27-Mar	Exam 3		
1-Apr	Respiratory System	Respiratory system models	23
3-Apr	Respiratory Physiology (Handout)	Respiratory volumes handout	24
8-Apr	Digestive System	Digestive system models	25
10-Apr	Digestive System Continued	Digestive system handout	25
15-Apr	Urinary System (Kidney Dissection)	Urinary system models, Kidney dissection	26
17-Apr	Reproductive System	Reproductive models	27
22-Apr	Fetal Pig Dissection	Fetal pig dissection	
24-Apr	Exam 4		
29-Apr	Open Lab - Final Review		
1-May	Lab Final Exam		

VII. EVALUATION AND GRADING

TOTAL PERCENTAGE FINAL GRADE

90+ %	A
80 – 90%	B
70 – 80%	C
60 – 70%	D

Lecture Grade = 400 points from Lecture Exams
 100 points from Quizzes, Exercises and Research project
100 points from Final Exam
 600 points available

The final exam grade may be used to replace the lowest test grade.

Lab Grade = 400 points from Lab Exams
100 points from Quizzes and Exercises
 500 points available

Final Course Grade = (Lect points you earn / 600) x 0.6
(Lab points you earn / 500) x 0.4
Maximum of 100 points

Testing Procedures

Lecture exams will be multiple choice and matching questions. Missed exams may be arranged at the instructor's discretion.

Final Exam: The comprehensive final exam will be taken in the lecture portion of this course, and will include both lecture and lab material .

*** STUDENTS ARE REQUIRED TO PROVIDE THEIR OWN SCANTRONS (FORM 882-E) FOR EACH EXAM!**

****** The instructor may modify the provisions of this syllabus to meet individual class need by informing the class in advance as to the changes being made.