

## **BIOL-2401 Syllabus**

# "You can learn anything." - Sal Khan

#### **Course Information**

Section Times/Locations	Sec 003: M/W 1:00pm-3:30pm Science 142 (Lecture)/Science 137(Lab)  Sec 007: T/Th 9:30am-12:00pm Science 142(Lecture)/Science 137(Lab)  Sec 009 T/Th 1:00pm-3:30pm Sciences 142 (Lecture)/Science 137(Lab)
Instructor	Dorian Smith
Office Hours	M/W: 10:00am - 12:00pm T/Th: 3:30 – 4:30pm Fri: 1:00pm – 3:00pm

## **Course Description**

Anatomy & Physiology I is the first part of a two-course sequence. This course intends to establish a foundation in basic human anatomy (the study of bodily structure) and physiology (the study of normal bodily functions) for those interested in allied health fields. Students must be **TSI complete in Reading, Writing, and Math** before taking this course. Completion of CHEM 1406 or an equivalent course is recommended prior to taking this course.

The purpose of this course is for students to:

- 1. Understand foundational physiological concepts
- 2. Identify human anatomical structures such as muscles and general bony landmarks
- 3. Create a strong foundation in A&P for pre-professional health students

#### **Course Format**

This course has a lecture and lab component. Lectures will be 1.5 hours long, followed by a break, and continuing into a 1.5-hour lab. There are many materials covered in both lab and lecture that will overlap; however, lab exams will primarily focus on students' abilities to identify structures and their functions.

#### Lecture Attendance

Lecture attendance is not mandatory but is <u>highly encouraged</u>. A&P I is a fast moving, content dense course. It is advised to attend lectures because any material discussed



class can be testable.

#### Lab Attendance

Laboratory attendance is **mandatory**. Students will be allowed 2 unexcused absences; further missed labs will be a deduction to their lab participation grade (understand that 2% of your final grade can be the difference of passing and failing a course).

## Tips to Succeeding in A&P I

A&P I is an extremely difficult course. Simply attending lectures and labs, taking notes, and reviewing days before the exam will not yield successful results in this course. Planned, concentrated, and spaced-repetitive studying will be required from students. Here are some ways students can be successful in A&P I:

#### Before Class...

Read the relevant chapter in the textbook. Even if you find the chapter dense, skim through it, look at the images, and familiarize yourself with the content as best as possible the day before each lecture.

## **Spaced Repetition**

It will not be enough to take notes in class and re-read them afterwards. Students must utilize spaced repetition. Spaced repetition is a learning technique where information is reviewed at increasing intervals over time, rather than in infrequent, concentrated sessions (cramming).

Make your own flashcards by hand or digitally (ex. Anki, Quizlet) to memorize and retain information. Find a page in your notebook, close it, and try to actively recall the information by memory. If you get it wrong, try and try again.

## Feynman Technique

The Feynman Technique is when you test your understanding of a concept by acting as if you are explaining it to someone else. By attempting to teach concepts, you can see the gaps in your understanding of the concept. If you don't like speaking to imaginary people, create a study group. Have one group member pick a section in their notes or lecture slides and ask another member to explain it from their memory.

## **Tutoring**

#### SPC Tutors:

Tutoring is FREE for all currently enrolled students. Make an appointment or drop-in for help at any SPC location or online! Visit the link below to learn more about how to book an appointment, view the tutoring schedule, and view tutoring locations. <a href="http://www.southplainscollege.edu/exploreprograms/artsandsciences/teachereduttoring.php">http://www.southplainscollege.edu/exploreprograms/artsandsciences/teachereduttoring.php</a>



#### Brain Fuse:

You also have 180 FREE minutes of tutoring with Brainfuse each week, and your hours reset every Monday morning. Log into Blackboard, and click on the tools option from the left-hand menu bar. Click on the Brainfuse link and you will automatically be logged in for free tutoring. You may access Brainfuse tutors during the following times:

Monday – Thursday: 8 pm-8 am 6pm Friday – 8am Monday morning For questions regarding tutoring, please email tutoring@southplainscollege.edu or call 806-716-224

#### **Course Materials and Tools**

Due to the rapid pace of this course and the density of material covered, students will be required to have access to a textbook. *Marieb Human Anatomy & Physiology* is the textbook for this course and BIOL 2402 (A&P II) and can also function as a good reference for future preprofessional health courses.

## **Text/Readings/Other Material**

Marieb, Elaine N. and Hoehn, Katja, Human Anatomy and Physiology, 12th Edition

Students can purchase also buy/rent an electronic version online here:

https://www.pearson.com/en-us/subject-catalog/p/marieb-human-anatomy-physiology/P200000011643/9780138244415

## **Technology Requirements**

Students must have access to a computer that is compatible with the requirements of this course. Students who do not have access to a computer and/or a working internet connection can use oncampus computers to complete their quizzes.

#### **Policies**

South Plains College policies concerning Disabilities, Non-discrimination, Title IX Pregnancy and Parenting Accommodations, CARE (Campus Assessment, Response, and Evaluation), Intellectual Exchange, Campus Concealed Carry, COVID-19, and AI (Artificial Intelligence) can be found here: Syllabus Statements.

## **Grading**

#### Exams

There will be four lecture exams and a cumulative final exam. Every lecture exam after unit 1 will have 20% of questions pertaining to previous units to encourage continuous content review of the course in preparation of the cumulative, final exam. At the end of the semester, the final



exam will replace the lowest lecture exam grade. If the final exam is lower than the lowest lecture grade, the two exams will be averaged.

The final exam is **NOT** optional and cannot be dropped even if the student is in good standing at the end of the semester. The final exam is cumulative because A&P I is a foundational course for nearly all fields in health care. These fields expect students to not only learn information but also retain said information years later.

#### Lab Practical

There will be two lab practicals for this course. These exams will be held in the lab. If a student has an excused absence, there will be a practical make-up date at the end of the semester.

If a student misses a practical, they must contact the instructor within 24 hours after the start time of their practical. Students who miss this 24-hour deadline will not be allowed to make-up the exam unless they have extenuating circumstances (motor vehicle accident, medical emergency, loss of a loved one, etc.) Students must also provide material to excuse a missed practical via email to be eligible to make-up for the exam if they miss the 24-hour deadline.

Summary of Grade Criteria

Assignment	Frequency	Weight	Important Information
Quizzes	12*	5%	Two of the lowest quiz grades will be dropped
Lab Participation	Total # of Labs  Total # of Only 2 unexcused absence		Only 2 unexcused absences allowed
Lab Practical	2	23%	<b>NO</b> practical grade is eligible to be dropped or replaced
Lecture Exams	5*	70%	4 lecture exams and one final. The <b>Final Exam</b> will replace the lowest lecture exam.
		100%	

## **Grading Scale**

$$A = 89.5-100\%$$

$$\mathbf{B} = 79.5 - 89.4\%$$

$$\mathbf{B} = 79.5-89.4\%$$
  $\mathbf{C} = 69.5-79.4\%$   $\mathbf{D} = 59.5-69.4\%$   $\mathbf{F} = 59.4\%$ -below

## **Grading Procedure and Feedback**

The final grade in the course will not be rounded. Students will have two of their lowest quiz grades dropped, a final to replace their lowest lecture exam, and 2% of their final grade from lab attendance; therefore, students should try their best on every assignment and attend lab to maximize the number of points they can receive on their final grade.

If there is an error in the gradebook, or an error on graded material (quizzes, practical, and exams) notify the instructor via email or visit office hours.



## **Quizzes**

Quizzes will be open on Friday at 12am and close on Sunday at 11:59pm each week. They will cover both lectures and lab materials. Quizzes will be open books, allowing students to use their notes, but you **cannot** use online resources.

## **Course Schedule**



**Key Tip:** Mark your calendar for quiz due dates and exams to not forget. Use a calendar app on your phone to always be updated on when assignments are due.



Week	M/W (003)	T/Th (007, 009)	Lecture	Text	Lab	Important Dates
1.	Aug 25		Intro to A&P/ Human Body Orientation	Ch. 1	Bone Introduction/ Human Orientation	
		Aug 26	Intro to A&P/ Human Body Orientation	Ch 1.	Bone Introduction / Human Orientation	
	Aug 27		Human Body Orientation	Ch. 2	Vertebral Bones	
		Aug 28	Human Body Orientation	Ch .2	Vertebral Bones	
		ıg 31 59pm	Quiz 1	Ch 1 + Lab		
2.	Sep 1		Labor Day (No Class) (Online Biochemistry Intro Lecture Video)		(Online Skull Anatomy Video): Facial Bones	Labor Day
		Sep 2	Biochemistry	Ch 2	Skull Anatomy: Facial Bones	
	Sep 3		Biochemistry	Ch 2	Skull Anatomy: Cranial Bones	
		Sep 4	Biochemistry	Ch 2	Skull Anatomy: Cranial Bones	



	Sep 7 11:59pm		Quiz 2	Ch 2 + Lab		
3.	Sep 8		Cell Biology	Ch 3	Thoracic Bones	
		Sep 9	Cell Biology	Ch 3	Thoracic Bones	
	Sep 10		Cell Biology	Ch 3	Appendicular Skeleton: Scapula & Upper Limb	
		Sep 11	Cell Biology	Ch 3	Appendicular Skeleton: Scapula & Upper Limb	
		ep 14 59pm	Quiz 3	Ch 3 + Lab		
4.	Sep 15		Lecture Exam I	Ch 1-3	Appendicular Skeleton: Upper Lim & Hand	Exam I
		Sep 16	Lecture Exam I	Ch 1-3	Appendicular Skeleton: Upper Lim & Hand	Exam I
	Sep 17		Tissues	Ch 4	Appendicular Skeleton: Pelvic Girdle & Lower Limb	
		Sep 18	Tissues	Ch 4	Appendicular Skeleton: Pelvic Girdle & Lower Limb	



	Sep 21 11:59pm		Quiz 4	Ch 4 + Lab	
5.	Sep 22		Tissues	Ch 4	Appendicular Skeleton: Lower Limb & Foot
		Sep 23	Tissues	Ch 4	Appendicular Skeleton: Lower Limb & Foot
	Sep 24		Integumentary System	Ch 5	Joints I
		Sep 25	Integumentary System	Ch 5	Joints I
		p 28 59pm	Quiz 5	Ch 4-5, Labs	
6.	Sep 29		Integumentary System	Ch 5	Joints II
		Sep 30	Integumentary System	Ch 5	Joints II
	Oct 1		Bones & Skeletal Tissues	Ch 6	Skull Review
		Oct 2	Bones & Skeletal Tissues	Ch 6	Skull Review



	Oct 5 11:59pm		Quiz 6	Ch 5, 6 + Lab		
7.	Oct 6		Joints	Ch 8	Lab Practical I	Practical
		Oct 7	Joints	Ch 8	Lab Practical I	Practical
	Oct 8		Muscles & Muscle Tissue	Ch 9	Muscle: Structures	
		Oct 9	Muscles & Muscle Tissue	Ch 9	Muscle: Structures	
		ct 12 59pm	Quiz 7	Ch 5-8		
8.	Oct 13		Lecture Exam II	Ch 4-8	Muscles: Head & Neck	Exam
		Oct 14	Lecture Exam II	Ch 4-8	Muscles: Head & Neck	Exam
	Oct 15		Muscles & Muscle Tissue	Ch 9	Muscles: Back	
		Oct 16	Muscles & Muscle Tissue	Ch 9	Muscles: Back	



	Oct 19 11:59pm		Quiz 8	Ch 9 + Lab		
9.	Oct 13		Nervous System & Tissue	Ch 11	Muscles: Upper Limb I	
		Oct 14	Nervous System & Tissue	Ch 11	Muscles: Upper Limb I	
	Oct 15		Nervous System & Tissue	Ch 11	Muscles: Upper Limb II	
		Oct 16	Nervous System & Tissue	Ch 11	Muscles: Upper Limb II	
	Oct 19 11:59pm		Quiz 9	Ch 9, 11 + Lab		Fall Break Oct 17 (Closed Campus)
10.	Oct 20		Central Nervous System	Ch 12	Muscles: Hand	
		Oct 21	Central Nervous System	Ch 12	Muscles: Hand	
	Oct 22		Central Nervous System	Ch 12	Muscles: Thorax & Abdomen	
		Oct 23	Central Nervous System	Ch 12	Muscles: Thorax & Abdomen	



		ct 26 59pm	Quiz 10	Ch12 + Lab		
11.	Oct 27		The Peripheral Nervous System	Ch 13	Muscles: Lower Limb I	
		Oct 28	The Peripheral Nervous System	Ch 13	Muscles: Lower Limb I	
	Oct 29		The Peripheral Nervous System	Ch 13	Muscles: Lower Limb II	
		Oct 30	The Peripheral Nervous System	Ch 13	Muscles: Lower Limb II	
		ov 2 59pm	Quiz 11	Ch 13 + Lab		
12.	Nov 3		Lecture Exam III	Ch 9-13	Muscles: Foot	Exam
		Nov 4	Lecture Exam III	Ch 9-13	Muscles: Foot	Exam
	Nov 5		The Autonomic Nervous System	Ch 14	PNS	
		Nov6	The Autonomic Nervous System	Ch 14	PNS	



	Nov 9 11:59pm		Quiz 12	Ch 14 + Lab		
13.	Nov 10		The Autonomic Nervous System	Ch 14	CNS	
		Nov 11	The Autonomic Nervous System	Ch 14	CNS	
	Nov 12		The Autonomic Nervous System	Ch 15	CNS	
		Nov 13	The Autonomic Nervous System	Ch 15	CNS	
		ov 16 re Quizzes)	Practice Practical I			
14.	Nov 17		Special Senses	Ch 15	Muscles: Review	
		Nov 18	Special Senses	Ch 15	Muscles: Review	
	Nov 19		Special Senses	Ch 15	Muscles: Review	
		Nov 20	Special Senses	Ch 15	Muscles: Review	



		ov 23 59pm	Practice Cumulative Exam (Super DUPER Recommendation)			
15.	Nov 24		Nervous System Review		Practice Practical Review	
		Nov 25	Nervous System Review		Practice Practical Review	
	Nov 26		HA (COO)	PP	Y (000)	
		Nov 27	THANK	SG	IVING	
		ov 30 59pm	Practice Practical & Practice Exam IV			
16.	Dec 1		Lecture Review		Practical II	Practical
		Dec 2	Lecture Review		Practical II	Practical
	Dec 3		Lecture Exam IV		Practical Make-Up Day	Exam
		Dec 4	Lecture Exam IV		Practical Make-Up Day	Exam



Finals	Dec 10		Final Exam		Final
Finals		Dec 11	Final Exam		Final

Note: This schedule may be changed as deemed necessary by the instructor.