

Course Syllabus
Biology 32: Human Anatomy & Physiology I
Bakersfield College, Fall 2017

Professor

Alexandra "Zannie" Dallara

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http://zanniedallarasciencepage.weebly.com

CRN # 72953	CRN # 72954
Lec T/Th 9:35-11:00 am (Delano STC 109)	Lec T/Th 9:35-11:00 am (Delano STC 109)
Lab T/Th 11:10-12:35 pm (Delano STC 107)	Lab T/Th 1:00-2:25 pm (Delano STC 107)

Required Text and Materials

Available at the Bakersfield College Bookstore:

- 1) Marieb, E; Hoehn, K, 2017. Anatomy & Physiology. 6thedition. (ISBN: 9780134712437)
- 2) Newton, C., 2017. Laboratory Exercises for Human Anatomy & Physiology – Biology 32.
- 3) Newton, C., 2017. Lecture Notes for Human Anatomy & Physiology – Biology 32.
- 4) Scranton's: 4 - form 882-E (green form with 50 questions on each side).
- 5) Binder 1.5-inch
- 6) Tabs to separate labs

Prerequisites

Reading - one level prior to transfer

Course Description

Biology 32 is the first part of a rigorous, two-semester integrated anatomy and physiology sequence that covers the structure, function, integration and homeostasis of the human body at the cellular, tissue, organ, organ system and organism level, including the integumentary, skeletal, muscular, nervous, sensory, cardiovascular, lymphatic, immune, respiratory, urinary, digestive, endocrine, and reproductive systems. This series meets the diverse needs of students seeking careers in allied health fields such as nursing, pharmacy, and physician's assistant.

Academic Honesty

Academic dishonesty in any form (including, but not limited to, cheating, copying test answers or outside assignments, sharing answers, using pre-prepared notes, text messages, or any other information, plagiarism, etc.) will not be tolerated and is grounds for immediate failure of the class assignment and/or test with a grade of F and serious disciplinary action by the college.

Student Learning Outcomes

At the conclusion of this course, students should be able to:

1. Describe and distinguish various roles of major classes of biomolecules in living cells.
2. Describe key structural features of different human cells and major tissue types.
3. Identify and describe the anatomy of the systems of the human body.
4. Identify key functions of major organ systems and the physiological mechanisms underlying their operation.
5. Relate structure and function at the cellular through system levels of organization of human body systems.
6. Describe structural or anatomical changes that occur in disease, injury or aging of the human body systems.
7. Demonstrate knowledge of metabolic and physiological disorders of the major organ systems.
8. Describe key functional features of different types of human cells and how they communicate.
9. Demonstrate an understanding of how organ systems of the body are integrated and regulated.
10. Demonstrate an understanding of how homeostasis is maintained in the body.
11. Analyze experimental data to demonstrate physiological principles.
12. Demonstrate an understanding of the scientific method, experimental design, and the philosophy of science.
Apply the scientific method and philosophy of science by designing components of and carrying out physiological experiments.

Attendance Policy

- Coming to all class meetings is absolutely mandatory. There is a direct correlation between attendance and your grade in the course, and you will not pass if you fail to show up.
- You are allowed to miss a total of three (3) class meetings throughout the semester; however, a student who is absent from more than three class meetings will either be dropped from the class or fail the course.
- No make-up quizzes, labs or exams will be given. Missed exams will be assigned a grade of zero.
- Lastly, promptness is expected of you; arriving to class late is NOT acceptable and you will be marked as absent if you are more than 15 minutes late to lecture or lab. In addition, tardiness may prevent you from taking quizzes and/or examinations, as extra time will not be allotted for those students who show up late.
- I have not created these guidelines to be overly stern or stringent, but to emphasize the importance of being present for all lecture and laboratory meetings and to best prepare you for a professional career.

Grading

Letter grades will be assigned as follows:

A = 603-670 points

B = 536-602 points

C = 469-535 points

D = 402-468 points

F = less than 402 points

(grades will not be rounded up or down)

<p>NOTE: <u>No exceptions</u> these standards are not subject to change.</p>

Course Requirements / Grading

Your final course grade will be based on the following:

3 LECTURE/LAB EXAMINATIONS @ 100 POINTS	300 points
1 LECTURE/LAB FINAL EXAMINATION	150 points
10 QUIZZES @ 10 POINTS	100 points
9 PRE-LAB ASSIGNMENTS @ 5 POINTS	45 points
2 PODCAST ASSIGNMENTS @ 5 POINTS	10 points
CHEMISTRY TAKE HOME ASSIGNMENT	10 points
3 CASE STUDIES @ 10 POINTS	30 points
ORAL PRESENTATION	10 points
LABORATORY NOTEBOOK	<u>15 points</u>
	670 points

- **Midterm and Final Examinations:** There will be three midterm examinations worth 100 points each and a 150-point cumulative final examination. Missed exams will be assigned a grade of zero. All examinations will cover material presented in both lecture and lab, and they will be administered using a written, multiple choice and practical exam format.
- **Quizzes:** Quizzes (totaling 10) will be given promptly at the beginning of lecture or lab. All quizzes will cover material presented in both lecture and lab, and they will be administered using an oral, laboratory practical exam format, short answer, matching, and/or fill-in items. They cannot be made-up. If you miss a quiz due to tardiness or an absence, the missed quiz will be assigned a grade of zero.
- **Oral Presentation:** You will be required to give a short oral presentation sometime this semester. Oral presentations will be conducted and graded as a clinical team, and assigned topics will be based on “learn lists” and models from selected components of the Skeletal System.
- **Laboratory Notebook:** You will be required to assemble a laboratory notebook that will contain ALL of the work you complete during the laboratory portion of this course. The notebook will be evaluated at the end of the semester for organization and completeness. Any missed assignments, questions, exercises or lack of organization will result in point deductions from your overall score.

The notebook itself should be a black, 1.5-inch, 3-ring binder with 21 numbered or lettered dividers that individually separate each laboratory exercise and case study, and you will need to format a “Table of Contents” that facilitates easy reference to each numbered or lettered section. Hand-in assignments that pertain to a particular laboratory exercise should be included in the section containing the laboratory exercise from which it was derived. Case studies should be located at the very back of the notebook, each one separated by its own divider as well.
- **Hand-in Assignments:** You will have a total of 15 assignments due throughout the semester. They will be based on selected pages from your lab manual, textbook, critical thinking questions, modules, podcasts, etc., and they must be turned in promptly at the due date. No late assignments will be accepted unless previous arrangements have been made. If you must be absent from a class meeting in which something is assigned, you are still responsible for the material covered, laboratory exercise, and submitting the assignment on

time. If you miss an assignment or fail to submit it on time due to tardiness or an absence, the missed assignment will be assigned a grade of zero.

- **Chemistry take-home assignment:** During the chemistry portion of the class you will be given one (1) take-home assignment that will reinforce and let you practice your knowledge of chemistry. If you are having trouble completing this assignment you should attend student hours or make an appointment with the tutoring center to obtain help.
- **Pre-Lab Assignments (PLA):** You will be required to complete nine (9) pre-lab assignments based on material found in your lab manual and textbook. PLA's can be found at the beginning of the corresponding lab in your manual. Each PLA is worth 5 points for a total of 45 points.
- **Podcast Assignments (Pod):** You will be required to listen to two (2) podcasts posted on the class website that deal with information from the course. Podcast instructions and podcast files can be found on your course Canvas page. Each podcast will be worth 5 points for a total of 10 points.
- **Case Study Assignments (CS):** You will have a total of three (3) case studies due throughout the semester worth 10 points each. They will be based on selected medical conditions associated with body systems and/or concepts that we will discuss throughout the course. Although case studies may be completed in groups, each student must submit his or her own in order to receive credit. Reading material to complete the assignment will be handed out separately, while the questions can be found in the back of your lab manual.

Special Accommodations

Students with disabilities needing accommodation, including those who had an IEP in high school, should make requests to Disabled Students Programs and Services, Counseling Center, CSS 40 or Delano room 1001 or by calling (661)395-4334 at BC or (661)720-2000 in Delano. All requests for accommodations require appropriate advance notice to avoid a delay in services. Please discuss approved accommodations with me so we can work together to ensure your access and success at BC.

Cell Phone/Electronic Communication Devices

Cell phones, pagers, and other such electronic devices must be turned off during class and lab time and securely stowed away. Communication by electronic devices, including but not limited to instant messaging, text messaging, and telephone, during class is strictly prohibited. Taking video of any kind or of any person (including me) during lecture or lab is also strictly prohibited. Use of electronic communication devices during examinations, exam debrief (or walkthroughs), or other graded activities may constitute grounds for serious disciplinary action. I do understand that emergency, family, or employment situations may at times require access to electronic communication services, so arrangements may be made with me in advance to accommodate those situations. Still, however, any exceptions granted for use during class time will NOT apply during any exam or testing situation.

Supplemental Instruction (SI)

Supplemental Instruction (SI) is offered for Biology 32 again this semester. SI sessions are group study opportunities that are scheduled at least two times per week. These sessions are facilitated by our SI Leaders Avery Kim and Caitlyn Lancaster who have successfully completed Biology 32 themselves and will be preparing SI sessions based on our course content. I strongly encourage you to attend SI sessions to ask questions about lecture and laboratory material and to develop learning and study strategies. Students who have participated in SI sessions in the past have typically earned higher exam scores and final course grades than students who did not participate in SI. SI attendance is voluntary, and please note that it is NOT a substitute for class attendance or individualized study time on your own outside of class.

Bio 32 Laboratory Safety Policies and Procedures

- No eating, drinking (including water) or smoking in the classroom, hallways or labs.
- Cell phones, pagers, and other such electronic devices must be turned off during class and lab time and securely stowed away.
- Memorize the locations of the emergency eyewash station, emergency shower, fire blanket and fire extinguisher. In the event of a fire, smother it with a blanket. If it involves your clothing or hair, never run. Stop, drop and roll.
- In the case of fire, explosion, earthquake or disaster, there are procedures posted by the door. Evacuate the classroom immediately and check in with the instructor. Do not leave the area until you have informed the instructor.
- In the case of an Active Shooter situation, it is important to be prepared and think about how you will respond beforehand, as these situations are dynamic and evolve rapidly. According to the Department of Homeland Security (DHS), you should 1) run, 2) hide, 3) fight. More information can be found on the Bakersfield College and Department of Homeland Security websites.
- Work in the lab only when supervised and perform only authorized experiments.
- Be prepared for each upcoming lab. Read each lab beforehand, and be aware of the safety measures required for each lab.
- Keep your work area clean and neat for the experiment, and wear appropriate clothing, lab coats, safety goggles or glasses if necessary.
- Shoes must be worn at all times while in the lab.
- Report any accident immediately to the instructor regardless of how minor it may appear. Be cautious if there is any bleeding or if a chemical is spilled or glass is broken.
- **Clean up your bench area before leaving the laboratory.** Please reassemble all models and return them back to their appropriate location(s). When you leave, the lab should look exactly like it did when you arrived.

Tentative Course Schedule for Fall 2017

Date	Lecture	Read	Lab	Notes
Aug 22	A&P Introduction, Attendance mandatory;			A: Lab pg. 5 A: Lab notebook A: Sign syllabus contract
Aug 24	Orientation to A&P	Ch. 1	Orientation to Human Body	D: Lab pg. 5 D: Syllabus A: Lab pg. 17 A: Chemistry take home
Aug 29	Inorganic Chemistry	Ch. 2	Metric Lab	Quiz #1 D: Lab pg. 17
Aug 31	Organic Chemistry	Ch. 2	Organic Molecules & Solution Lab	D: Lab Notebook A: Cellmates podcast
Sept 4: Last day to drop class with full refund Sept 5th: <i>Labor Day Holiday-No Class (Work on Chemistry take home)</i>				
Sept 7	Chemistry & Physiology: Cell introduction	Ch. 2&3	Microscope Lab	D: Chemistry take home A: Lab pg. 32-33
Sept 12	Cells I (structure & function)	Ch. 3	Cell & Mitosis Lab	Quiz #2 D: Lab pg. 32-33 A: CS #1
Sept 14	Cells II (mitosis & cancer)	Ch. 3	DNA Lab (pre-read text pgs. 90-102)	D: Cellmates podcast
Sept 19	Cells III (DNA & protein synthesis)	Ch. 3	Exam Review	Quiz #3 D: CS #1
Sept 21		EXAM I		
A: Lab pg. 44				

Date	Lecture	Read	Lab	Notes
Sept 26	Tissues I	Ch. 4	Tissue Lab (epithelial)	D: Lab pg. 44 A: Lab pg. 46-47 A: CS #2
Sept 28	Tissues II	Ch. 4	Tissue Lab (connective, muscle, nervous)	Quiz #4 D: Lab pg. 46-47 A: Lab page 50
Oct 3	Integumentary System	Ch. 5	Integumentary models; Skull intro.	D: CS #2 D: Lab pg. 50
Oct 5	Bones & Skeletal Tissue	Ch. 6	Skeletal tissue & Skull Lab	Oral presentation
Oct 10	Bone Growth & Repair; Axial Skeleton	Ch. 6&7	Thoracic cage & Vertebral column	Quiz #5 Oral presentation
Oct 12		EXAM II		

Date	Lecture	Read	Lab	Notes
Oct 17	Appendicular Skeleton	Ch. 7	Pectoral girdle; Upper extremities	Oral presentation
Oct 19	Appendicular Skeleton contd.	Ch. 7	Pelvic girdle; Lower extremities	Oral presentation A: Lab pg. 67
<u>Oct 20:</u> Last day to drop a class with a "W"				
Oct 24	Joints & Body Movements	Ch. 8	Joints & movements	Quiz #6 D: Lab pg. 67 Oral presentation; A: Lab pg. 72-73 A: CS #3
Oct 26	Muscle I (muscle fiber & tissue anatomy)	Ch.10	Muscle anatomy	D: Lab pg. 72-73 Oral presentation
Oct 31	Muscle II (physiology)	Ch. 9	Muscle anatomy	Quiz #7
Nov 2	Muscle III (physiology continued)	Ch. 9	EXAM III Review	Quiz #8 D: CS #3 A: Huntington's Podcast
Nov 7		EXAM III		

Date	Lecture	Read	Lab	Notes
Nov 9	Intro to Nervous System	Ch.11	Intro to nervous system	D: Huntington's Podcast A: Lab pg. 78-79
<u>Nov 10th:</u> Veterans Day-Thank a Veteran for your Freedom!				
Nov 14	Central Nervous System	Ch.12	CNS Lab	D: Lab pg. 78-79
Nov 16	Peripheral Nervous System	Ch.13	PNS Lab	
Nov 21	Special Senses (eyes & ears)	Ch.13	Eyes and Ears Lab	Quiz #9
<i>11/23-25 Thanksgiving Holiday-Happy Turkey Day!- No class 11/23</i>				
Nov 28	Autonomic Nervous System Nervous System Review	Ch.14 Ch. 1-14	ANS Lab Lab Final Review	Quiz #10
Thursday Nov 30		LAB CUMULATIVE EXAM (regular lab time)		
Tuesday Dec 5		FINAL LECTURE CUMULATIVE 10:00 am - 11:50 am		

NOTE:

- *SCHEDULE IS TENTATIVE AND THEREFORE SUBJECT TO CHANGE AT INSTRUCTOR'S DISCRETION*
- *LAST DATE TO DROP WITHOUT "W" IS JANUARY 29TH*
- *LAST DATE TO DROP WITH "W" IS MARCH 24TH*

Sign and Turn In

I have read the syllabus and understand the requirement and commitments Biology 32 with Professor Alexandra Zannie Dallara. I also understand that my seat is valuable and there are many other students who need this course in order to complete their pre-requisites at BC. By signing below, I am treating this syllabus as a contract and pledging to give my best effort and achieve my goals in this course.

Print Name	Section (CRN#)
Signature	Date

In addition, please describe three study skills you will practice in this class:

1)

2)

3)