

WACO, TEXAS

# AND INSTRUCTOR PLAN

Anatomy and Physiology I

**BIOL 2401.02** 

**Shannon Thomas** 

**NOTE:** This is a 16-week course.

#### BIOL 2401.02

# **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:**

- Come to class and be engaged.
- Balance study time. I know that many of you have incredibly busy schedules and are taking an online
  class because of the flexibility that it provides. It is helpful 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 general recommendation is 2-3 hours per week of study time for every college
  credit hour taken.
- Stay on top of due dates. It is helpful to review the course calendar at the beginning of each week to avoid missing any important deadlines.
- Make sure that your computer meets the system requirements
- Make sure that all course links are working as soon as they are available. Even if you intend to submit the work at a later date, it is important to make sure that all links are working and tasks are understood well before the deadline ©
- Contact your instructor immediately if you encounter any problems (personal, technical, etc.) that prevent you from completing a class requirement by the deadline.
- Review textbook chapters, study chapter notes, and utilize practice tests and Quizlet sets in order to prepare for the unit exams.
- Check student email and announcements daily. I do post important information about the class on the announcements page. It is part of your responsibility in the class to keep up with and follow any instructions that I post in the email and announcements.
- Ask questions! Students have occasionally commented that they didn't want to "bother me" with a
  question or problem. Please know that I am here for you and I welcome any comments or questions
  that you have. Please do not ever think that you are bothering me!

# **Instructor Information:**

Instructor Name: Shannon Thomas MCC E-mail: <a href="mailto:Sthomas@mclennan.edu">Sthomas@mclennan.edu</a>

Office: SB 208

Office Phone Number: 254-299-8167

#### BIOL 2401.02

Office/Teacher Conference Hours: 1:00 – 2:30 MW(Other times, by appointment)

**Other Instruction Information:** For online classes, the main method of communication should be through email. Should the need arise for you to speak with me on the phone or meet with me in person, please email me in order to schedule an appointment.

- o **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.
  - **Be concise:** Keep your emails as short as possible, but don't use text and chat abbreviations (I know most of them but not all :) I will do the same for you!
  - Quote back: If you are sending a new email from a previous conversation, 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!! If I receive an email with no name, I will email you back in order to find out who you are. Providing this information in the first place will enable me to respond to your need more quickly and ultimately save us all time!
  - Do not attach files or email assignments without permission.
  - 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.
- Meeting: If you would like to meet in person, please just send me an email to secure an appointment time.

\*\*Please follow up with me if you have not received a reply within 24-hours on a weekday or by Monday afternoon if you contacted me over the weekend \*\*

# **Required Text & Materials**:

#### **Free Online Textbook:**

- **Title:** Anatomy and Physiology
- Author: OpenStax College
- Edition: 1st
- Publisher: OpenStax College
- **ISBN:** 978-1938168130
- **Click here** 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.

# MCC Bookstore Website

# **Student Support/Resources:**

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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 <a href="http://www.mclennan.edu/campus-resource-guide/">http://www.mclennan.edu/campus-resource-guide/</a>

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources, we encourage you to contact a success coach by calling (254) 299-8226. Students can visit the Completion Center Monday-Friday from 8:00 a.m.-5:00 p.m. to meet with a success coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) is open 12:00 p.m.-1:00 p.m., Monday-Friday, without an appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

**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 (www.mclennan.edu/center-for-teaching-and-learning/teaching-commons/requirements)

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.

# **Methods of Teaching and Learning:**

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

- Direct instruction
- 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 that will be employed to help students learn the material:

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- Assigned Reading: Reading material will be assigned on a weekly basis. Although, the
  majority of required reading material will be assigned from the required textbook, students
  will also have assigned reading from websites related to Anatomy and Physiology and/or
  current issues in health.
- Online Resources: Online resources such as lecture notes, lab presentations, practice tests, chapter lessons, Quizlet cards, videos, etc., will be provided.
- Lecture presentations: Class presentations will be given in both lecture and lab and will
  cover anatomical structures, physiological concepts, and related terminology.
- Lab Activities/Assignments: Lab grades consist of a combination of online lab exercises, worksheets, creative projects, and collaborative games and exercises. Students will be checked off at the end of each lab for participation and completion of assigned lab work and activities.
- **Collaboration**: Students will work together to learn, evaluate, and teach challenging class material.
- Quizzes: Daily lecture and lab quizzes will be given and will consist of multiple, true-false, matching questions over previously discussed materials.
- Exams will consist of a lecture exam and a lab portion containing multiple-choice, true/false, matching, short-answer, and essay questions.

# **Course Objectives:**

- **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 (Lecture):**

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# Upon successful completion of this course students will be able to:

- 1. Use anatomical terminology to identify and describe locations of major organs of each system covered. Explain interrelationships among molecular, cellular, tissue, and organ functions in each system.
- 2. 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.
- 3. Describe modern technology and tools used to study anatomy and physiology.

# **Learning Outcomes (Lab):**

# Upon successful completion of this course students will be able to:

- 1. Apply appropriate safety and ethical standards
- 2. Locate and identify anatomical structures
- 3. Appropriately utilize laboratory equipment, such as microscopes, dissection tools, general lab ware, 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:

\*\*Note that the schedule is tentative and subject to change

| Date | Lecture (Room 215)  | Date | Lab (Room 127)  |
|------|---|------|---|
| 1/13 | Class Orientation   | 1/15 | Q <i>uiz</i><br>Human Organism Lab<br>Microscope Lab  |
| 1/20 | Martin Luther King Jr. Day (no class)                     | 1/22 | Quiz: Human Organism Chemistry Lecture  |
| 1/27 | Quiz (Chemistry)  The Cell: Cell anatomy                  | 1/29 | Quiz (The Cell) Cell Lecture, con't VoiceThread Identification (cell) due before next class.                |
| 2/03 | Quiz: The Cell<br>The Tissues                             | 2/05 | <b>Tissues lab</b> VoiceThread Identification (tissues) in class due by 2/12 Quiz 5 (tissues) at end of lab |
| 2/10 | Lecture Exam 1 (human organism, chemistry, cell, tissues) | 2/12 | The Integumentary system (lecture & lab)  |

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| Date  | Lecture (Room 215)   | Date  | Lab (Room 127)                                      |
|-------|--|-------|---|
|       |  |       |   |
|       | Quiz 5 Bone Tissue   |       | Quiz 6 Axial Skeleton & Bone Tissue Lab             |
| 2/17  |  | 2/19  |   |
|       | Quiz on Bone tissue and Axial Skeleton                             |       | Quiz on Appendicular skeleton structures (ppt       |
| 2/24  | structures (ppt slides)  | 0/26  | slides)   |
|       | Appendicular Skeleton  Lecture Exam 2 (Integumentary, bone tissue, | 2/26  | Bone Lab  |
|       | Axial and appendicular skeleton)                                   |       | Bone & Joint Lab                                    |
|       | The Joints Lecture   |       | VoiceThread Identification (bones) due before       |
| 3/2   |  | 0/04  | class.  |
| 3/09  |  | 3/04  | Quiz: mini lab practicum at end of class            |
| 5/05  | SPRING BREAK!!   | 3/11  | SPRING BREAK!!                                      |
|       | Muscle Tissue Lecture  |       | Lab Practicum 1 (over cell structures,              |
| 3/16  |  | 0/40  | microscope, tissues, integumentary, bone tissue,    |
|       | Quiz: Muscle Tissues   | 3/18  | axial skeleton, appendicular skeleton).  Muscle Lab |
| 3/23  | The Muscular System  | 3/25  | Muscle Quiz at end of lab!                          |
|       | VoiceThread Identification (Muscles) due by                        | 0, _0 |   |
|       | 8:00 am on 3/25.   |       |   |
|       | Lecture Exam 3   |       | Nervous Tissue, con't                               |
| 3/30  | Nervous Tissue Lecture (part 1)                                    | 4/01  | Nervous Tissue lab                                  |
|       | ·  |       | More work on Muscle (time permitted)                |
|       |  |       |   |
| 1.000 | Nervous Tissue Quiz  | 4 (00 | Nervous System: Brain and Cranial nerves            |
| 4/06  | Nervous System: <b>Brain and Cranial nerves</b>                    | 4/08  | Quiz: Brain and Cranial nerves at end of class      |
|       | Nervous System: Spinal cord and spinal                             |       | VoiceThread Identification (CNS) due.               |
| 4/13  | nerves   | 4/15  | Nervous System: Spinal cord and spinal nerves       |
|       |  |       | Brain dissection                                    |
|       |  |       | Quiz CNS at end of class                            |
|       |  |       | Special senses lab                                  |
| 4/20  | Special senses   | 4/22  | Eye dissection                                      |
|       | Quiz: Special Senses   |       |   |
| 4/27  | Autonomic N.S.   | 4/29  | Final Lab Practicum (Comprehensive)                 |
|       | Exam Review  |       |   |
| 5/04  | Final exams week (our class will not meet)                         | 5/06  | Final Exam  |

# **Course Grading Information:**

# **EXAMS:**

There will be FOUR lecture exams and TWO lab practicums (lab exams):

# • Lecture Exams:

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- o Exam 1 (Chapters 1-4) Human body, basic chemistry, the cell, tissues.
- o Exam 2 (Chapters 5-8): Integumentary, bone, skeletal tissues, joints.
- o Exam 3 (Chapters 9-10): Muscles and Muscle Tissue
- Exam 4 (11-15; comprehensive): Nervous and sensory systems. Approximately 80% of the exam will consist of nervous and sensory questions while the other 20% will consist of questions covered on previous exams.
- **Lab Practicums:** The lab portion of the exams will consist of 50-100 short answer questions that will primarily address the identification of anatomical structures and their functions.
  - Lab practicum 1: microscope, cell, tissue identification, integumentary, skeletal system, and joints.
  - Lab practicum 2: microscope, cell, tissue identification, integumentary, skeletal system, muscular system, nervous system, eye and ear model.

**QUIZZES**: Students will have regular lecture quizzes at the beginning of the class over assigned lecture or lab material and occasionally at the end of class over assigned lab structures.

#### **Identification Activities:**

To evaluate verbal participation, proper pronunciation, and an understanding of anatomical structures and their basic functions, students will be required to participate in creating Identification videos over required structures on the anatomical models. Using a communication and collaboration tool, students will be asked to draw and describe assigned physiologic processes and name and identify assigned anatomical structures and functions.

#### LAB PARTICIPATION/TEAMWORK:

Group/Teamwork is expected during lab time and will be evaluated for a grade. It is the expectation that each student come to class prepared and actively assist their group members in completing the required material for each day. Students are strongly encouraged to prepare for lab material in advance by completing the written questions in the lab manual, studying Quizlet cards, practice tests and other material as indicated by your instructor.

Students are expected to participate in lab and work together to solve problems and achieve goals. If collaboration and teamwork are not being observed within a group, then all groups may be restructured and assigned according to the discretion of the instructor. Students may also request to be reassignment if their lab group is failing to adequately meet the team collaboration requirements listed below.

#### LAB ASSIGNMENTS:

Lab assignments may include worksheets, case-studies, and in-class lab activities.

#### **GRADE BREAKDOWN:**

Grades will be calculated based on the following:

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| Lecture Exams                     | 40% |
|-----------------------------------|-----|
| Lab Practicums                    | 20% |
| Identification Activities         | 15% |
| Daily quizzes (lecture and lab)   | 15% |
| Lab assignments and participation | 10% |

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

$$A = 89.5 - 100$$
;  $B = 79.5 - 89.4$ ;  $C = 69.5 - 79.4$ ;  $D = 59.5 - 69.4$ ;  $F = 59.4$  or less

# **Late Work, Attendance, and Make-Up Work Policies:**

- **Lab exercises and activities** may not be made up. However, two low grades will be dropped from the average.
- **Identification Activities:** Will receive a 10% deduction each day beyond the due date.
- **Daily Quizzes:** missed quizzes may not be made up. However, two low grades will be dropped from the average. Students will be given 15-minutes from the beginning of the quiz to complete it. Students who come in late to class may take the quiz, but will only have the remaining time to complete it. All students must stay in the room until all quizzes are handed in.

#### Exams:

- Lecture Exams: Missed lecture exams may be scheduled at the testing center outside of class time. You will need to meet with your instructor make arrangements for testing.
- Lab Practicums: The comprehensive final lab practicum grade will replace a low, or missed, midterm exam grade. Students with a documented excuse may arrange with the instructor to take the comprehensive final exam. It is the students responsibility to contact the instructor in a timely manner to arrange a time and location for the make up exam.

#### **Student Behavioral Expectations or Conduct Policy:**

**Professionalism**: A casual and friendly atmosphere is encouraged. However, civility and respect towards the instructor and classmates is required. It is expected that each student demonstrate respectful behavior to his/her classmates as well as their instructor. Failure to do so may result in a grade of zero for a particular assignment, loss of opportunity to participate in future assignments that require an interactive environment, and in extreme circumstances, may result in removal from the class.

Policy on cell phones, tablets, and devices: Students may use phones, tablets, and laptops for BIOL 2401 coursework. However, any student who is using the devices for other purposes is not only hurting their own

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learning, but serving as a distraction to others around them. With a first violation, you will be asked to turn off your device and put it away for the remainder of the class. Consecutive, or violations involving multiple students may result restriction of devices for all students during class.

# **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.

# **Academic Integrity Statement:**

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

Students caught cheating or plagiarizing will receive a zero for the assignments or exams in which the act occurred. Additionally, students may be required to change testing locations (according to the discretion of the instructor) and will be reported to the Conduct Counselor.

# Plagiarism:

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.

Plagiarized work will be assigned a grade of "F" and could result in failure or withdrawal from the class.

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If in doubt about plagiarism, please contact me prior to the submission of the activity and I will be glad to help you.

# **Cheating** -- includes but is not limited to:

- 1. Copying from someone (anyone) else.
- 2. Having someone else complete your assignments, quizzes, or exams.
- 3. Using unauthorized materials.
- 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**

#### (www.mclennan.edu/highlander-guide-2014-15/policies)

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

Please refer to the Highlander Guide for the complete policy.

# \* Click Here for the MCC Attendance/Absences Policy

# (www.mclennan.edu/highlander-guide/policies)

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

# **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.

"If anyone in this class has a diagnosed disability or requires accommodations, I would appreciate hearing from you so we may work together for a successful completion of the course. Please schedule an appointment with me and be sure to follow the instructions in your syllabus to complete Disability Services requirements."

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

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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 <a href="mailto:titleix@mclennan.edu">titleix@mclennan.edu</a> or by calling Dr. Drew Canham (Vice President for Student Success) 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.

McLennan's Title IX webpage (<a href="http://www.mclennan.edu/titleix/">http://www.mclennan.edu/titleix/</a>) 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: Internet Explorer, Mozilla, Chrome, or Safari) to print each link's information.