

WACO, TEXAS

COURSE SYLLABUS

AND

INSTRUCTOR PLAN

Anatomy and Physiology I

(Lab and Lecture)

BIOL 2401.87

Shannon Thomas

NOTE: This is a 16-week course.

COVID 19 Notice:

McLennan Community College is committed to providing you with every resource you need to reach your academic goals. We are also concerned for your safety. We are working through COVID-19 guidelines to make sure we offer a safe environment for you and our faculty. This will include smaller class sizes to manage social distancing and proper cleaning techniques. You will have the advantage of a physical classroom experience but may also need to work part of the time online as we adjust to limited classroom capacity. This will also allow us the flexibility to move online if so directed by federal, state and/or local COVID 19 guidelines. Faculty and staff are preparing now to ensure that you have the best experience in the midst of these uncertain times.

AN EQUAL OPPORTUNITY INSTITUTION

Spring 2021

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, and nervous and special senses. Emphasis is on interrelationships among systems and regulation of physiological functions involved in maintaining homeostasis.

Prerequisites and/or Corequisites:

Must have passed the reading and writing portion of the TSI Assessment or have credit for INRW 0402. Semester Hours 4 (3 lec/3lab)

Course Notes and Instructor Recommendations:

- Make sure that your computer meets the <u>system requirements</u> for online classes.
- **Balance study time.** I know that many of you have hectic schedules and are taking an online class for flexibility. Therefore, it helps to create a schedule that allocates time for each of your responsibilities and allows for set times for which you may study and meet class requirements. A <u>general recommendation</u> for study time is 2-3 hours per week (outside of class) time for every college credit hour enrolled. Therefore, you should plan to spend 8-12 hours a week preparing for this class.
- **Stay on top of due dates.** Review the course calendar and weekly checklist at the beginning of each week to plan your study time and avoid missing any important deadlines.
- Make sure that all course links are working as soon as they are available. Even if you intend to submit the work later, I strongly recommend ensuring that all links are working and tasks are understood well before the deadline.
- Reach out to me immediately when you encounter problems (personal, technical, etc.) that prevent you from completing a class requirement by the deadline. I am here to help!

- **Take advantage of the resources provided.** You will be provided with various study resources for learning the material and successful completion of the class. Be sure to utilize these!
- Check student email and announcements daily. I frequently post information about the class on the announcements page and in emails. To avoid missing out on information that could impact your grade, you must check daily for any communication from me.
- Ask questions and stay in touch. Please know that I am here for you, and I welcome any comments or questions you have. You never bother me by asking questions!

Instructor Information:

Instructor Name: Shannon Thomas

MCC Email: <u>Sthomas@mclennan.edu</u>

Office: SB 208

Office Phone Number: 254-299-8167

Office/Teacher Conference Hours: Online.

- Monday Thursday mornings between 8:00 10:00
- Friday evenings between 5:30 7:30.
- Feel free to email any time! I will get back with you as soon as I can!

Other Instruction Information:

For online classes, the FASTEST way to reach me is through email!! Should the need arise for you to speak with me on the phone or Zoom, please email me, and I will be glad to schedule an appointment with you!

- **Email:** For online classes, the preferred method of communication should be through email.
 - **Subject line:** Please include the name of your class and your purpose for writing.
 - **Quote back:** If you are replying to a previous email from me, please copy/paste your previous discussion, or provide a brief summary of what we have discussed. Reminders are always appreciated!

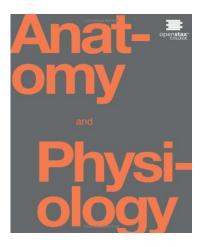
- **Identify yourself:** Please tell me who you are and what class you are in! Providing this information in the first place will enable me to respond to your need more quickly!
- Response time: I will respond with 24-hours on weekdays. Emails and phone calls made during the weekend, and after business hours on Friday, may be returned during my office hours on Monday.
- Phone calls: If you call outside of my office hours, please leave a message with your name, the class you are taking, and a phone number and I will return your call during my next scheduled office hours.

**Send a follow-up email if you have not received a reply within 24-hours on a weekday or by Monday afternoon if you emailed me over the weekend **

Class Requirements:

Free Online Textbook:

- Title: Anatomy and Physiology
- Author: OpenStax College
- Edition: 1st
- Publisher: OpenStax College
- **ISBN:** 978-1938168130
- **<u>Click here</u>** to Access Website
- Note that a hard copy of this textbook is available for purchase in the bookstore. However, it is not required that you purchase a hard copy since a free online textbook is available.



Other Requirements:

• A webcam and computer mic.

MCC Bookstore Website: http://www.mclennan.edu/bookstore/

Methods of Teaching and Learning:

Anatomy and Physiology I BIOL 2401.87

Methods of instruction will be delivered through weekly lessons and VoiceThread activities that include lecture presentations, instructional videos, learning objects, homework assignments, oral lab identification assignments and discussion forums.

- Indirect instruction
- Interactive instruction
- Guided and independent study.
- Chapter exams
- Practice exams

- Inquiry approach
- Simulations
- Questioning skills
- Animations and videos
- Application

The following instructional strategies will be employed to help students learn the material:

- Assigned Reading: Reading material will be assigned weekly in the form of your textbook, my lecture notes, and websites that discuss current topics in health, science, and medicine.
- Weekly Lessons: Chapter assignments will include both <u>lecture</u> and <u>lab</u> <u>activities</u>. Weekly assignments will consist of various activities, including interactive lecture presentations, instructional videos, quiz groups, and various learning objects.
- "VoiceThreads": Voicethread is a collaborative tool that enables individuals to create, share, and comment on shared files using a computer mic, webcam, text, phone, or audio-file upload. VoiceThread will be used primarily for discussions and identification activities:
 - Discussions: Discussions will address current and/or controversial topics in science and medicine related to science, ethics, health, and public policy. Students will be required to watch educational videos, read the assigned material, and/or seek additional information on subjects from credible sources. Group-work will be utilized to break down complex issues, work through a set of problems, or come to a consensus on a controversial topic.

- Identification Activities: To simulate an in-person lab experience, students will use VoiceThread to circle and name assigned anatomical structures and their functions and to draw and describe basic physiological processes. Videos, presentations, and handouts will be provided to guide you in this process!
- **Quizzes:** Weekly Quizzes covering lecture and lab material will consist of multiple-choice, true-false, and matching questions.
- **Exams:** *Lecture exams* will consist of multiple-choice, true/false, matching, short-answer, and essay questions. *Lab Exams* primarily consist of fill-in-the-blank questions and involve identifying structures on models, dissections, line diagrams, or identifying anatomic details of tissues and organs from a histology image. Students may also be required to interpret charts, graphs, or diagrams.
 - Midterm Exams:
 - Lecture Exam 1 will cover Chapters 1-10: Introduction to the Human Body, Basic Chemistry, The Cell, The Tissues, The Integumentary System, Bone Tissue, Axial Skeleton, Appendicular Skeleton, The Joints, Muscle Tissue, The Muscular System.
 - Lab Practicum Exam 1 will cover chapters 1-10: anatomical terminology, the cell, the microscope, the tissues, body membranes, the integumentary system, the skeletal system.
 - **Final Exams:** Final exams are *comprehensive*, which means that they cover the class material from the entire semester. The final exam grade may replace a low or missed midterm exam grade; however, final exam grades will not be replaced by another grade.
 - Lecture Exam 2 will cover chapters 1-15: Introduction to the Human Body, Basic Chemistry, The Cell, The Tissues, The Integumentary System, Bone Tissue, Axial Skeleton, Appendicular Skeleton, The Joints, Muscle Tissue, The Muscular System, Nervous System, and Special Senses.
 - **Lab Practicum Exam 2** will cover chapters 1-15: anatomical terminology, the cell, the microscope, the tissues, body

membranes, the integumentary system, the skeletal system, the muscular system, the nervous system, and the special senses.

Course Objectives and/or Competencies:

- **Critical Thinking (CT):** to include creative thinking, innovation, inquiry and analysis, evaluation and synthesis of information.
 - Taught through daily discussion and assessed using lecture exams with a course-wide bank of CT questions and laboratory exercises that challenge students to answer more complicated real-life questions and predict outcomes using what they have learned in lecture.
- **Communication Skill (COM):** to include effective written, oral, and visual communication.
 - Taught through formal or information presentation (including oral, written and visual components), class discussion and assessment via common rubric or use of scientific language, clarity, and understanding. Also taught using scientific articles or current events within face-to-face or online discussion groups.
- **Empirical and Quantitative Skills (EQS):** to include applications of scientific and mathematical concepts.
 - Taught using specific laboratory exercises involving measurements and very basic data collection (for example measuring arm length among each group, tallying the data, and then analyzing it by gender and height.
- **Teamwork:** To include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.
 - Taught using specific laboratory or homework exercises and/or through class or online discussion groups.

Learning Outcomes:

1. To be able to read and analyze various printed materials (CT, EQS)

- To demonstrate knowledge of the major issues and problems facing modern science, including issues that touch upon ethics, values, and public policies (CT, COM, TW)
- 3. To demonstrate critical thinking by using both qualitative and quantitative analysis to evaluate strategies and recognize alternative strategies.

Upon successful completion of this course, the student should be able to:

Learning Outcomes (Lecture):

- 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.

Upon successful completion of this course, the student should be able to:

Learning Outcomes (Lab):

- 1. Apply appropriate safety and ethical standards
- 2. Locate and identify anatomical structures
- 3. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general labware, physiology data acquisition systems, and virtual simulations.
- 4. Work collaboratively to perform experiments
- 5. Demonstrate the steps involved in the scientific method
- 6. Communicate results of scientific investigations, analyze data and formulate conclusions
- 7. Use critical thinking and scientific problem-solving skills, including, but not limited to, inferring, integrating, synthesizing, and summarizing, to make decisions, recommendations and predictions.

Course Schedule:

| Week | Date | Chapter | Exams |
|------|----------------|--|--|
| | 1/11 - | | |
| 1 | 1/18 | Introduction and Orientation | |
| | 1/19 - | | |
| 2 | 1/25 | Chapter 1: The Human Organism | |
| | 1/26 - | | |
| 3 | 2/01 | Chapter 2: Basic Chemistry | |
| | 2/02 - | | |
| 4 | 2/08 | Chapter 3: The Cell | |
| 5 | 2/09 - | Chapter 4: The Tissues | |
| | 2/15 | Chapter 5: The Integumentary System | |
| | 2/16 - | | |
| 6 | 2/22 | Chapter 6: Bone Tissue | |
| | 2/23 - | | |
| 7 | 3/01 | Chapter 7: Axial Skeleton | |
| | 3/02 - | | |
| 8 | 3/07 | Chapter 8: Appendicular Skeleton | Midterm Exams |
| 9 | 3/8 - 3/14 | Spring Break | Chapters 1 - 8 |
| | | | Available from 3/02 - |
| 10 | 3/15 -3/22 | Chapter 9: The Joints | 3/22 |
| | 3/23 - | | |
| 11 | 3/29 | Chapter 10: Muscle Tissue | |
| | 3/30 - | | |
| 12 | 4/05 | Chapter 11: The Muscular System | |
| 10 | 4/06 - | | |
| 13 | 4/12 | Chapter 12: Nervous Tissue | |
| 14 | 4/13 - 4/19 | Chapter 13: Anatomy of the Nervous System | |
| 14 | 4/15 | Chapter 13: Anatomy of the Nervous | |
| 15 | 4/20 - | System | Final Exams |
| | 4/26 | | |
| | 4/27 - | Chapter 14: The Somatic Nervous System | Chapters 1 - 15 Available from 3/20 - |
| 16 | 4/27 - 5/02 | Chapter 15: The Autonomic Nervous System | 5/05 |
| 10 | 5/02 - | | 5/05 |
| 17 | 5/05 | Chapter 16: Final Exams | |
| 17 | 5/05 | | |

! Note that the schedule is tentative and subject to change.

Lessons and discussions are due by the end of the day from 7-day period in which they are assigned. For the most of the semester this will be on a Monday evening.

Course Grading Information:

| Grade Breakdown: | | | |
|---|-----|--|--|
| Introduction and Orientation activities: | 5% | | |
| Chapter Lessons: | 25% | | |
| VoiceThreads (Discussions and Identification Exercises) | 15% | | |
| Weekly Quizzes: | 15% | | |
| Midterm Exams (2): Lecture Exam Lab Practical | 20% | | |
| Final Exams (2): Lecture Exam Lab Practical | 20% | | |

<u>Click here</u> for a helpful grade calculation slider!

Final letter grades will be assigned according to the following percentages:

A = 90 - 100; **B** = 89 -- 89; **C** = 70 -- 80; **D** = 60 -- 70; **F** = 59 or less

Options for taking exams:

1. <u>Respondus Monitor</u>: Most students choose this option because it provides the flexibility to take your exams at a time and location of your choice. To utilize this option, you must



Online exam

have a webcam and a computer mic. Additional instructions and rules will be provided within Brightspace.

- 2. <u>MCC testing center</u>. All students may schedule their exams at the MCC testing center free of charge. Note that the availability of this testing option may change due to COVID.
- **3. Outside Proctor:** If you reside outside of the area and are unable to use Respondus Monitor, it will be your responsibility to arrange a suitable location for which to take a proctored exam. Proctors must be pre-approved. To request an outside proctor, you will need to send me an email with "Proctor Request" as the subject heading. Within your email, you will need to include the name of the proctor, the organization, professional email, and business phone number. <u>Any</u> <u>request must be submitted at least 2-weeks before the scheduled exam</u>. Note that the availability of this testing option may change due to COVID.

Policies for outside proctors:

- The proctoring facility must have a secure testing environment and a computer with Internet access.
- The student is responsible for any fees that the proctoring facility may charge.
- Proctors must have an official email address provided by their employer. This
 email address can be a shared account that the proctoring facility uses for
 general proctoring service, or it can be the proctor's individual email address. I
 will not accept personal email addresses for the proctor.
- Tests must be taken at the proctor's workplace.
- The proctor must be present for the entire duration of exams.
- Should a proctor be unavailable to oversee an exam, the student or proctor will need to contact me at least one-week in advance of the exam for to arrange for another suitable proctor.
- Should the student encounter technical issues with the exam, the proctor will be required to contact me immediately by via phone. If I am unavailable, I will contact both the proctor and student as soon as possible with a resolution.

Acceptable Proctors:

- College and military testing Centers
- Learning/Tutorial Centers where the entirety of the exam will be monitored.

Please plan your schedules in advance to meet scheduled due dates. It is each student's responsibility to plan for transportation, childcare, and work schedule adjustments that

are needed to meet exam deadlines. Please contact me as soon as possible if you encounter difficulty with meeting scheduled deadlines.

*Your professor reserves the right to reject requests for proctors for any reason.

Late Work, Attendance, and Make Up Work Policies:

Please contact me immediately with any obstacles that would prevent you from meeting an assigned deadline. I am here to help!

- Late Chapter Lessons, Identification Activities, and Quizzes: Late submissions for which the student has not made prior arrangements with the instructor will result in a 10% deduction for each day in which an exam is taken beyond the posted due date.
- **Discussions:** Due to the interactive nature of the discussions, you are strongly urged to meet the deadlines. Unless prior arrangements have been made, stud



deadlines. Unless prior arrangements have been made, students who post late discussions will receive a 30% deduction on top of whatever grade is earned.

• **Exams:** Unless arrangements have been made with the instructor prior to the due date, there will be a 10% deduction for each day in which an exam is taken beyond the posted due date. Missed final exams will be recorded as a zero in absence of previous arrangements or a documented excused absence.

No late work will be accepted during final exams week.

Student Behavioral Expectations or Conduct Policy:

When interacting with classmates, please remember to be respectful, polite, and considerate to others. Constructive criticisms are expected, but personal attacks, inappropriate jokes, or rude comments to a classmate will not be tolerated. Offensive remarks and comments are that counterproductive to the learning environment in the online classroom will result in one or all of the following consequences: (1) a grade of zero, (2) being potentially banned from future graded interactions, and (3) disciplinary action, if severe.

If you witness or experience any offensive behavior, please report it to me as soon as possible.

* Click Here for the MCC Academic Integrity Statement

(www.mclennan.edu/academic-integrity)

The link above will provide you with information about academic integrity, dishonesty, and cheating.

Instructors comments:

Academic dishonesty will not be tolerated in this course. Academic dishonesty includes cheating, plagiarism, and other acts of dishonesty designed to provide unfair advantage to the student or the attempt to commit such acts.

At minimum, students caught cheating or plagiarizing will receive a zero for the assignments or exams in which the act occurred.

Plagiarism is the "use of another's writing as one's own" (Mead & Stevenson, 1997).

To plagiarize is to:

- Pass off another person's words or ideas as your own.
- Use another person's or organizations words or ideas without citing and giving credit to your source.
- Present a product from an existing source as new or original.
- Commit literary theft.

The following acts are considered plagiarism:

- Failure to put a direct quotation in quotation marks and then cite the source.
- Turning in another person's work as your own work.
- Copying another's words or ideas as your own without giving credit. You should cite your source even when you paraphrase another person's work.
- Providing the wrong information about a source.
- Substituting a few different words but leaving the sentence structure intact.

• Copying so much from a source that it constitutes the majority of your answer, assignment, or work. This is considered plagiarism even when you do cite your source (Plagiarism.org, 2010).

General Rule: If someone else said it, thought it, or wrote it, you have to cite it. DO NOT COPY TEXT OR CUT AND PASTE FROM THE INTERNET.

Cheating includes but is not limited to:

- 1. Using unauthorized materials during exams.
- 2. Copying from someone (anyone) else.
- 3. Having someone else complete your assignments, quizzes, or exams.
- 4. Collaborating with another student without permission from the instructor
- 5. Knowingly using, buying, selling, stealing, transporting, or soliciting the contents of an unauthorized test or assignment.
- 6. Substituting for another student or misrepresenting one's work.
- 7. The appropriation, theft, purchase, or obtaining of any other person's work without giving proper credit.

* Click Here for the MCC Attendance/Absences Policy

(https://www.mclennan.edu/highlander-guide/policies.html)

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

 You will need to access each link separately through your Web browser (for example: Mozilla Firefox, Chrome, Microsoft Edge or Safari) to print each link's information.

Attendance policy for BIOL 2401 online:



Online students are allowed no more than 4 weekly "absences." Because of the nature of online classes, your absences will be based upon the failure to complete required weekly assignments. An absence will be assigned for any student who fails to complete both a chapter lessons and assigned quizzes within a specific weekly checklist. Absences (and late penalties)

may be avoided when if a student has made *prior* arrangements with the professor for an extension due to legitimate circumstances.

$\begin{array}{c} \text{McLennan} \\ \text{COLLEGE} \end{array}$

ACADEMIC RESOURCES/POLICIES

Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at http://www.mclennan.edu/campus-resource-guide/

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact a success coach by calling (254) 299- 8226. Students can visit the Completion Center Monday-Friday from 8 a.m.-5 p.m. to schedule a meeting with a success coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff based on household size. Text (254) 870-7573 to schedule a pantry appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to <u>https://www.mclennan.edu/foundation/scholarships-</u> andresources/emergencygrant.html to find out more about the emergency grant. The application can be found at <u>https://www.mclennan.edu/foundation/docs/Emergency Grant_Application.pdf</u>.

Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

Backup Plan for Technology:

In the event MCC's technology systems are down, you will be contacted/notified through your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

* Click Here for the Minimum System Requirements to Utilize MCC's D2L/Brightspace

(https://www.mclennan.edu/center-for-teaching-and-

learning/Faculty%20and%20Staff%20Commons/requirements.html)

Click on the link above for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

Email Policy:

McLennan Community College would like to remind you of the policy (<u>http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf</u>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails.

Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with her/his students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

Email on Mobile Devices:

The College recommends that you set up your mobile device to receive McLennan emails.

Forwarding Emails:

You may forward the emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may become lost or placed in junk or spam filters.

Accommodations/ADA Statement

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. Instructors should not provide accommodations unless approved by the Accommodations Coordinator. For additional information, please visit mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

disabilities@mclennan.edu 254-299-8122 Room 319, Student Services Center

* Click Here for more information about Title IX

(www.mclennan.edu/titleix)

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at

<u>titleix@mclennan.edu</u> or by calling Dr. Drew Canham (Chief of Staff for Equity & Inclusion/Title IX) at 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC by calling 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting the following website: <u>http://www.lighthouse-services.com/mclennan/</u>.

McLennan's Title IX webpage (<u>http://www.mclennan.edu/titleix/</u>) contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

* You will need to access each link separately through your web browser (for example Mozilla Firefox, Chrome, Microsoft Edge, or Safari) to print each link's information.