

### BSC 1309.01W Human Structure and Function

COURSE SYLLABUS: Fall 2024

### INSTRUCTOR INFORMATION

Instructor: Jenny Hodnett

Office Location: Room 224 Caddo Mills High School

Office Hours: 7:45-8:30 am Monday-Friday

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Preferred Form of Communication: email

Communication Response Time: <24 weekday hours

#### **COURSE INFORMATION**

# **Course Description**

BSC 1309.01W is a three-hour credit course for non-biology majors designed to apply the principles of biology to humans as a functional unit of our social organization. Fundamental principles of humans, as in all living organisms, include physical and chemical properties of life, organization, function, and evolutionary adaptation. This course will explore basic biological concepts in a manner that stresses relevance to the human population by focusing on current issues and should engage the student in thought-provoking analyses to reflect and integrate into societal interactions.

# **BSC 1309.01W Required Course Materials and Resources**

Textbook: *Human Biology* Edition: 16th Edition

Authors: Sylvia S. Mader and Michael Windelspecht

Publisher: McGraw-Hill

ISBN: 9781260692174 (looseleaf <u>or</u> ebook)

You can rent the ebook at this link for \$50

**Human Biology (Mader)** 

### Free Supplemental Material:

https://openstax.org/details/books/anatomy-and-physiology

#### **Software Required:**

Must have access to computer/device and internet service provider for participation and completion of the coursework. A reliable computer/device and access to link with the internet is essential for this course. Students who do not have access to a compatible and reliable computer/device and/or internet provider may utilize the resources provided by Texas A&M University - Commerce in Gee Library or the various computer labs located on the campus.

# **Course Description**

# **Student Learning Outcomes**

- 1. <u>Critical Thinking</u> Students will be able to analyze, evaluate, or solve problems when given a set of circumstances, data, texts, or art.
- 2. <u>Communication</u> In written, oral, and/or visual communication, A&M-Commerce students will communicate in a manner appropriate to the audience and occasion, with an evident message and organizational structure.
- 3. <u>Empirical and Quantitative Skills</u> Students will be able to interpret, test, and demonstrate principles revealed in empirical data and/or observable facts.
- 4. <u>Teamwork</u> Students will be able to work together toward a shared purpose relevant to the course or discipline with a sense of shared responsibility for meeting that purpose.

### **COURSE REQUIREMENTS**

#### Minimal Technical Skills Needed

The following are minimal technical skills required for the coursework for BSC 1309.01W:

- Ability to use and navigate MyLeo Online (D2L Brightspace) for Texas A&M University -Commerce containing the coursework components.
- 2. Ability to research, compose, and submit the research article critique in APA format.

#### **Instructional Methods**

This is a face to face course. A minimum of three days a week will consist of lecture, note-taking, and discussion/activities. Your performance in this course will be assessed by means of:

#### 1. Quizzes

You will complete a quiz each week over the previous week's reading material and notes. These quizzes will ensure that you are learning the material that is covered during the lecture and you are reading the chapters. The lowest quiz grade will be dropped.

# 2. Group Project

You will complete a group project (2-4 people in each group) that includes all 4 learning competencies of the course. The group project is due **December 2nd at midnight but needs to be submitted by December 1st to check for plagiarism**. The instructions for the group project are as follows:

## **Infectious Disease Group Project:**

For this assignment, you will work with a group to construct a research paper over an infectious disease. Your paper should inform the public about the disease as if there were a pandemic, with the

goal of reducing the spread of the disease and increasing the likelihood of survival. You will also create an infographic on the disease to present to the class. Each group member must be responsible for one or more aspects of the disease. You must have a minimum of 5 sources and you will use in-text citations throughout the paper. Any thought that is not your own MUST be cited. It is important that your sources be credible. Wikipedia is NOT credible.

Chapter 8 in your textbook covers infectious diseases. You should read this chapter for some background knowledge before choosing your disease.

You may choose a disease from the attached list or one of your own. Please post your disease to D2L as soon as you select it so that we do not have two groups with the same disease.

List of Infectious Diseases				
Leprosy (aka Hansen's Disease)	Meningitis (bacterial or viral)			
Black Plague (aka Plague or Bubonic Plague)	MERS (middle east respiratory syndrome)			
AIDS (HIV)	SARS (severe acute respiratory syndrome)			
Typhoid Fever	Covid-19			
Ebola	Hantavirus			
Creutzfeldt-Jakob Disease (or Kuru)	Rabies			
Hepatitis	Chickenpox			
Malaria	Gonorrhea			
Influenza (flu)	Listeriosis			
Tetanus	Chikungunya			
Measles	Rubella			
Smallpox	Chlamydia			
Rabies	Norovirus			
Diphtheria	Dengue Fever			
Tuberculosis	Hand, foot, and mouth disease			
Polio	Herpes			
African Sleeping Sickness	Influenza			
Gangrene (infection)	Mono (Epstein-Barr virus)			
Whooping Cough	Cholera			

Yellow Fever	Hepatitis (A, B, or C)	
West Nile Virus	Lyme Disease	
Anthrax	Mumps	

# Rubric for your paper

Sources and Credits (30 pts.)	Resources and citations included many high quality	Resources and citations included, most are high quality	Resources not included, or are questionable quality. No in text	No works cited; no in text citations (0 pts.)	
Global Incidence 10 pts.	Statistics, maps, and other information included to provide scope and scale of the disease and how it affects global populations	Some information provided about scale and overall incidence of the disease	Lacking information about how the disease affects the global community	No information	
Treatment or Outcomes (mortality rate) 10 pts.	Provides treatment options, information about need for hospitalization, or gives a time frame for recovery and mortality rates.	Provides treatment options and information about outcomes	Some details are included about how to treat the disease or mortality rates	No information	
Symptoms 10 pts.	Details about symptoms of the disease are specific and comprehensive, images included if appropriate	Some details about symptoms are included, images included if appropriate	A few details about symptoms are included, details lacking	No information	
Transmission 10 pts.	Provides details on the routes of transmission and how infectious it is (R0); includes how to avoid becoming infected; vaccine or other medical preventatives addressed.	Provides details on the routes of infection, includes how to avoid becoming infected	Route of infection is mentioned, though lacking in details	No information	
Pathogen 10 pts.	Details on the type of pathogen (bacteria, virus, etc) that causes the disease is included	type of pathogen that causes the disease is included	lacking details on the type of pathogen	No information	
General Content 20 pts.	Provides an overview of the pathogen and the disease it causes, the reader understands main points at a glance; well organized	Provides an overview of the pathogen and the disease it causes, main points are not clear or there are minor issues with organization	Includes general information about the pathogen or the disease, main points not clear or well-organized	Content is plagiarized or is not relevant to the topic.	
					Total Pts. Earned

### Length

I expect your paper to be 5-7 pages but it may need to be longer to cover everything. You may also need to use subheadings throughout your paper. This is a good way to break down your paper into sections for each group member.

#### Citing your sources:

You must summarize the information in your own words and all information MUST include in-text citations. Do not directly quote anything. Plagiarism will result in a zero. This course uses Turnitin plagiarism software. You must have less than 25% plagiarism. Make sure you check turnitin once you submit the paper. ONLY ONE PERSON IN THE GROUP WILL SUBMIT THE PAPER. ALL OF YOU CANNOT SUBMIT OR IT WILL SHOW 100% PLAGIARISM FOR EVERYONE. You should not use quotations or directly copy anything from any of your sources. You must cite any sources that you use. I recommend www.bibme.org to help with your citations. APA format should be used. YOU MUST INCLUDE IN-TEXT CITATIONS. When you cite a source within the text, you will use parentheses with the last name of the author and the year it was published. Your paper should be 12pt font with one-inch margins and double-spaced. You must also include a title page but this is not part of the required length.

#### **Teamwork Grade:**

Team members will complete a teamwork questionnaire for each person in the group as well as themselves. Individual group members may be awarded different grades when teamwork is calculated into the final project grade for each person. If a group member is identified by **all** other group members as someone who chose not to participate in the group project, that person will be awarded a zero for the overall project grade.

#### **Presentation:**

You will create an infographic to present to the class to share information about your infectious disease. You may use the following to create your presentation:

- 1. Create an infographic using piktochart.com.
- 2. Create a poster using postermywall.com
- 3. Create a poster using canva.com

Each group member will present their research findings to the class through the infographic.

#### Example:



Overall Project Breakdown:

Teamwork - 20% Presentation - 20% Research Paper - 60%

### <u>Important Project Due Dates (subject to change):</u>

Sept. 30 - Group members and disease are chosen - submit this in the discussion post in D2L.

Nov. 4 - Outline due with paper divided into sections for each group member.

**Dec. 2** - Paper Due <u>It must be submitted in D2L by **Dec. 1** to prevent anyone from submitting the paper late and for an opportunity for questions.</u>

May 6-10 Group Presentations MUST HAVE A GRAPHIC AND ALL GROUP MEMBERS MUST SPEAK ABOUT THEIR RESEARCH (no time limit)

# 3. Empirical and Quantitative Data Assessment:

The empirical and quantitative data assessment will cover genetics and heredity and will meet the course core competency of empirical and quantitative skills. This assessment will consist of 10 genetics problems that will require you to use punnett squares. This assessment will be taken the week of the exams.

# 4. Attendance/Participation

It is imperative that you are present, paying attention, and taking notes during lecture. Points will be deducted for cell phone usage, leaving class during lecture, sleeping during lecture, an absence that is not excused per university policy.

Student Responsibilities or Tips for Success in the Course

Communication throughout this semester is imperative for success. Reach out to me if you have questions before the assignment is due. If you wait until the due date, it is too late. It is important for you to be in class for lectures everyday. It is also important that you stay up to date with due dates. All due dates are at 11:59pm on the date the assignment is due. Do not wait until the last minute to complete graded assignments to avoid unforeseen "life" situations from interfering with due dates. Late work is not accepted unless there are extenuating circumstances. It is important that you begin communicating with your group members and begin the group assignment well before it is due so you can come to me with any questions. You should check your email regularly for important information or changes that may be made to the coursework. Log into D2L regularly to check due dates. If you are absent from class the day of a quiz it may only be made up if the absence is excused based on university policy. If it is not made up, you will get a zero for the quiz. Cell phone use during lecture is prohibited. I will adhere to the district cell phone policy.

#### **GRADING**

Final grades in this course will be based on the following scale:

A = 90%-100%

B = 80% - 89%

C = 70% - 79%

D = 60% - 69%

F = 59% or Below

Quizzes: 55%
Group Project: 30%
Empirical and Quantitative Data Assessment: 10%
Attendance/Participation 5%

TOTAL 100%

# **TECHNOLOGY REQUIREMENTS**

#### **LMS**

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

#### LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser\_support.htm

### Zoom Requirements:

https://support.zoom.us/hc/en-us/articles/201362023-Zoom-system-requirements-Windows-macOS-Linux

#### **ACCESS AND NAVIGATION**

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or <a href="https://example.com/helpdesk@tamuc.edu">helpdesk@tamuc.edu</a>.

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

#### **COMMUNICATION AND SUPPORT**

If you have any questions or are having difficulties with the course material, please contact your Instructor.

### **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

#### COURSE AND UNIVERSITY PROCEDURES/POLICIES

# **Course Specific Procedures/Policies**

It is imperative that all lab safety procedures are followed. Lab dress code must be observed on lab days or you will not be allowed to participate in the lab. Cell phones should not be visible or in use during lab or lecture. Please make sure cell phones are silenced and put away.

# **Syllabus Change Policy**

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

# **University Specific Procedures**

#### **Student Conduct**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <a href="https://www.britannica.com/topic/netiquette">https://www.britannica.com/topic/netiquette</a>

#### **TAMUC Attendance**

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

# **Academic Integrity**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

<u>Undergraduate Academic Dishonesty 13.99.99.R0.03</u> <u>Undergraduate Student Academic Dishonesty Form</u>

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

#### Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

# Office of Student Disability Resources and Services

Texas A&M University-Commerce Velma K. Waters Library Rm 162 Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: <a href="mailto:studentdisabilityservices@tamuc.edu">studentdisabilityservices@tamuc.edu</a>

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

#### **Nondiscrimination Notice**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

# **Campus Concealed Carry Statement**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOf EmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

# **A&M-Commerce Supports Students' Mental Health**

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit <a href="https://www.tamuc.edu/counsel">www.tamuc.edu/counsel</a>

# **Course Calendar**

Week	Chapter Readings	Assignment	
1	Chapter 2 - Chemistry of Life	Chapter Quiz	
1	Chapter 3 - Cell Structure and Function	Chapter Quiz	
2	Chapter 4 - Organization and Regulation of Body Systems	Chapter Quiz	
3	Chapter 5 - Cardiovascular System: Heart and Blood Vessels	Chapter Quiz	
3	Chapter 6 - Cardiovascular System: Blood	Chapter Quiz	
4	Chapter 9 - Digestive System	Chapter Quiz	
5	Chapter 10 - Respiratory System	Chapter Quiz	
6	Chapter 11 - Urinary System	inary System Chapter Quiz	
7	Chapter 12 - Skeletal System	Chapter Quiz	
8	Chapter 13 - Muscular System	Chapter Quiz	
9	Chapter 14 - Nervous System	Chapter Quiz	
10	Chapter 16 - Endocrine System	Chapter Quiz	
11	Chapter 19 - Patterns of Chromosome Inheritance	Chapter Quiz	
12	Chapter 20 - Cancer Chapter Quiz		
13	Chapter 17 - Reproductive System Chapter Quiz - Summar		
13	Chapter 18 - Development and Again Chapter Quiz - Summar		
14	Chapter 21 - Genetic Inheritance	Empirical and Quantitative Data Assessment	
	Chapter 7 - The Lymphatic and Immune Systems Chapter 8 Biology of Infectious Disease	Research Paper	

