South Portland, Maine 04106

Biology Department

Title: Anatomy and Physiology I with Lab	**Catalog Number:**BIOL 132
Credit Hours: 4	**Total Contact Hours:** 75
Lecture (or Lab): Online Lecture and Virtual Lab	**Instructor:** Dr. Aline Potvin
Office Hours – Location: Virtual	**Contact Information:**
(2x/week or by appointment)	apotvin@smccme.edu

Course description:

This four-credit lecture/lab course is designed for first-year students preparing for a career in the medical field. Emphasis will be on anatomical terminology, fundamental biochemistry, and structure and function of the following components of the human body: cells, tissues, integument, skeleton, joints, muscles, and nervous system. The laboratory portion of the course complements and reinforces the lecture through the use of additional resources, focusing on closer examination of the body's components. *Students who have not passed a college biology course are strongly encouraged to take BIOL 100 Biology w/Lab for Non-Majors or BIOL 105 Human Biology before attempting BIOL 132.* Prerequisites: ENGL 050, ENGL 075, MATH 050. Corequisites: ENGL 100.

Learning outcomes for science courses at SMCC: SMCC students recognize the methodology and content of science and its relevance. SMCC students:

1. apply scientific methodology to the study of the natural world.
2. participate in hands-on and interactive lab activities.
3. demonstrate the ability to make scientifically informed decisions.

Course objectives:

After successfully completing this course, students should be able to:

1. **Apply the scientific methodology**
2. **Understand** basic anatomical vocabulary.
3. **Describe** and demonstrate a basic understanding of structure and function as they pertain to the following topics: major body cavities, relative body positions, body sections, body regions, role of biochemistry in functioning organisms, structure and function of cells, tissues, integument, skeletal system and articulations, muscular system, and nervous system.
4. **Explain how each of the systems function individually and together.**
5. **Perform** the lab experiments/activities safely, using selected supplies and equipment.
6. **Learning outcome**: SMCC students apply the scientific method and employ the technological skills necessary to function effectively in an increasingly complex world

Course outline:

1. Introduction to Anatomy and Physiology (Ch 1, Labs 1-2)
2. Basic Cell Structure and Biochemistry (Ch 2-4, labs 3-7)
3. Tissues (Chapter 5, Labs 8-10)
4. Support and Movement (Chapter 6,7,8, and 9, labs 11-24)
5. Integration and Coordination (Ch. 10, lab 25)

Required materials, tools, or supplies:

1. Hole's Human Anatomy and Physiology textbook, 16th ed., by Welsh and Prentice-Craver, McGraw Hill, 2021. ISBN: 978-1264-26288-5 (loose-leaf edition)
2. McGraw-Hill Connect program for Hole's A&P 16th Edition (complete with Anatomy and Physiology Revealed v3 (online access). Your access code should be good for one year from date of purchase and can be purchased from the SMCC book store or direct from McGraw-Hill
3. Modeling clay or play dough (can be store bought or homemade) required for lab exercises

Material is presented through recorded lecture, online and home-based lab manual activities, anatomy/physiology educational websites, and other assignments. PowerPoint slides for each lecture (that correspond with the textbook) are available under each Brightspace module. ***Constructive participation is required throughout the semester via discussion boards.*** Questions and discussions are required to ensure you get the most from the course. Given the heavy material of this course, you are also encouraged to access free tutoring and learning support services through SMCC Learning Commons, even if you typically are a strong academic performer. *Do not wait until something becomes a problem to get help; by then it's usually too late.*

Brightspace Access: All of your course modules, instructions, and grades can be found on the Brightspace course homepage. You will use your SMCC username and password to log into the platform via the SMCC webpage and/or this direct link: https://mccs.brightspace.com/
McGraw Hill Connect and Anatomy and Physiology Revealed access: To access our Connect classroom to complete homework, exams, and applicable lab assignments, you can follow the link provided in your Brightspace Course.

Communication Policies:

- Students MUST use their SMCC e-mail address to communicate with me. There will be no response to a personal e-mail address.
- I will be available twice weekly for live Q&A sessions through Zoom that is integrated into Brightspace.
- It is the student's responsibility to check their SMCC e-mail account **DAILY** for messages about the course or coursework.
- It is the student's responsibility to check the course page in BrightSpace **DAILY**. This is very important – you may miss important updates and other information if you do not.
- It is the student's responsibility to keep track of their assignments, quizzes etc.This information is available BrightSpace; assignments are posted on the portal and the gradebook will tell you whether or not I have received yours.

Course Requirements

BIOL 132 Spring 2022 Online Schedule and Expected Workload

*Schedule subject to change depending on cohort outcomes, but this is a reliable indicator of overall timetable

Week	Dates	Chapter/Homework	Lab Exercises (pieces may be assigned from each listed below)
1	January 17-23 Monday Jan 18 is MLK Holiday. No classes that day.	**Ch 1: Intro to Human Anatomy and Physiology** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 2 Watch: Brief Lecture Videos Connect Homework: Chapter 11 Lab: Complete designated Lab assignment Submit Electronically signed Statement of Understanding (after fully reading this syllabus)	BrightSpace To-Do list will specify which portions these labs you are responsible for
2	January 24-30	**Chapter 2: Chemical Basis of Life** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 2 Watch: Brief Lecture Videos Connect Homework Lab: Complete designated Lab assignment	BrightSpace To-Do list will specify which portions these labs you are responsible for
3	January 31-February 6	**Chapter 3: Cells** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 3 Watch: Brief Lecture Videos Connect Homework Lab: Complete designated Lab assignment	BrightSpace To-Do list will specify which portions these labs you are responsible for

4	February 7-13	**Chapter 4: Cellular Metabolism** **Complete Exam I (Chapter 1-3)** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 4 Watch: Brief Lecture Videos Connect Homework (due end of week 5)	No Lab This Week
5	February 14-20	**Chapter 4 Continued and Chapter 5 (Tissues)** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 4 and 5 Watch: Brief Lecture Videos Connect Homework (due end of week 6) Lab: Complete designated Lab assignment	Explorations in Clay Lab Exercise (See Brightspace for instructions)
6	February 21-27 (Monday, Feb 21 is Presidents Day. No SMMC classes that day)	**Chapter 5: Tissues continued** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 5 Watch: Brief Lecture Videos Connect Homework Lab: Complete designated Lab assignment	BrightSpace To-Do list will specify which portions these labs you are responsible for
7	February 28-March 6	**Chapter 6: Integumentary System** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 6 Watch: Brief Lecture Videos Lab: Complete designated Lab assignment Connect Homework	Connect/APR lab BrightSpace To-Do list will specify which portions of these labs you are responsible for
8	March 7-13	**Chapter 7: Intro to Skeletal System** **Complete Exam II (Chapter 4-6) and Lab Quiz 2** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: 7 Watch: Brief Lecture Videos No Connect Homework No Lab assignment due	No Lab this week
9	March 14-20	**SPRING BREAK**	HAVE A GREAT WEEK!

	10	March 21-27	**Chapter 7 Continued:** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 7 Watch: Brief Lecture Videos Connect Homework Chapter 7 (due end of week 11) Lab: Complete designated Lab assignment	APR lab BrightSpace To-Do list will specify which portions of these labs you are responsible for
	11	March 28-April 3	**Chapter 7: Skeletal System** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 7 Watch: Brief Lecture Videos Connect Homework Chapter 7 Lab: Complete designated Lab assignment	Explorations in Clay BrightSpace To-Do list will specify which portions of these labs you are responsible for
	12	April 4-April 10	**Chapter 8: Joints** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 8 Watch: Brief Lecture Videos Connect Homework Lab: Complete designated Lab assignment	APR lab BrightSpace To-Do list will specify which portions of these labs you are responsible for
	13	April 11-17	**Chapter 9: Muscular System Complete Exam III (Chapter 7-8)** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 9 Watch: Brief Lecture Videos Connect Homework (Due end of Week 14) Lab: Complete designated Lab assignment	No Lab
14		April 18-24 Monday April 18 is Patriots Day. No SMCC Classes that day *April 19 is the last day to withdraw from classes	**Chapter 9: Muscular System** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 9 Watch: Brief Lecture Videos Connect Homework Lab: Complete designated Lab assignment	Research Paper Project Due APR Lab
15		April 25-May 1	**Chapter 10: Intro to the Nervous System** Discussion Board: Second half of Research Paper Project Read: Chapter 10 Watch: Brief Lecture Videos Connect Homework (due end of week 16) Complete designated Lab Exercises	Explorations in Clay Lab BrightSpace To-Do list will specify which portions of these labs you are responsible for

16	May 2-May 8	**Chapter 10 Continued** Discussion Board: Participate in weekly discussion (see requirement further up in syllabus) Read: Chapter 10 Watch: Brief Lecture Videos Connect Lab: Complete designated Lab assignment	APR lab exercises BrightSpace To-Do list will specify which portions of these labs you are responsible for
17	May 9-May 14	**Final Exam and Lab Quiz II: Open May 9 at 12am, Due by Friday, May 13 at 11:59pm**	No Lab exercise

Required Work for this Course and Means of Evaluation/Grading:

The course is organized into Learning Modules that correspond to the Chapters in the text and the Laboratory Exercises in the lab manual. It is important to approach each module methodically. **Set yourself up for success each week by consulting your "Module X To-Do List" on each module page on Brightspace under course content.** Each Brightspace learning module contains several links to what you will need to complete that week, including reading, lecture videos, lab exercises, discussion boards, etc. You can count on some assignments and lab activities being completed on the Connect/APR programs, so make sure you are registered and can access it readily. Students can expect the following types of assignments, all of which are required.

- **Theoretical Exams (30% of final grade):** There will be **4, 50 question, timed exams** that cover information in the textbook, lectures, and slideshows. They are completed on Brightspace. **See more specific discussion of expectations for exams later in the syllabus.**
    - **Exam 1:** Chapter 1-3
    - **Exam 2**: Chapter 4-6
    - **Exam 3:** Chapter 7-9
    - **Exam 4:** 50% Chapter 10, 50% material from previous exams
- **Lab Quizzes:** There will be **2, 15-20 question lab quizzes conducted on Brightspace/Connect**. These quizzes will be held on the same module weeks of your 2nd and Final theoretical exams. They may consist of theoretical questions and/or structural anatomical questions/labeling specifically from your assigned lab exercises (combinations of Connect assignments, Clay Exploration assignments, and Anatomy and Physiology Revealed Assignments). **Combo of Lab Quizzes and Lab assignments are 20% of total grade.**
    - **Quiz 1**: Labs from Chapter 1-5
    - **Quiz 2:** Labs from Chapter 6-10
- **Lab Activities (Combo of Lab Quizzes and Lab Write-ups are 20% of total grade):** Lab Activities will be comprised of a combination of clay exploration assignments, and Connect/APR assignments. In each module, you will get specific instructions on what to complete for lab that week.
- **Discussion Boards(20% of final grade):** Discussion boards are an essential means of being engaged in the coursework with myself and your classmates. The discussions will be case based and require you to use at least two academic resources. **See more specific discussion of expectations for discussion board participation later in the syllabus.**
- **Homework (20% of total grade):** Each module will include a homework assignment on Brightspace that is either devised by the instructor or connected to Brightspace from your Connect platform. These are helpful means of practicing the reading and lecture material and preparing for theoretical exams.
- **Research Paper Assignment (10% of final grade):** Part of our outcomes for the course is ensuring you are able to review scientific literature and be able to effectively analyze the scientific process conducted in a study. This project provides the opportunity to share a paper of your choice with your classmates and analyze the validity of the findings.

Summary Breakdown of the Weight for Graded tasks in this Course:

- **Theoretical Exams:** 30% of total grade
- **Lab Quizzes + Activities/Writeups:** 20% of total grade
- **Discussion Boards:** 20% of total grade
- **Homework Assignments**: 20% of total grade
- **Research Paper Assignmen**t (10% of total grade)

Grading scale:

Number Scale	Letter Grade	Number Scale	Letter Grade
93-100	A	73-76	C
90-92	A-	70-72	C-
87-89	B+	67-69	D+
83-86	B	63-66	D
80—82	B-	Below 63	F
77-79	C+		

Scores for your exams, lab tests, lab quizzes and participation quizzes can be found under My Grades in Brightspace.

Assessment Policy

To earn full points for your work, you must complete it during the 7-day period that it is assigned. Exams, quizzes, experimental results and lab tests that are not completed during the week that they are assigned will be scored with a zero. **For all weeks, you will have access to the module material starting on Monday at 12:01am, and all of your work will be due for that module on the following Sunday by 11:59 pm.** (The exception being your final exam)

You can take a late exam, late quiz or late lab test, and you can write up your experimental results up to the last day of the semester, but you will earn approximately half the points after the due date.

You must participate every week in online discussions by writing a minimum of 4 messages. These messages must be completed over the course of at least 2 separate days. i.e: you will not get credit if you complete all your discussion posts on a single day. This assesses your active participation each and every week. You cannot do it ahead or after that week.**The discussion boards are the one assignment that I absolutely cannot accept early or late, as that defeats the participatory purpose of the assignment**.**There are no extra credit assignments available for this course. You are responsible for monitoring your grade to meet specific program or prerequisite GPA requirements.**

If you are inactive in the class for more than one week, this can impact your status in the course, which unfortunately can negatively impact financial aid, etc. **Communication with me is key so we can devise ways to support you best if there are disruptions to your coursework that are out of your control.**

There are no extra credit assignments available for this course. You are responsible for monitoring your grade to meet specific program or prerequisite GPA requirements.

Pay Attention to the Schedule in the Syllabus and in the online Syllabus Summary

The material covered on each test is described in the online Syllabus Summary (as well as in the Learning Module for the exam). The schedule lists what is assigned for each week of the entire semester. These assignments distribute the material over the semester so that there is a reasonable pace for learning it. Do not fall behind in your studies. This course involves learning a lot of new words and memorizing a great deal of material. That is best achieved over weeks rather than by cramming in assignments.

Lab Assignments:

Lab assignments will help prepare you for your 2 lab quizzes. They will be devised for each module in one of three possible formats: Lab Manual Assignments, Connect/APR assignments, and Clay Exploration assignments. Review your syllabus for more specific instructions for each week's lab assignment.

Participating in Online Discussions

For each of the discussion posts, you are being asked to to respond to a case-based scenario that encapsulates what you've been covering in the reading, lecture, labs, etc. You will be expected to be specific in your feedback/responses to your classmates, provide at least **two academic resources per post, with citations provided in APA format.**

Remember that the other students in your Anatomy and Physiology class are likely to be following a career path that is much like your path. These people may be friends and colleagues years from now, or they may be interviewing you for a future job. Before you post a message, look it over and ask yourself if the message has a tone that is both professional and friendly. It is appropriate to admit that you don't know everything. It is never appropriate to insult other students and use offensive language. Avoid slang or other phrasing that is not professional. **A post that says "Me too" or one that was copied from another student will not count as participation.** Don't write that you have no questions because you understood everything; write a particularly insightful question to demonstrate your understanding and actively help your classmates to learn and think about the material. Do not cut and paste your posts from other sources without changing the phrasing and the sentence structure substantially. If you copy a few sentences or a paragraph from an internet source such as Wikipedia or from a textbook, you must say that you copied it and where you found it. You also must write a few sentences to tell us what you learned from that quote and why you thought it worth copying.

The Exams and Lab Tests Are "Open Book"

You may use notes and textbooks to find answers. However, these are timed tests, and you will have just a bit more than one minute per question. You will not do well if you have not done the lab exercises and studied your textbook. You will do better if you study the figures and memorize names of structures, so that you are able to answer most of the questions without looking for the answer. Some of the questions may involve a small detail from the lab manual or textbook, so you should strive to have a good idea where to find the answer for a detailed question. **You may NOT ask another person, even a partner, for answers to questions during assessments. Another person may NOT take a test for you. You may NOT take the online assessments alongside another student.**

Find the Right Time and Place to Take Your Exams
Make sure you have time without interruption to take the timed assessments. You may begin an assessment anytime within the week it is assigned, but once you start the test, the clock is ticking. If you're "on call", don't take a test. Make certain that you are using a reliable computer that has a reliable connection to the internet. Do let me know if there is any difficulty with internet access (because of moving, home setup, etc). Do NOT wait until the last evening, especially if there is messy weather that could interrupt internet, or if you have life circumstances that can cause interruption or inconsistency of any kind.

How To Do Well On The Lab Tests and Exams
Make sure you are consistently doing lab exercises/assignments and turning in your write-ups. For your Lab quizzes, you'll be completing a designated Anatomy and Physiology Revealed/Connect Quiz and turning the results in via Brightspace, or completing a quiz created on Brightspace by the instructor, depending on what the instructor determines is best for the modules covered. You will be given updates on what is going to be expected for each of the four Lab Quizzes. You must study and prepare as if it were "closed book," though you are allowed to use your lab manual and resources (not other people). If a diagram appears in both the Lab Exercises and in the Learning Modules for a chapter, that diagram is likely to appear on a lab test and an exam. Memorize as many names of structures in these diagrams as you can.

A Note on Video Lectures:
Video lectures for this course are brief summaries of the material and are meant to highlight most important concepts. You are still responsible for the depth of these concepts present in the text unless otherwise specified. The videos can be used in a couple of ways: either by watching them after you've already read the chapter as means of reinforcing the objectives for each module. Or, they can be used as a way to introduce you to the material and you can watch them first. Either way, they are good tools for review and determining which parts of the chapter may require more review on your part.

How to be most successful in a content-heavy course like Anatomy and Physiology I:
Anatomy and Physiology is a very content heavy course that can be challenging to master. **Count on spending 2 hours of study/ assignment time for every hour you'd be expected to make class contact.** Start by getting very clear on the module objectives posted under each Brightspace module as the foundation you need to navigate exams/quizzes. A lot of memorization is required for course material, and thus repetition is the most realistic way to ensure that happens, regardless of individual ability. For reference: studies show that a person needs to hear a concept 7-8 times before they can full assimilate it into their working memory. It's normal to need time! If your schedule allows, it can be helpful to circumvent overwhelm by studying for shorter periods of time more frequently. For example, instead of spending 2 hours straight studying, split your time up into 20 minute concept "chunks" with a 5-10 minute break for stretch, movement, etc in between. Much like interval running, this actually allows you to study more material over an expanse of time without hitting an overwhelm threshold. Not reaching overwhelm ensures what you are studying is more likely to be retained. I would also recommend accessing tutoring services through the learning center, regardless of whether or not you are typically a strong academic performer.

Policies for all courses at Southern Maine Community College:
1. ADA (Americans with Disabilities Act): Southern Maine Community College is an equal opportunity/affirmative action institution and employer. For more information, please call 207-741-5798. If you have a disabling condition and wish to request accommodations in order to have reasonable access to the programs and services offered by SMCC, you must register with the Disability Services Coordinator, Sandra Lynham, who can be reached at 741-5923. Further information about services for students with disabilities and the accommodation process is available upon request at this number. Course policies about online testing are modified to suit each individual's accommodations.

2. SMCC Pay-for-Print Policy: Each semester students receive a $20 printing credit. The balance resets at the end of the semester and any remaining credits are removed. The College's pay-for-print system monitors printing on all printers (including those in general access labs, library printers,Tutoring Services, Campus Center Lounge and technology labs). Be sure to log OUT of the system when you've finished your printing, to prevent unauthorized access to your account. Students can check the number of pages they have printed by using the Printing Balance tool available on SMCC computers (located in the lower right corner of the screen, near the clock). Departments with work study students who need to print documents for the department should contact the Help Desk at 741-5696 to have a special account set up. To find ways to reduce your printing charges, please go to the IT Help tab on My SMCC. If you have questions about the payfor-printing policy or your printing charges, please contact the Help Desk at 741-5696 or send an e-mail to helpdesk@smccme.edu.

Refunds
Print jobs are eligible for a refund in the event of mechanical or electronic error on the part of the printer, print server, or software used to submit the job. Jobs are not eligible for a refund in cases where the job was not set up correctly, was submitted multiple times, or the student is not satisfied with the result. To request a refund, please bring the offending print to the IT Department in the basement of the Ross Technology Center. Refunds will be granted in the form of a credit to the student's account. Be sure to log OUT of the system when you've finished your printing, to prevent unauthorized access to your account.

3. Add/Drop Policy: Students who drop a course during the one-week "drop/add" period in the fall and spring semesters, and the first three days of summer sessions, receive a 100% refund of the tuition and associated fees for that course. Please note any course that meets for less than the traditional semester length, i.e., 15 weeks, has a pro-rated drop/add period. There is no refund for non-attendance. REMEMBER: Remaining enrolled after Add/Drop week means you understand and accept the requirements, policies, and instructions spelled out here, and in Brightspace. Read all the files in the Welcome (START HERE) folder in Brightspace, before the Drop/Add period ends, to ensure you understand the requirements and have enough time to devote to this course.

4. Withdrawal: A student may withdraw from a course only during the semester in which s/he is registered for that course. The withdrawal period is the second through twelfth week of the fall and spring semesters and the second through ninth week of twelve-week summer courses. This period is pro-rated for shorter-length courses, usually 75% of the course meeting times; please check with the Registration Office. To withdraw from a course, a student must complete and submit the appropriate course withdrawal form, available at the Enrollment Service Center. The process must be completed either in person or by using SMCC e-mail accounts. The designation "W" will appear on the transcript after a student has officially withdrawn. A course withdrawal is an uncompleted course and may adversely affect financial aid eligibility. Failure to attend or ceasing to attend class does not constitute withdrawal from the course. There is no refund associated with a withdrawal.

5. Plagiarism: If an instructor suspects that a student has knowingly committed a violation defined in the Maine Community College System Policy on Student Grade Appeals and Academic Misconduct, the instructor has the authority to review the alleged misconduct and determine the grade that the student should receive for the assignment and the course. The instructor may assign a failing grade for the assignment or course and may require the student to complete additional work for the course. The instructor may consult with the department chair and/or the College's chief academic officer prior to making such decisions. If a student seeks to challenge an instructor's determination, the student should submit a grade appeal. Grade appeal forms are available in the Advising Office on the South Portland Campus or in the administrative offices in the Learning Commons on the Midcoast Campus. An instructor may also refer the matter to the College's disciplinary officer for review under the procedures of the MCCS Student Code of Conduct.

6. The Learning Commons: The library, tutoring and writing centers, and open study space are located on the second floor of South Portland's Campus Center and in the Midcoast's LL Bean Learning Commons and Health Science Center. Here you can find free academic support through individual and online tutoring, information literacy/research librarians, and professional academic strategy/planning mentoring. There are many desktop and laptop computers as well as printers, reserve textbooks, and other academic tools available for use within the Learning Commons. Services are offered by appointment or as drop-in assistance. To access services, visit My Learning in My Maine Guide. Students consistently report that the Learning Commons is an inviting and friendly place to seek academic support or study. Those who make use of the Learning Commons regularly have been shown to be more likely to succeed—take advantage of this exceptional resource for this, or any of your classes.

Discussion Board Rubric

	Criteria Met (all 5 points)	**Criteria Partially Met (2-4 points)**	**Criteria Not Met (0-1 point)**
Participation (5 points)	Posts initial response at least 72 hours before due date. Posts, replies, and asks questions at least two 2 separate days within week. Provides at least 4 responses including initial.	Posts initial response 48 hours or less before due date. Provides 3 total responses.	Posts initial response day before due date or does not post response. Provides 2 or less responses. Posts all responses on same day.
Thoughtful and Complete Responses (5 points)	Fully responds to the discussion prompt. Post makes connections to reading and prompts further discussion with classmates	Partially responds to discussion prompt. Responses vague and/or do not prompt further discussion.	Does not post a response or response is vague, off topic, or repetitive.
Appropriate use of academic resources (5 points)	At least 2 reputable academic resources used for each response (textbooks appropriate), APA formatting used appropriately, providing both in-text citations and bibliography.	Less than 2 reputable academic resources used. Inappropriate APA formatting.	No citations or resources provided. Inappropriate/invalid resources used (example: Wikipedia). Copying of material (no total points granted for plagiarized material).
Total: 15 Points			

Explorations in Clay Lab Assignment Rubric:

Clay Exploration Exercise Rubric

	Meets Expectations	Partially Meets Expectations	Does Not Meet Expectations
Structure (5)	Unique and distinct characteristics of structure are identifiable	Unique and distinct characteristics ambiguous	Little to no differentiation of distinct structural characteristics
Proper Identification (5)	Assigned structures are appropriately and accurately labeled	Assigned structures are incorrectly or incompletely labeled	No assigned structures are labeled
Related Questions (5)	Related questions/ writing prompt accurate, and resources provided	Related questions/ writing prompt vaguely/ incorrectly formulated. No resources provided	Related questions/ writing prompt not completed
Total = 15points			

Applied Research Final Project (Video presentation and Discussion):

Intro: With all of the changes and innovations we witness in the public sphere, it can be challenging to understand scientific studies and evidence used to make decisions and support future scientific study. Scientific literacy is a key skill to discern best evidence and decision making.

Purpose: The purpose of this project is to use your understanding of scientific method to analyze a research paper of your choice and share your analysis with your classmates for discussion.

Method (Part I): I would like you to start by choosing a research paper of interest that relates to a topic we cover this semester. **This paper has to have been published in the last five years.** I wouldn't recommend waiting until we've covered a system to start your project, as the semester is short and the project will be time intensive. Once you have settled on a paper, I would like you to analyze it and create a powerpoint with a 10-ish minute (absolutely no more) recorded video presentation of the following:

1) What type of study is this paper based on? What methods did the authors use, what were their basic results, and conclusion based on the data they collected?
2) Who wrote the study and do they report any conflicts of interest in the study they conducted. Where was funding acquired for this study?
3) What did the authors identify as weaknesses and/or areas of essential future study based on the conclusion of their own study?

Once you've completed your video presentation (or voiceover option in the power point presentation), I would like you to turn it in on the due date in an open forum for your classmates to view.

Method (Part II): In this part of the assignment, you will complete the second half of the project by providing a focused discussion in response to one of your classmates presentations. You have to complete both the presentation and discussion to get credit for the assignment.

Rubric Part I: Powerpoint and Video Presentation

	Criteria Met (all 35 points)	**Criteria Partially Met (20-30 points)**	**Criteria Not Met (0-20 point)**
Research and distillation of information (35 points)	Chooses at least 4 academically sound info sources (textbooks count)	3 or less academic sources used.	No academic sources used. Or inappropriate sources used (wikipedia, etc)
	The questions (see above description) are fully answered and/or addressed if there is no current data on an aspect of the question.	Questions are not completely answered and/or limitations of info not discussed.	Questions not completely answered
	Responses show you understand the fundamentals of how your chosen system works and how Covid impacts it.	Difficulty demonstrating fundamental knowledge of system anatomy/physiology	Little to no knowledge of systemic anatomy and physiology. No understanding of Covid impact.
Powerpoint structure and Presentation (35 points)	Slides are clear, organized, and don't have excessive text. There is no slide limit, but like with all scientific presenting, simple and direct is best. Images are very helpful but not required if not applicable.	Slides disorganized and/or overly complicated.	Slides very disorganized. Do not convey key information to answer required questions.
	Citations/resources provided in APA format on last slide	Citations/resources provided in incorrect APA (7) format	No citations/resources provided
	Powerpoint presentation video meets but doesn't exceed 10-15 minutes	Presentation exceeds 15 minutes or is inadequate in length to answer questions effectively	Presentation exceeds 15 minutes or is inadequate in length to answer questions effectively
Total: 70 Points			

Rubric Part II (similar to regular discussion board)

	Criteria Met (all 10 points)	**Criteria Partially Met (5-8 points)**	**Criteria Not Met (0-4 points)**
Participation (10 points)	Posts initial response at least 72 hours before due date. Posts, replies, and asks questions at least two 2 separate days within week. Provides at least 4 responses including initial.	Posts initial response 48 hours or less before due date. Provides 3 total responses.	Posts initial response day before due date or does not post response. Provides 2 or less responses. Posts all responses on same day.
Thoughtful and Complete Responses (10 points)	Fully responds to the discussion prompt. Post makes connections to reading and prompts further discussion with classmates	Partially responds to discussion prompt. Responses vague and/or do not prompt further discussion.	Does not post a response or response is vague, off topic, or repetitive.
Appropriate use of academic resources (10 points)	At least 2 reputable academic resources used for each response (textbooks appropriate), APA formatting used appropriately, providing both in-text citations and bibliography.	Less than 2 reputable academic resources used. Inappropriate APA formatting.	No citations or resources provided. Inappropriate/invalid resources used (example: Wikipedia). Copying of material (no total points granted for plagiarized material).
Total: 30 Points			

PROJECT TOTAL POINTS: 100 (10% of final grade)