

BIOL 2401 Anatomy and Physiology I
Instructional Syllabus

I. BASIC COURSE INFORMATION

A. Course Description

Anatomy and Physiology I is the first part of a two course sequence. It is a study of the structure and function of the human body including cells, tissues and organs of the following systems: integumentary, skeletal, muscular, nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis. Prerequisite: TSI exempt, or passing scores on all sections of TSI Assessment Test (TSI complete). Three lecture and two lab hours each week. Lab fee.

Intended Audience

This course is the first semester of the two-semester human anatomy and physiology course sequence, continued as BIOL 2402. The intended audience is any student needing the first semester of a sophomore level course in human anatomy and physiology. It is a laboratory-based course designed for those pursuing a degree in health related careers and/or pre-professional course work (i.e. nursing, pre-medical, pre-dental, etc.).

B. Instructor

Instructor's Name: Suzanne Kouts

Office Location: W103

Office Phone: 936-630-4118

E-mail Address: skouts@lufkinisd.org

Conference Period: First – 8:10 – 9:25

II. INTENDED STUDENT OUTCOMES:

A. Core Objectives Required for this Course

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 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 (ACGM Lower Division Academic Course Guide Manual; <http://www.thecb.state.tx.us/reports/pdf/6309.pdf?CFID=20849286&CFTOKEN=77757605>)

Upon successful completion of this course, students will:

1. Use anatomical terminology to identify and describe locations of major organs of each system covered.
2. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.
3. Describe the interdependency and interactions of the systems.
4. Explain contributions of organs and systems to the maintenance of homeostasis.
5. Identify causes and effects of homeostatic imbalances.
6. Describe modern technology and tools used to study anatomy and physiology.

III. ASSESSMENT MEASURES:

A. Assessments for the Core Objectives

1. **Critical thinking:** Students will identify, organize, and recall relevant information and demonstrate an in-depth understanding through completing an assignment / worksheet.
2. **Communication:** Students will organize, analyze, and convey effective communication through writing a report.
3. **Empirical and Quantitative Skills:** Students will demonstrate their abilities to represent, calculate, interpret, and analyze empirical and quantitative data by completing an assignment / worksheet.
4. **Teamwork:** Students will demonstrate their abilities to communicate effectively with team members by evaluating one another after working through activities together.

THE INSTRUCTOR WILL SUBMIT ALL ASSESSMENTS BY December 14

B. Assessments for Course Learning Outcomes

1. Students will use anatomical terminology to identify and describe locations of major organs of each system covered by answering written questions during lecture activities, on lecture exams, and by orally answering questions during presentations and class activities.
2. Students will explain interrelationships among molecular, cellular, tissue, and organ functions in each system by answering questions during lecture activities and on lecture exams.
3. Students will describe the interdependency and interactions of the systems by answering written questions during lecture activities and on lecture exams.
4. Students will explain contributions of organs and systems to the maintenance of homeostasis by answering written questions about case studies and on lecture exams.
5. Students will identify causes and effects of homeostatic imbalances by answering embedded exam questions and by answering written questions about case studies and current advances in medicine.
6. Students will describe modern technology and tools used to study anatomy and physiology by answering written questions about case studies or writing critical analyses of current medically related journal articles.

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 dissection of specimens will be employed to enhance lecture and laboratory presentations.

V. COURSE REQUIREMENTS AND POLICIES:

A. Required Textbooks, Materials, and Equipment:

1. Human Anatomy and Physiology by Elaine Marieb (Benjamin/Cummings), Tenth Edition.
2. Human Anatomy and Physiology Laboratory Manual by Elaine Marieb (Benjamin/Cummings), Eleventh Edition.
3. Student Study Guide to Accompany Human Anatomy and Physiology by Elaine Marieb (Benjamin Cummings) (OPTIONAL)
4. CD ROM - Packaged with textbook (OPTIONAL)
5. Access to Google Classroom. Obtaining a copy of the course **Lecture Notes, Lectures, Lecture final exam review, Lab study guide, Quizzes, Grades, and Other valuable resources** are highly recommended by the instructor for success in the classroom. Join the Bio 2401 Google Classroom and register for Mastering A & P Modified the first day of school.

B. Course Policies – (This course conforms to the policies of Angelina College as stated in the Angelina College Handbook.)

1. **Attendance:** Attendance is required as per Angelina College Policy and will be recorded every day. Any student with three (3) consecutive absences or four (4) cumulative absences may be dropped from the class. Records will be turned in to the academic dean at the end of the semester. Do not assume that non-attendance in class will always result in an instructor drop. **You must officially drop a class or risk receiving an F;** this is official Angelina College Policy.

3. Additional Policies Established by the Individual Instructor:

STUDENT CONDUCT

A positive environment for learning will be maintained by students being courteous to each other and to the instructor.

- Arrive in class on time and do not prepare to leave before class is over, unless special arrangements have been made prior to class with the instructor.
- No eating in class.
- Cell phones should be on “vibrate only” (silent mode) or turned off.
- Cheating on tests is not tolerated as per Angelina College policy and may result in expulsion from the course. Plagiarism is not tolerated and will result in a zero for any assignment in which it is detected.
- *If a student does not attend a class, it is the student’s responsibility to contact the instructor for missed material or information.*

VI. COURSE CONTENT: This is the plan, but is subject to change as unforetold events may occur.

Lecture content, schedule, and reading assignments

Week	Lecture	Lab
1	Introduction The Human Body (Ch. 1)	The Human Body (Ex. 1); Spaghetti/jello models
2	Chemistry (Ch. 2) Lecture Quiz 1A Intro/Human Body	Organ Systems (Ex. 2) Microscope (Ex. 3) – MICROSCOPE & LETTER "e" SLIDES; Lab Quiz 1A Intro/Human Body
3	Cells (Ch. 3) Lecture Quiz 1B (Chemistry)	Cell (Ex. 4)
4	Cells (Ch. 3) Lecture Quiz 1C (Cells/Transport) Lecture Quiz 1D (Nucleus – Protein Synthesis)	Mitosis Assessment
5	Lecture Exam #1 (Intro, Chemistry, Cells) Integumentary System (Ch.5)	Tissues (Ex. 6) – HISTOLOGY SLIDES Lab Quiz 1B (Cells/Histology) Skeleton (Ex. 8, part 1 & 2) – SKELETON MODELS
6	Bones (Ch. 6)	Lab Exam #1 (intro – Histology) Skeleton (Ex. 8 complete) – SKELETON MODELS
7	Bones (Ch. 6) Lecture Quiz #2 (Skin/Bones)	Skeleton (Ex. 9) – SKELETON MODELS Skeleton (Ex. 10) - SKELETON MODELS
8	Muscles (Ch. 9)	Articulations (Ex. 11) – ARTICULATED JOINT / SKELETON MODELS Lab Quiz #2 (Bones/Bone Markings) Lab Exam #2 (Bones/Bone Markings)
9	Lecture Exam #2 (Skin/Bones) Muscles (Ch.9)	Gross Anatomy of Muscular System (Ex. 13) – MUSCLE MODELS
10	Fund. Of Nervous System (Ch. 11)	Lab Quiz #3 (Muscles/Joints) Lab Exam #3 Muscles/Joints
11	CNS (Ch.12) Lecture Quiz 3A (Muscles) Lecture Quiz 3B (Nervous)	Gross Anatomy of the Brain & Cranial Nerves (Ex. 17) – BRAIN MODELS & SHEEP BRAINS Activity 1 External Brain Activity 2 Internal Brain
12	CNS (Ch.12) Lecture Exam #3 (Muscles & Nervous)	
13	PNS (Ch. 13) Lecture Quiz 4A CNS	Gross Anatomy of the Brain & Cranial Nerves (Ex. 17) – BRAIN MODELS & SHEEP BRAINS Activity 3 Testing Cranial Nerves; Sheep brain dissection
14	PNS (Ch. 13); ANS (Ch. 14) Lecture Quiz 4B PNS/ANS	Lab Quiz 4 (Neuron – Special Senses) Spinal Cord & Spinal Nerves (Ex. 19) Activity 1 -3 Lab Exam #4
15	Thanksgiving Holiday Lecture Exam #4	
16	Lecture Exam #4 (Ch. 11 -14)	Special Senses (Ex. 23, 25, 26) – SHEEP EYES
17	Disease Research Due	Lab Exam #4 (All of Nervous System)
18	Final Exam	

VII. EVALUATION AND GRADING:

A. Grading Criteria (percents, extra credit, etc.)

Questions for lecture exams and quizzes will be taken from lecture notes and textbook chapters. **It is important for the student to understand that not all of the textbook information will be discussed in class, thus it is the students responsibility to read and study all chapter material (besides lecture notes) in preparation for an exam.** Combined scores from lecture and laboratory constitute the final grade in the course:

Lecture

4 Lecture Exams = 100 points each
Lecture Quizzes = 100 points total (quizzes are averaged to reach this total)
Lecture Comprehensive Final = 100 points
 $600 \div 6 = 100$ points

Lab

4 Lab Exams = 100 points each
Lab Quizzes = 100 points total (quizzes are averaged to reach this total)
Lab Comprehensive Final = 100 points
 $600 \div 6 = 100$ points

Total course grade will be determined according to the following:

Lecture Average (60%)	$100 \times .60 = 60$
Lab Average (40%)	$100 \times .40 = \underline{40}$
	100

B. Determination of Grade (assignment of letter grades)

Grades for the course will be based on the following guidelines:

- A = 90 - 100 points
- B = 80 - 89 points
- C = 70 - 79 points
- D = 60 - 69 points
- F = 59 points

C. Lecture Exams: There will be four lecture exams (worth a total of 100 points) that will be given as shown on the class schedule. These four exams include multiple-choice, short answer questions, and/or "essay". The final exam is worth 100 points and will be 100% comprehensive. The grade on the comprehensive lecture final exam can replace the single lowest grade on the regular exams. **Make-up exams are to the discretion of the instructor.**

D. Lab Exams: There will be four lab exams (worth a total of 100 points) that will be given as shown on the class schedule. Lab exam questions will be fill- in-the-blank and may also include multiple-choice and short-answer questions. The grade on the comprehensive lab final exam can replace the single lowest grade on the regular exams. **Make-up exams are to the discretion of the instructor.**

E. Quizzes: A series of quizzes will be given for lecture and lab. The lecture quizzes are worth a possible 100 points and are averaged to count as one exam grade for lecture. The lab quizzes are worth a possible 100 points and are averaged to count as one exam grade for lab. One low lecture quiz grade and one low lab quiz grade for the semester will be dropped. **QUIZZES WILL BE GIVEN WEEKLY THROUGH Google Classroom. THERE WILL BE NO MAKE-UPS FOR MISSED QUIZZES.**

*See the graphic organizer illustrating the process for grade determination. In order to comply with both the Angelina College and LHS grading policies, lecture quizzes and lab quizzes will be marked as **NOT COUNTED**. They will be manually averaged and entered into a column at the end of the term. There will be one column titled "Lab Quiz Average" which will be weighted at 40%, and one column titled "Lecture Quiz Average" which will be weighted at 60%, allowing the quiz averages to be weighted appropriately in Skyward

and in compliance with Angelina College's requirements.

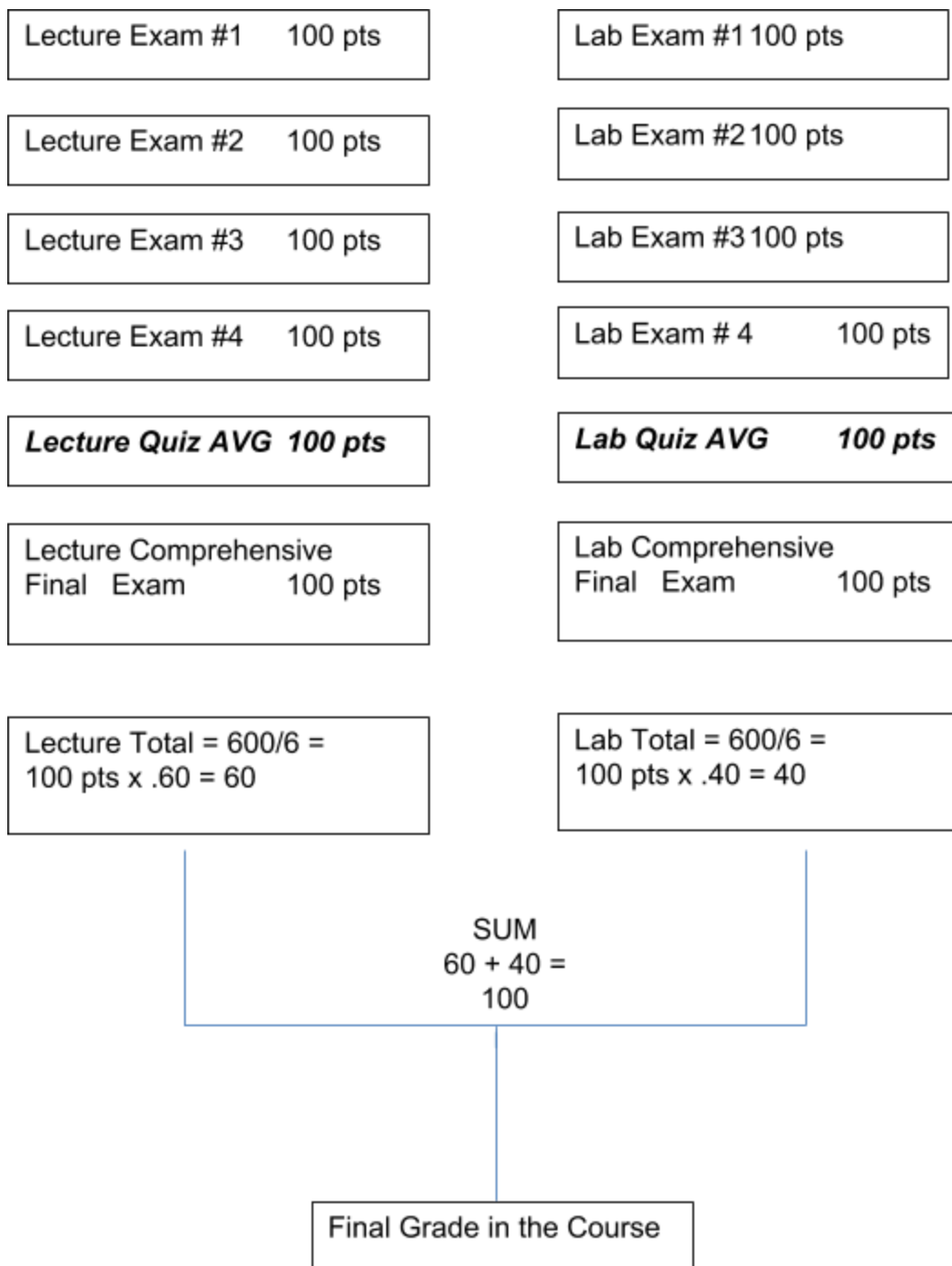
This means that your average on the progress reports will not include the quizzes until the end of the term, even though they are recorded there. You may manually calculate your current average at any time by following the process above under **VII. A. Evaluation and Grading**. You may also look at the final average to see your actual current average through Family Access.

VIII. SYLLABUS MODIFICATION:

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

IX. GRAPHIC REPRESENTATION OF GRADING PROCEDURE

Remember, the Lecture Quizzes and Lab Quizzes are not included in the average until the end of the term. This allows a cumulative average to be used in the final grade calculation.



Example of how to interpret the grade sheet:

A hypothetical student's grades for the first 9 weeks are shown below.

For assignment #1 (Lecture Quiz 1A), the student made a 90, assignment #2 (Lab Quiz 1A) is a 80, assignment #3 (Lecture Quiz 1B Chemistry) is a 96, Column #4 is the first Progress Report.

Notice that assignments # 1,2,3,5,6, and 8 are in bold print. This means they have been marked "no count" (but individual quiz grades are recorded and the student can see what they made in Family Access). The PR1 average did not show up on the first progress report because the only grades at that point were quizzes and marked "no count". I will pick a column to temporarily mark as "count" so you will have a number for my class for PR1, but after PR1 grades are pulled, I will have to go back in and mark that grade as a 'no count' so it will calculate properly at the end of the semester. In reality, until the end of the semester, your average consists of Lecture Exams and Lab Exams.

To know how you are faring in the course, look at column 21, the Final average. This student's current grade is a 73. Lecture quiz grades for the entire semester are averaged manually and entered in column 16 (Lecture Quiz Average). Likewise, lab quizzes are averaged manually and entered in column 17 (Lab Quiz Average). Column 21 (FIN) shows the student's average with the Lecture Quiz Average (Column 16) counting as one Lecture Exam (worth 60%) and the Lab Quiz Average (Column 17) counting as 1 Lab Exam (worth 40%).

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Teacher: SUZANNE KOUTS																School Year: 2017-2018		Period: 2		SUZANNE KOUTS	
Course: S6AHA0 / 01 DC A&P HUMAN SYSTEMS																Room #: W-123		S6AHA0 / 01			
Assignment	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Week/Day	W02-W	W02Th	W03-T		W04-T	W04-F	W05-M	W05Th	W06-M							W18Th	W18Th	2ND		SM2	FIN
Due Date	08/23	08/24	08/29		09/05	09/08	09/11	09/14	09/18							12/14	12/14				
Category	M	D	M		M	M	M	D	D							M	D				
01.	90	80	96		100	85	50	78	70	58			58			93	80	88	88	73	
02.	*	*	*		*	*	*	*	*	*						*	*				
03.	*	*	*		*	*	*	*	*	*						*	*				
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16.	*	*	*		*	*	*	*	*	*						*	*				

#	Description	Fam/Stu	#	Description	Fam/Stu	#	Description	Fam/Stu
1	Lecture Quiz 1A Intro	y/y	8	Lab Quiz 1B	y/y	15	PR4 Grade Mark	
2	Lab Quiz 1A	y/y	9	Lab Exam 1	y/y	16	Lecture Quiz Average	
3	Lecture Quiz 1B Chemistry	y/y	10	PR2 Grade Mark		17	Lab Quiz Average	
4	PR1 Grade Mark		11	1ST Grade Mark		18	2ND Grade Mark	
5	Lecture Quiz 1C	y/y	12	EX1 Grade Mark		19	EX2 Grade Mark	
6	Lecture Quiz 1D	y/y	13	SML Grade Mark		21	Final Grade - includes quiz averages	
7	Lecture Exam 1	y/y	14	PR3 Grade Mark				