

**Course number, Course CRN, COURSE TITLE**

***BIOL 3315-120 Advanced Physiology***

**Spring 2023**

Texas A&M University-Central Texas

**COURSE DATES, MODALITY, AND LOCATION**

*This course meets face-to-face Mondays and Wednesdays 4- 5:15 pm in Warrior Hall room 313, with supplemental materials made available online through the A&M-Central Texas Canvas Learning Management System [<https://tamuct.instructure.com/>].*

**INSTRUCTOR AND CONTACT INFORMATION**

**Instructor:** Dr. Onadia Cabrera-Mora

**Office:** Heritage Hall 302S

**Phone:**

**Email:** o.cabrera@tamuct.edu

**Office Hours: Virtual hours: T/TH 3- 5 PM**

**Student-instructor interaction**

*I will check my Canvas email at least twice a day from Sun- Fri. This is the best way to reach me. Face-to-face appointments will be available during office hours and can be arranged via Canvas In box correspondence or phone.*

<b>Communication received</b>	<b>Expect a response</b>
Monday through Thursday	Within 48 hours
Friday	By noon the following Monday
Saturday and Sunday	By 5:00 pm the following Tuesday

**Emergency Warning System for Texas A&M University-Central Texas**

**SAFEZONE.** SafeZone provides a public safety application that gives you the ability to call for help with the push of a button. It also provides Texas A&M University-Central Texas the ability to communicate emergency information quickly via push notifications, email, and text messages. All students automatically receive email and text messages via their myCT accounts.

Downloading SafeZone allows access to push notifications and enables you to connect directly for help through the app.

You can download SafeZone from the app store and use your myCT credentials to log in. If you would like more information, you can visit the [SafeZone](http://www.safezoneapp.com) website [[www.safezoneapp.com](http://www.safezoneapp.com)].

To register SafeZone on your phone, please follow these 3 easy steps:

1. Download the SafeZone App from your phone store using the link below:
  - o [iPhone/iPad](https://apps.apple.com/app/safezone/id533054756): [<https://apps.apple.com/app/safezone/id533054756>]
  - o [Android Phone / Tablet](https://play.google.com/store/apps/details?id=com.criticalarc.safezoneapp) [<https://play.google.com/store/apps/details?id=com.criticalarc.safezoneapp>]

2. Launch the app and enter your myCT email address (e.g. {name}@tamuct.edu)
3. Complete your profile and accept the terms of service

**For updates on COVID information**, please monitor the University [website](https://www.tamuct.edu/covid19/)  
[https://www.tamuct.edu/covid19/]

## **COURSE INFORMATION**

### **Course Overview and description**

Study human physiology at the biochemical, cellular, tissue, and organ level. Designed for upper-division science and nursing majors.

Prerequisite(s): BIOL 1406."

### **Course Objective or Goal**

The course objective is to understand the human body's physiological processes, how these processes are integrated, and how, when, and why these processes malfunction causing disease or disorder in the human body.

### **Student Learning Outcomes**

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

- A. Use quantitative information to evaluate and understand physiological processes.
- B. Describe the cellular activity using chemical and physical principles
- C. Relate the cellular activity to specific body tissues and organs functioning.
- D. Describe the interactive functions of key homeostatic mechanisms.
- E. Distinguish between regular physiological changes and common pathological changes in the body.

### **Required Reading and Textbook(s)**

Required Textbook: Watson, C. 2015. Human Physiology. Jones and Bartlett Learning, Burlington, MA ISBN: 9781284035179

## **COURSE REQUIREMENTS**

### **Required Assignments:**

- |                              |                 |
|------------------------------|-----------------|
| i. Lecture Exams (3)         | (300 pts.) 30 % |
| ii. Final Comprehensive Exam | (200 pts.)20 %  |
| iii. Assignments             | (200 pts.)20%   |
| iv. Participation/Discussion | (150 pts.) 15%  |
| v. Quizzes                   | (150 pts.) 15%  |

### **Grading Criteria Rubric and Conversion**

**A 4.00 ≥ 90%** Achievement that is outstanding relative to the level necessary to meet course requirements.

**B 3.00 = 80-89%** Achievement that is significantly above the level necessary to meet

course requirements

**C 2.00 = 70-79 %** Achievement that meets course requirements in every respect.

**D 1.00= 60-69** Achievement that is worthy of credit even though it fails to fully meet course requirements.

**F  $\leq$  60 %** Represents failure and signifies that the work was either **1) completed but at a level of achievement that is not worthy of credit or 2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I (INCOMPLETE)**

**I (Incomplete)** The “I” shall be assigned at the discretion of the instructor when, due to extraordinary circumstances, the student was prevented from completing the work of the course on time. The assignment of an “I” is to remain on the transcripts until changed by the instructor or department. For all other students, work to make up an “I” must be submitted within one year of the last day of final examinations of the term in which the “I” was given; If not submitted by that time, then the “I” will automatically change to an “F”

*To obtain an incomplete you must have been doing passing work in the course.*

## **GRADING POLICY: RUBRICS**

### **a. Chapter Preview Assignments**

Satisfies SLOs b,c, and d

These assignments will be your first exposure to new vocabulary and the foundation for your self-cultivated exam study guides.

These assignments will be worth 200 points in total

The following will be assigned to various vocabulary terms: Define, give an example, compare, and contrast.

The point value of each term depends on the number of total words. The points for each term are divided by the number of tasks assigned. For example:

20 vocabulary terms = 5 pts each

Ligand-gated ion channel (D) (Ex) = 2.5 pts for (D), 2.5 pts for (Ex).

Blanks and incorrect answers will be assessed for 0 pts.

### **b. Quizzes**

Satisfies SLOs a-e

Are designed to provide immediate feedback on your grasp of the material

Covers two chapters at a time, worth 30 pts

Multiple choice = 2 pts/each

Fill in the blanks = 2 pts/each

Matching = 2 pts/each

True/False = 2 pts each

### **c. Exams**

Satisfies SLOs a-e

Covers three- four chapters at a time, worth 100 pts

Multiple choice = 3 pts/each

Fill in the blanks = 3 pts/each

Matching = 2 pts/each

True/False = 2 pts each

Short answer = 5 pts/each, Partial credit may be assessed.

### **d. Chapter-based Case study Discussion**

Satisfies SLOs a-e

This is a participation grade

Will be graded complete or incomplete

To earn a complete, the student must respond to the original case study post and reply to at least one of their peers' posts. Failing to do both will result in an incomplete grade.

There is no grade assessed for class participation. However, it is vital to the proper integration of these concepts.

### **Posting of Grades**

*I will grade the test and post the grades to Canvas on Sundays.*

#### **Grading Policies**

##### **Assignments:**

Assignments are designed to help you build a study guide for exams while satisfying the SLOs and module objectives. Please see the Rubrics for additional information. I will not give other study materials or accept assignments by email.

##### **Late Assignments:**

I expect that all assignments will be turned in on time. Late assignments impeded my ability to provide timely feedback. Please be aware that extra time taken to complete any work may be viewed as an unfair advantage. Therefore, the highest grade allowed for late assignments is an 80 (B). Deductions for incorrect or partial responses will be taken from 80 pts. I will reserve the right to decline work if I observe that being late is habitual. I will not accept late work after the assignment has been returned.

##### **Assessments: Exams and Quizzes**

I will not provide additional study material for exams or quizzes. You are expected to treat quizzes like study guides. For quizzes, you will receive randomly selected questions from a question bank. You are allowed three attempts, and your grade is the average of all attempts. Please be aware that you can save queries and answers as part of your study material. Exams, however, are closed-book, in-class, written assessments of your understanding of the SLOs. Please see the **Rubrics** for additional information

**Late attendance policy:** Students arriving late for the exam will not be given additional time to complete the exam.

**Makeup exam policy:** If you need to schedule makeup for a MISSED exam, you must contact the instructor **at least 24 hours before the exam** unless it is a medical or a family emergency. The missed exam must be made up within seven days of the scheduled test date. A note or documentation must be provided as proof of scheduling a makeup exam.

**Accommodated exams:** All students needing special accommodation must submit an accommodation form from the Office of Access and Inclusion listing the specific accommodation needed. Students are responsible for scheduling their own exam times with the TAMUCT Testing Center.

**Grade Dispute Policy:**

Grading disputes must be presented in writing no later than 24 hours after the assignment has been returned. A credible source must support the dispute. Although I will consider your request, I reserve the right to adjust your grade or reject the request.

**Exam Policies:**

- *There will be no bathroom breaks allowed during any exam. Be sure that you address this issue before beginning an exam.*
- *Any student needing to take an exam at a different time than the rest of the students due to sickness or other accommodations will receive a different version of the exam. This includes sickness, special accommodations, etc...*
- *All students needing special accommodations must submit an accommodation form from the Office of Access and Inclusion listing the specific accommodations needed. Students are responsible for scheduling their own exam times with the TAMUCT Testing Center.*
- *Any student missing an exam in class for any other reason (i.e. illness, death in the family, etc...) must provide documentation for missing the exam (e.g. doctor's note, obituary notice, etc...). Exams must be made up within one week of the originally scheduled date, with no exceptions.*
- *All backpacks and materials as well as cell phones, smartwatches, and all other electronic devices, must be turned off and placed at the front of the room on test day.*
- *Jackets, sweaters, etc must be placed in the front of the room on test day, unless otherwise indicated by the teacher.*

## COURSE OUTLINE AND CALENDAR

### Complete Course Calendar

W k.	Dates	Lecture Topic	Assigned Readings	HW (Due end of the week on Monday at 11:59 pm)
1	1/19 W	<b>1/17 Mon</b> Course Introduction: Cellular Physiology	<b>MLK Day HOLIDAY</b>  Chapter 1, pg 1-29	Chapter 1 Preview HW due (M 01/23) Chapter 1 case study discussion due (Wed. 01/25)
2	1/23 M	Cellular Physiology contd.		
	1/25 W	Autonomic Nervous System Physiology	Chapter 2, pg 31-45	Chapter 2 Preview HW due (Wed 01/25)
3	1/30 M	Autonomic Nervous System ( Cont)		Chapter 1.2 Case Study Canvas discussion (Fr.01/27)
	2/01 W	Endocrine System Physiology	Chapter 3, pg 47-68	Chapter 3 Preview HW due (Wed 02/01)
4	2/6 M	Endocrine System (contd.)	<b>Chapter 1,2 &amp; 3 Review Quiz (Sun 02/04)</b>	Chapter 3 Case Study Canvas discussion (Fr.02/10)
	2/8 W	<b>Lecture Exam 1</b> Immune System Physiology (Intro)	<b>includes chapters (1-3)</b>	Chapter 4 Preview HW due (Wed 02/08)
5	2/13 M	Immune System Physiology	Chapter 4, pg 71-85	Chapter 3.2 Case Study Canvas discussion (Fr.02/17)
	2/15 W	Immune System Physiology		Chapter 5 case study discussion (Wed 02/22)
6	<b>2/20 Mon</b>	<b>President's Day HOLIDAY</b>		
	2/22 W	Somatic Nervous System and Special Senses	Chapter 5, pg 87-122	Chapter 5 Preview HW due (Wed 02/22)
7	2/27 M	Somatic Nervous System and Special Senses (contd)		Chapter 5.2 Case Study Canvas discussion (Fr.02/24) Chapter 5 Case Study

				review discussion
	3/1 W	Digestive System Physiology	Chapter 6, pg 125-140	Chapter 6 Preview HW due (Wed 3/1)
8	3/6 M	Digestive System Physiology contd.	Chapter 4, 5 & 6 Review Quiz (Sun 03/04)	
	3/8 W	<b>Lecture Exam 2</b>	Includes Chapters 4,5 & 6	
9	<b>3/13 - 3/17</b>	<b>SPRING BREAK – NO CLASS</b>		
10	3/20 M	Cardiovascular Physiology	Chapter 7, pg 143-171	Chapter 7 Preview HW due (Wed 03/20)
	3/22W	Cardiovascular Physiology contd.		Chapter 6 Case Study Canvas discussion (Fr.03/24)
11	3/27 M	Respiratory Physiology	Chapter 8, pg 173-187	Chapter 8 Preview HW due (M 03/27) Chapter 6.2 Case Study Canvas discussion (Fr.03/31)
	3/29 W	Respiratory Physiology contd.		Chapter 7 Case Study Canvas discussion
12	4/3 M	Renal Physiology and Acid-Base Balance	Chapter 9, pg 189-210	Chapter 9 Preview HW due (M 04/3)
	4/5 W	Renal Physiology and Acid-Base Balance contd.	Chapter 7, 8 & 9 Review Quiz (Sun 04/08)	
13	4/10 M	Renal Physiology and Acid-Base Balance contd.		Chapter 9 Case Study Canvas discussion (Fr.04/14)
	4/12 W	<b>Lecture Exam 3</b> Exercise Physiology (Intro)	Includes chapters 7,8 &9 Chapter 10, pg 211-224	Chapter 10 Preview HW due (M 04/12)
14	4/17 M	Exercise Physiology contd.		Chapter 9.2 Case Study Canvas discussion (Fr.04/21)
	4/19 W	Exercise Physiology contd.		Chapter 11 Preview HW due (M 04/24)

15	4/24 M	Reproductive System Physiology	Chapter 11, pg 227-249	
	4/26 W	Reproductive System Physiology Contd.	Chapter 10 & 11 Review Quiz (Sun 04/29)	Chapter 11 Case Study Canvas discussion (Fr.04/28)
16	5/1 M	Reproductive System Physiology		Chapter 11 Case Study Canvas discussion (Wed 05/3)
	5/3 W	Review		
17	8-9 FINALS WEEK	Comprehensive Final Exam	Includes Chapters (1-11)	

### Important University Dates

link: <https://www.tamuct.edu/registrar/academic-calendar.html>

## TECHNOLOGY REQUIREMENTS AND SUPPORT

### Technology Requirements

This course will use the A&M-Central Texas Instructure Canvas learning management system. **We strongly recommend the latest versions of Chrome or Firefox browsers. Canvas no longer supports any version of Internet Explorer.**

Log on to A&M-Central Texas Canvas [<https://tamuct.instructure.com/>] or access Canvas through the TAMUCT Online link in myCT [<https://tamuct.onecampus.com/>]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

### Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select “Chat with Canvas Support,” submit a support request through “Report a Problem,” or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

### Online Proctored Testing

A&M-Central Texas uses Proctorio for online identity verification and proctored testing. This service is provided at no direct cost to students. If the course requires identity verification or proctored testing, the technology requirements are: Any computer meeting the minimum computing requirements, plus web camera, speaker, and microphone (or headset). Proctorio also requires the Chrome web browser with their custom plug in.



## Other Technology Support

For log-in problems, students should contact Help Desk Central, 24 hours a day, 7 days a week

Email: [helpdesk@tamu.edu](mailto:helpdesk@tamu.edu)

Phone: (254) 519-5466

[Web Chat](http://hdc.tamu.edu): [<http://hdc.tamu.edu>]

*Please let the support technician know you are an A&M-Central Texas student.*

---

## UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

### Academic Accommodations

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Warrior Center for Student Success, Equity and Inclusion is responsible for ensuring that students with a disability receive equal access to the university's programs, services and activities. If you believe you have a disability requiring reasonable accommodations, please contact the Office of Access and Inclusion, WH-212; or call (254) 501-5836. Any information you provide is private and confidential and will be treated as such.

For more information, please visit our [Access & Inclusion](https://tamuct.instructure.com/courses/717) Canvas page (log-in required) [<https://tamuct.instructure.com/courses/717>]

### Academic Integrity

Texas A&M University-Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. All academic misconduct concerns will be referred to the Office of Student Conduct. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

For more [information regarding the student conduct process](https://www.tamuct.edu/student-affairs/student-conduct.html), [<https://www.tamuct.edu/student-affairs/student-conduct.html>].

If you know of potential honor violations by other students, you may [submit a referral](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0), [[https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout\\_id=0](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0)].

### Drop Policy

If you discover that you need to drop this class, you must complete the [Drop Request](#) Dynamic Form through Warrior Web.

[<https://federation.ngwebsolutions.com/sp/startSSO.ping?PartnerIdId=https://eis-prod.ec.tamuct.edu:443/samlssso&SpSessionAuthnAdapterId=tamuctDF&TargetResource=https%3a%2f%2fdynamicforms.ngwebsolutions.com%2fSubmit%2fStart%2f53b8369e-0502-4f36-be43-f02a4202f612>].

Faculty cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed. Once you submit the completed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

### **Important information for Pregnant and/or Parenting Students**

Texas A&M University-Central Texas supports students who are pregnant, experiencing pregnancy-related conditions, and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit [Student Affairs](https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html) [https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines](http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf) online, please visit the website [http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender—including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

### **Tutoring**

Tutoring is available to all A&M-Central Texas students, both virtually and in-person. Student success coaching is available online upon request.

If you have a question, are interested in becoming a tutor, or in need of success coaching contact the Warrior Center for Student Success, Equity and Inclusion at (254) 501-5836, visit the Warrior Center at 212 Warrior Hall, or by emailing [WarriorCenter@tamuct.edu](mailto:WarriorCenter@tamuct.edu).

To schedule tutoring sessions and view tutor availability, please visit [Tutor Matching Services](https://tutormatchingservice.com/TAMUCT) [https://tutormatchingservice.com/TAMUCT] or visit the Tutoring Center in 111 Warrior Hall.

Chat live with a remote tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive online tutoring support at no additional cost. This tool provides tutoring in over 40 subject areas except writing support. Access Tutor.com through Canvas.

### **University Library & Archives**

The University Library & Archives provides many services in support of research across campus

and at a distance. We offer over 350 electronic databases containing approximately 631,525 eBooks and 75,149 journals, in addition to the 97,443 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place virtually through WebEx, Microsoft Teams or in-person at the library. [Schedule an appointment here](https://tamuct.libcal.com/appointments) [https://tamuct.libcal.com/appointments]. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our [Library website](https://tamuct.libguides.com/index) [https://tamuct.libguides.com/index]

### **University Writing Center**

University Writing Center: Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University–Central Texas (A&M–Central Texas) is a free service open to all A&M–Central Texas students. The hours of operation are from 10:00 a.m.-5:00 p.m. Monday thru Thursday in Warrior Hall 416 (with online tutoring available every hour as well) with satellite hours available online only Monday thru Thursday from 6:00-9:00 p.m. and Saturday 12:00-3:00 p.m.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

Students may arrange a one-to-one session with a trained and experienced writing tutor by making an appointment via [WCOOnline](https://tamuct.mywconline.com/) [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at [bruce.bowles@tamuct.edu](mailto:bruce.bowles@tamuct.edu) if you have any questions about the

UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor.

## **OTHER POLICY STATEMENTS**

### **A Note about Sexual Violence at A&M-Central Texas**

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Wellness and Counseling (254-501-5955) located on the second floor of Warrior Hall (207L).

Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors we will support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the [Title IX webpage](https://www.tamuct.edu/compliance/titleix.html) [https://www.tamuct.edu/compliance/titleix.html].

### **Behavioral Intervention**

Texas A&M University-Central Texas cares about the safety, health, and well-being of its students, faculty, staff, and community. If you are aware of individuals for whom you have a concern, please make a referral to the Behavioral Intervention Team. Referring your concern shows you care. You can complete the [referral](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2) online

[https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout\_id=2].

Anonymous referrals are accepted. Please see the [Behavioral Intervention Team](https://www.tamuct.edu/bit) website for more information [https://www.tamuct.edu/bit]. If a person's behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5805.

---

## **Copyright Notice**

Students should assume that all course material is copyrighted by the respective author(s). Reproduction of course material is prohibited without consent by the author and/or course instructor. Violation of copyright is against the law and Texas A&M University-Central Texas' Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

Copyright. (2023) by (Dr. Onadia Cabrera-Mora) at Texas A&M University-Central Texas, (College of Arts and Science); 1001 Leadership Place, Killeen, TX 76549; 254-(); Fax 254-(); (o.cabrera@tamuct.edu)