

INSTRUCTIONAL SYLLABUS  
Angelina College Science and Mathematics Division  
BIOL 2404 - General Anatomy and Physiology - Online

**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: Todd 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: Online

**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 video lectures and online laboratory exercises that complement and supplement lecture material. Audio-visual materials, virtual models, and online laboratory experiments will be employed to enhance lecture and virtual laboratory presentations.

#### **V. COURSE REQUIREMENTS AND POLICIES**

##### **A. Required Textbooks, Materials, and Equipment**

1. Essentials of Human Anatomy and Physiology, (Pearson). 12<sup>th</sup> Edition, Marieb.
2. MasteringA&P for Marieb, Essentials of Human Anatomy & Physiology 12th Edition
3. Laboratory Manual to Accompany Essentials of Human Anatomy and Physiology, (Pearson). 7<sup>th</sup> Edition. Marieb.
4. All lecture notes, power point presentations, & supplementary materials necessary for the course will be available via blackboard.
5. Access to a computer with internet and speakers/headphones
6. Access to a testing center or ProctorU
7. Access to a printer

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](mailto: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](mailto:aallen@angelina.edu). To report discrimination of any type, contact Steve Hudman, Dean of Student Affairs, at (936) 633-5292 or [shudman@angelina.edu](mailto: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).

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

**Lecture Outline:**

<b>Lecture Outline</b>			
<b>Week</b>	<b>Date</b>	<b>Topic</b>	<b>Online Homework</b>
1	14-Jan	Introduction (Ch 1)	Chapter 1 Assessment, Discussoin 1
2	22-Jan	Chemistry (Ch 2)	Chapter 2 Assessment, Discussoin 2
3	28-Jan	Cells (Ch 3)	Chapter 3 Assessment, Discussoin 3
4	4-Feb	Skin & Body Membranes (Ch 4) <b>Exam 1 (Ch 1 - 4)</b>	Chapter 4 Assessment, Discussoin 4
5	11-Feb	Skeletal System (Ch 5)	Chapter 5 Assessment, Discussoin 5
6	18-Feb	Muscle System (Ch 6)	Chapter 6 Assessment, Discussoin 6
7	25-Feb	Nervous System (Ch 7) <b>Exam 2 (Ch 5 - 7)</b>	Chapter 7 Assessment, Discussoin 7
8	4-Mar	Endocrine System (Ch 9)	Chapter 9 Assessment, Discussoin 8
9	18-Mar	Blood (Ch 10)	Chapter 10 Assessment, Discussoin 9
10	25-Mar	Cardiovascular (Ch 11)	Chapter 11 Assessment, Discussoin 10
11	1-Apr	Lymphatic System (ch 12) <b>Exam 3 (Ch 9 - 12)</b>	Chapter 12 Assessment, Discussoin 11
12	8-Apr	Respiratory System (Ch 13)	Chapter 13 Assessment, Discussoin 12
13	15-Apr	Digestive System (Ch 14)	Chapter 14 Assessment, Discussoin 13
14	22-Apr	Urinary System (Ch 15)	Chapter 15 Assessment, Discussoin 14
15	29-Apr	Reproductive System (Ch 16) <b>Exam 4 (Ch 13 - 16)</b>	Chapter 16 Assessment, Discussoin 15
16	6-May	<b>Final Exam (All Chapters)</b>	

**Lab Outline:**

<b>Week</b>	<b>Date</b>	<b>Lab Outline</b>	<b>Lab Exercise</b>
1	14-Jan	Language of Anatomy Handout	1
2	22-Jan	Organs and Organ Systems	2
3	28-Jan	Cells Handout	3
4	4-Feb	Classification of Tissues Handout <b>Lab Exam 1</b>	5
5	11-Feb	Integumentary System Handout	6
6	18-Feb	Skeletal System Handout	8, 9
7	25-Feb	Muscular System Handout <b>Lab Exam 2</b>	12
8	4-Mar	Nervous System (Brain) Handout	13, 14
9	18-Mar	Nervous System (Nerves) Handout	14
10	25-Mar	Special Senses Handout	17
11	1-Apr	Endocrine System Handout <b>Lab Exam 3</b>	18
12	8-Apr	Blood and Cardiovascular Handout	19, 20
13	15-Apr	Respiratory Handout	23
14	22-Apr	Digestive Handout	25
15	29-Apr	Urinary Handout <b>Lab Exam 4</b>	26
16	6-May	Reproductive Handout <b>Final Lab Exam</b>	27

## VII. EVALUATION AND GRADING

TOTAL PERCENTAGE	FINAL GRADE
90+ %	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
<60%	F

Lecture Grade = 400 points from Lecture Exams  
50 points from online homework  
50 points from discussion posts  
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 Lab Final  
400 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.