

## Texas A&M University-Central Texas Course Syllabus

### **NURS 3317-110 Pathophysiology for the Registered Nurse**

CRN- 11323

Fall 2021

3 credit hours

#### **Mode of Instruction and Course Access:**

This is a 100% online course and uses the A&M-Central Texas [Canvas Learning Management System](https://tamuct.instructure.com) [https://tamuct.instructure.com].

#### **COARSE DATES**

January 18, 2022 until May 13, 2022.

#### **Instructor and Contact Information:**

Dr. Dawn Riess, Ph.D., RN, Assistant Professor of Nursing

Office: Heritage Hall, Office: 302B

Phone: 254-519-5718

TEAMS: Text via TEAMS chat

Email: dawnriess@tamuct.edu

#### **Office Hours:**

Office Hours are: Tuesday-Thursday, 0730-1500. Drop-in is welcome.

Additional hours are available by appointment, in-person or virtual. Virtual office hours will be available via TEAMS. I am available for virtual office hours Monday-Friday and by appointment on weekends. I know you work different shifts, so I can accommodate your needs.

#### **Student-Instructor Interaction:**

Student faculty communication by e-mails will be answered within 24 hours during the workweek and within 48 hours on weekends. Please contact me again if you have not heard from me in this period. You may also call or text via TEAMS at any time.

My goal is to provide student feedback on papers and case studies within one week from the assignment due date. Please contact me if you have not heard from me in this period of time.

Office hours are held at the university and available by face-to-face visits, phone consultation, or synchronous online meetings. Feel free to schedule a meeting as needed outside of the regularly scheduled office hours. You may also send text messages using the TEAMS app.

#### **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].

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.

### **University Student Conduct Guide:**

[https://www.tamuct.edu/student-affairs/docs/Code-of-Student-Conduct\\_2021.pdf](https://www.tamuct.edu/student-affairs/docs/Code-of-Student-Conduct_2021.pdf)

5.4.5. Disorderly Conduct 5.4.5.1. The university supports the principle of freedom of expression for both instructors and students. The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires conditions that do not impede their exercise. An individual engaging in disorderly conduct may be subject to disciplinary action. Such activities may include, but are not limited to: x Leading others to disrupt scheduled and/or normal activities on University premises. x Classroom behavior that seriously interferes with either (a) the faculty member's ability to conduct the class or (b) the ability of other students to profit from the instructional programs. x Any behavior in class or out of class, which for any reason interferes with the class work of others, involves disorder, or otherwise disrupts the regular and essential operation of the University. x Activity or conduct that violates the Texas A&M University-Central Texas Rules on Freedom of Expressive Activity (See Appendix A).

5.4.5.2. Disorderly conduct is public behavior that is disruptive lewd, or indecent; breach of peace; or aiding, or procuring another person to breach the peace on University premises or at functions sponsored by the University or participated in by members of the University community.

## **COURSE INFORMATION**

### **Course Overview and Description:**

The focus of this course is to understand the pathophysiological basis for disease processes in adults and children. Central concepts will address symptoms, treatment, and prognosis. The major direction of this course will be on clinical application of findings that underlie

pathogenesis and provide a basis for evidence-based practice. The course is specifically designed to meet the needs of nursing students.

**Prerequisites/Co-requisites:**

NURS 3300

**Course Objectives:**

By the end of this course the student will be able to:

- Recognize disease processes and relate them to treatment modalities and patient response.
- Explain the central concepts of pathophysiology and pathophysiologic alterations in the body.
- Evaluate homeostasis as a mechanism for achieving and maintaining normal interaction of structure and functions.
- Evaluate various disease processes and their outcomes.
- Integrate theories and concepts from the sciences into nursing practice.
- Integrate evidence-based interventions into the care of complex pathology states.
- Utilize self-reflection as a means of improving nursing practice.

**Nursing Program Student Learning Outcomes:**

Pathophysiology for the RN addresses the following Nursing Program Student Learning Outcomes:

- Integrate knowledge and skills in the provision of patient-centered care from liberal education base. Domain 1: Knowledge for Nursing Practice.
- Integrate best practices in scholarship for translating evidence into practice. Domain IV: Scholarship for Nursing Practice.
- Utilize models and theories of clinical prevention and population health to perform nursing actions which optimize health of a target population. Domain III: Population Health.

**Professional Standards and Guidelines:**

The curriculum is guided by: American Association of Colleges of Nursing, (2021). [The Essentials: Core Competencies for Professional Education](#). Washington, DC.

[<https://www.aacnursing.org/Portals/42/AcademicNursing/pdf/Essentials-2021.pdf>]

- Essential 1.1: Demonstrate an understanding of the discipline of nursing’s distinct perspective and where shared perspectives exist with other disciplines.
- Essential 1.2: Apply theory and research-based knowledge from nursing, the arts, humanities, and other sciences.
- Essential 2.2: Communicate effectively with individuals.
- Essential 2.3: Integrate assessment skills in practice.
- Essential 2.4: Diagnose actual or potential health problems and needs.
- Essential 2.5: Develop a plan of care.
- Essential 2.8: Promote self-care management.
- Essential 3.1h: Describe general principles and practices for the clinical management of populations across the age continuum.
- Essential 4.2c: Use best evidence in practice.

The curriculum is also guided by: The Texas Board of Nursing, (2021). [Differentiated Essential Competencies of Graduates of Texas Nursing Programs](#).

[[https://www.bon.texas.gov/pdfs/publication\\_pdfs/Differentiated%20Essential%20Competencies%202021.pdf](https://www.bon.texas.gov/pdfs/publication_pdfs/Differentiated%20Essential%20Competencies%202021.pdf)]

- Member of the Profession
- Provider of Patient-Centered Care
- Patient Safety Advocate
- Member of the Health Care Team

### **Required Reading and Textbook:**

Norris, T. L. (2019). *Porth’s pathophysiology: Concepts of altered health states* (10<sup>th</sup> ed.). Wolters Kluwer. ISBN: 978-1-4963-7755-5

## **COURSE REQUIREMENTS**

### **Course Requirements:**

For each of the five modules you will complete a module quiz, a case study and a reflection paper. Your total grade is based on 100 points.

- Each quiz is worth 10 points for a total of 50 points. Quiz questions are based on the objectives that are listed with each specific module.
- Each case study is worth 9 points for a total of 45 points. Each case study is based on the course learning outcomes.
- Each reflection paper is worth 1 point for a total of 5 points. The reflection papers are

used to assess application of course content and to provide feedback on areas of the course that you find confusing or difficult.

### **Grading:**

#### **Final Course Grades are Based on the Following Scale:**

A=90.0-100 points

B=80.0-89.9 points

C=70.0-79.9 points (note: a final grade of “C” or higher is required to pass the course)

D=60.0-69.9 points

F=0-59.9 points

#### **Late Submission of Assignments:**

On occasion, you may find that you need a time extension for one of your reflection papers or case study assignments. Please note that an extension will only be given if requested prior to the assignment deadline. If you need an extension, please send me an email with the following information: 1) Name of assignment; 2) Length of the extension that you are requesting (for example, one day, one week); and 3) The reason you are requesting an extension. If a requested extension is not granted, then the ***Department of Nursing Late Assignment Policy*** is followed.

#### ***Department of Nursing Late Assignment Policy***

Assignments are due on the date and time outlined in the course schedule and syllabus. A 10% deduction will be taken for each day an assignment is past the due date. After three days, a grade of 0 will be entered into the gradebook for that assignment. This includes all quizzes, discussion boards, and any other written work in the course. Exceptions will be granted at faculty discretion and only if arrangements were made prior to the due date.

#### **Course Assignment Due Dates:**

Sunday, January 23, 2022—Start Here Orientation Assignments

Sunday, January 30, 2022—Case Study 1

Friday, February 4, 2022—Reflection Paper 1 AND Original Discussion Post

Sunday, February 6, 2022—Quiz 1 AND Response to ONE peer in the Discussion

Sunday, February 20, 2022—Case Study 2

Friday, February 25, 2022—Reflection Paper 2 AND Original Discussion Post

Sunday, February 27, 2022—Quiz 2 AND Response to ONE peer in the Discussion

Sunday, March 13, 2022—Case Study 3

Friday, March 25, 2022—Reflection Paper 3 AND Original Discussion Post

Sunday, March 27, 2022—Quiz 3 AND Response to ONE peer in the Discussion

Sunday, April 10, 2022—Case Study 4  
Friday, April 15, 2022—Reflection Paper 4 AND Original Discussion Post  
Sunday, April 17, 2022—Quiz 4 AND Response to ONE peer in the Discussion  
Sunday, May 1, 2022—Case Study 5  
Friday, May 6, 2022—Reflection Paper 5 AND Original Discussion Post  
Sunday, May 8, 2021—Quiz 5 AND Response to ONE peer in the Discussion  
Friday, May 13, 2021—Complete “Blue” End-of-Course Survey

## **GRADING CRITERIA RUBRICS**

### **Case Study Assignment Rubric:**

Case studies are about real-life situations. A case study typically involves a story about a client and their health care situation. This assignment is designed to give you the opportunity to synthesize and apply concepts learned in this and in previous coursework to analyze a real-world scenario.

After the case study story is presented, you will have a series of questions to answer that directly link course concepts to the client’s situation. Each case study is worth 9 points (9% of your grade). The grading rubric is provided below:

#### **Knowledge Application- Application of pathophysiological concepts to the case study.**

**6 Points**—Each answer is comprehensive and accurately explains the concepts of pathophysiology at the molecular, cellular and organ level. Each answer clearly demonstrates a depth of subject knowledge in pathophysiology.

**4 Points**—Each answer is complete and explains the pathophysiology at a sufficient level. Some, but not all of the answers demonstrate a depth of subject knowledge in pathophysiology.

**2 Points**--Insufficient, incomplete or inaccurate explanation of concepts of pathophysiology to the case study.

#### **Information Literacy- Referencing style conforms to APA format and references are reputable academic sources.**

**3 Points**--An extensive range of recent, applicable scholarly reference material is cited. APA format is exemplary. All sources are accurately documented. Each answer

includes a minimum of one citation. A full reference for each citation is listed at the end of the case study.

**2 Points**--A range of recent applicable scholarly reference material is cited. APA format is accurate with minimal mistakes. Most answers include citations and a complete reference for each citation is listed at the end of the case study.

**1 Point**--Insufficient citation of recent, applicable and scholarly reference materials. Some sources are not accurately documented. Reference list is incomplete or missing. Multiple APA errors noted throughout the case study.

### **Module Reflection Paper Assignment Rubric:**

Reflective writing is different from most other forms of academic writing because it does not require that you cite sources. Instead, it calls on you to express your own views on an experience, even though you may have "experienced" it only in print or on the screen. Reflective writing is designed to help you learn. The process of writing forces your brain to take action on the information, consolidating it and fixing it in long term memory. It also provides an opportunity to express what you think and how and why you think that way.

Prior to the end of every module, a Module Reflection Paper must be completed and submitted in CANVAS. In addition, the answer to the first question of the Reflection Paper must be posted on the discussion board to be shared with the rest of the class. Each reflection assignment is worth a total of 1 point (1% of your grade). Because this is a reflective and evaluative exercise, the grade will only be based on completion of the full assignment by the due date. In other words, if you answer all of the required questions, post the answer to the first question in the discussion board, with **ONE peer** reply, and submit the assignment by the due date, you will receive full credit for the assignment. Reflection papers that are incomplete or submitted late will receive a grade of 0.5 points.

Each Module Reflection must include your name and the date and address the following areas:

1. What is the most important/valuable thing you have learned in this module, **and** discuss why it is important or valuable to your clinical practice? **Note—Your answer to this question also needs to be posted on the discussion board to be shared with the rest of the class.**
2. Select one disease process or concept that was covered in this module and identify an evidence-based intervention that you would incorporate into your clinical practice.

3. Is there an area in the module that you are confused about or would like more clarification on?

### **Posting of Grades**

- Grades are posted in the Canvas grade book where you can monitor your status in the class.
- My goal is to provide student feedback on papers and case studies within one week from the assignment due date. Please contact me if you have not heard from me in this period of time.
- **IMPORTANT:** In addition to general comments and calculation of your assignment grade, I will also provide detailed feedback directly in the body of your paper. Detailed comments on your assignments can be accessed by clicking on the “View Feedback” button. Here is a link to a [quick Canvas Guide](https://community.canvaslms.com/docs/DOC-10542-4212352349) that will show you how to see the detailed comments and annotated feedback. The URL is: [\[https://community.canvaslms.com/docs/DOC-10542-4212352349\]](https://community.canvaslms.com/docs/DOC-10542-4212352349)
- Quiz grades are posted immediately after completion of the quiz. You will be able to see your quiz grade and what you answered correctly immediately after you complete the quiz. You will be able to view full details of what questions you missed and the correct answers after the last date of the quiz.

### **COURSE OUTLINE AND CALENDAR**

#### **Module 1: Cellular Pathophysiology**

**January 18, 2022-February 6, 2022**

#### Module 1 Topics:

- Cellular Adaption, Injury, and Death
- Genetic and Congenital Disorders
- Neoplasia
- Disorders of Red Blood Cells
- Disorders of White Blood Cells and Lymphoid Tissues

#### Module 1 Objectives:

1. Describe cell changes that occur with atrophy, hypertrophy, hyperplasia, metaplasia and dysplasia.
2. Compare the pathogenesis and effects of dystrophic and metastatic calcifications.
3. Identify the causes and mechanisms of cell injury and death.
4. Describe three types of single-gene disorders and their patterns of inheritance.



5. Contrast disorders due to multifactorial inheritance with those caused by single-gene inheritance.
6. Describe three patterns of chromosomal breakage and rearrangement.
7. Explain how neoplastic growth differs from normal adaptive changes seen in atrophy, hypertrophy, and hyperplasia.
8. Describe the phases of the cell cycle.
9. Differentiate between benign and malignant neoplasms.
10. Describe cancer cell characteristics.
11. Explain the process of carcinogenesis.
12. Identify the host and environmental risk factors associated with cancer.
13. Outline the systemic manifestations of cancer.
14. Describe the TNM Classification System for cancer.
15. Contrast cancer treatment modalities of surgery, radiation, chemotherapy, hormonal therapy, and biotherapy.
16. Describe the manifestations of anemia and their mechanisms.
17. Compare characteristics of the red blood cells in acute blood loss, sickle cell disease, iron deficiency anemia and aplastic anemia.
18. Describe the different types of white blood cells and structures of the lymphoid system.
19. Differentiate between leukopenia, neutropenia, granulocytopenia, and aplastic anemia.
20. Discuss the etiology, pathogenesis, and clinical manifestations of malignant lymphoma, acute and chronic leukemia, and multiple myeloma.

#### Module 1 Assigned Readings:

- Porth's Pathophysiology - Chapter 3 (entire chapter)
- Porth's Pathophysiology - Chapter 5 (pages 82-97)
- Porth's Pathophysiology - Chapter 6 (entire chapter)
- Porth's Pathophysiology - Chapter 23 (pages 649-658)
- Porth's Pathophysiology - Chapter 24 (entire chapter)

#### Module 1 Assignments:

- Complete the "Start Here" Orientation Assignments by Sunday, January 23, 2022
- Case Study 1 is due Sunday, January 30, 2022
- Reflection Paper 1 AND Discussion post are due Friday, February 4, 2022
- Quiz 1 AND ONE peer response are due Sunday, February 6, 2022

## Module 2: Pathophysiology of Infection, Inflammation and Immunity

February 7, 2022- February 27, 2022

### Module 2 Topics:

- Mechanisms of Infectious Disease
- Innate and Adaptive Immunity
- Inflammation, Tissue Repair and Wound Healing
- Disorders of the Immune Response

### Module 2 Objectives:

1. Define the terms host, infectious disease, colonization, microflora, virulence, pathogen and saprophyte.
2. Differentiate between the agents of infectious disease.
3. Discuss the epidemiology of infectious disease.
4. Describe the states of an infectious disease after the potential pathogen has entered the body.
5. List the systemic manifestations of infectious disease.
6. Define inflammation.
7. Describe the inflammatory process.
8. Differentiate between acute and chronic inflammation.
9. Identify the clinical manifestations of inflammation.
10. Outline the wound healing process through the inflammatory, proliferative, and remodeling phases.
11. Discuss factors that affect wound healing.
12. Compare and contrast the pathology and clinical manifestations of humoral and cellular immunodeficiency.
13. Discuss the possible mechanisms of autoimmune disease.
14. Compare and contrast the manifestations and treatment of two different autoimmune diseases.

### Module 2 Assigned Readings:

- Porth's Pathophysiology - Chapter 10 (pages 247-263)
- Porth's Pathophysiology - Chapter 11 (entire chapter)
- Porth's Pathophysiology - Chapter 9 (entire chapter)
- Porth's Pathophysiology - Chapter 12 (pages 303-312; 327-331)

### Module 2 Assignments:

- Case Study 2 is due Sunday, February 20, 2022
- Reflection Paper 2 AND Discussion Post are due Friday, February 25, 2022
- Quiz 2 AND ONE peer response are due Sunday, February 27, 2022

**Module 3: Pathophysiology of the Cardiovascular and Respiratory Systems**  
**February 28, 2022- March 20, 2022 (Spring Break: 3/14/22-3/18/22)**

Module 3 Topics:

- Structure and Function of the Cardiovascular System
- Disorders of Blood Flow and Blood Pressure Regulation
- Disorders of Cardiac Function and Heart Failure
- Disorders of Ventilation and Gas Exchange

Module 3 Objectives:

1. Describe the relationships between blood flow, pressure and resistance.
2. Diagram the cardiac cycle and the changes seen in left atrial pressure, left ventricular pressure, aortic pressure, ventricular volume, the ECG, and heart sounds.
3. Explain the effects that venous return, cardiac contractility and heart rate have on cardiac output.
4. Outline how preload, afterload, cardiac contractility and heart rate impact the heart's ability to increase cardiac output.
5. Characterize mechanisms responsible for regulation of blood flow.
6. Explain the etiology and pathogenesis of hyperlipidemia.
7. Compare and contrast the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of atherosclerosis, acute arterial occlusion, atherosclerotic occlusive disease, Burger disease, Raynaud disease, chronic venous insufficiency and venous thrombosis.
8. Describe the mechanisms of blood pressure regulation.
9. Explain how the renin-angiotensin-aldosterone system, vasopressin, and epinephrine/norepinephrine help contribute to blood pressure regulation.
10. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of hypertension.
11. Interpret coronary circulation and myocardial oxygen supply and demand.
12. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of hypertension.
13. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of coronary artery disease.

14. Compare and contrast the etiology, pathogenesis, clinical manifestations, diagnosis and treatment of mitral valve stenosis, mitral valve regurgitation, mitral valve prolapse, aortic valve stenosis, and aortic valve regurgitation.
15. Explain how the Frank-Starling mechanism, sympathetic nervous system, renin-angiotensin-aldosterone mechanism, and myocardial hypertrophy serve as both adaptive and maladaptive mechanisms in heart failure.
16. Outline the etiology, pathogenesis, clinical manifestations, diagnosis and treatment of heart failure.
17. Compare and contrast hypoxemia and hypercapnia.
18. Describe the etiology, pathogenesis, clinical manifestations, diagnosis and treatment of pleural effusion, hemothorax and pneumothorax.
19. Differentiate between obstructive airway disorders and chronic restrictive lung diseases.
20. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of asthma, chronic obstructive pulmonary disease and idiopathic pulmonary fibrosis.

#### Module 3 Assigned Readings:

- Porth's Pathophysiology - Chapter 25 (entire chapter)
- Porth's Pathophysiology - Chapter 26 (pages 713-730, 731-734, 737-747)
- Porth's Pathophysiology - Chapter 27 (pages 758-770, 774-776, 785-804)
- Porth's Pathophysiology - Chapter 31 (pages 920-944)

#### Module 3 Assignments:

- Case Study 3 is due Monday, March 13, 2022
- Reflection Paper AND Discussion post 3 are due Friday, March 25, 2022
- Quiz 3 AND response to ONE peer are due Sunday, March 27, 2022

### **Module 4: Pathophysiology of the Renal, Gastrointestinal, and Hepatobiliary Systems March 28, 2022- April 17, 2022**

#### Module 4 Topics:

- Structure and Function of the Kidney
- Disorders of Renal Function
- Acute Kidney Injury and Chronic Kidney Disease
- Disorders of Gastrointestinal Function
- Disorders of Hepatobiliary and Exocrine Pancreas Function

#### Module 4 Objectives:

1. Describe the structure and function of the glomerulus and tubular components of the nephron in terms of regulating the composition of the extracellular fluid compartment.
2. Explain how the kidney concentrates urine.
3. Explain the functions of the kidney.
4. Describe the inheritance, pathology, and manifestations of the different types of polycystic kidney disease.
5. Identify the causes of urinary tract obstruction.
6. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of renal calculi.
7. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of Acute Kidney Injury.
8. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of Chronic Kidney Disease.
9. Explain the physiologic mechanisms underlying the common problems associated with Chronic Kidney Disease, including fluid and electrolyte imbalance, and disorders of bones, skin, sexual function, and disorders of the hematologic, cardiac, immune and neurologic system.
10. Relate the pathophysiology of gastroesophageal reflux to measures used in the diagnosis and treatment of the disorder.
11. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of Peptic Ulcer Disease.
12. Compare and contrast the pathophysiologic processes and manifestations of Crohn disease from Ulcerative Colitis.
13. Relate the mechanism of bile formation and elimination to the development of cholestasis.
14. Identify the functions of the liver and explain the manifestations of altered function of the liver.
15. Compare hepatitis A, B, C, D, and E in terms of source of infection, incubation period, acute disease manifestations and development of chronic disease.
16. Describe the physiologic basis for portal hypertension and relate it to the development of ascites, esophageal varices and splenomegaly.
17. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of Cirrhosis and liver failure.
18. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of cholelithiasis and cholecystitis.
19. Describe the etiology, risk factors, pathogenesis, clinical manifestations, diagnosis and treatment of acute and chronic pancreatitis.

#### Module 4 Assigned Readings:

- Porth's Pathophysiology - Chapter 32 (pages 960-976)
- Porth's Pathophysiology - Chapter 33 (pages 982-992)
- Porth's Pathophysiology - Chapter 34 (entire chapter)
- Porth's Pathophysiology - Chapter 37 (pages 1079-1096)
- Porth's Pathophysiology - Chapter 38 (pages 1117-1141, 1143-1149)

#### Module 4 Assignments:

- Case Study 4 is due Sunday, April 10, 2022
- Reflection Paper AND original discussion post are due Friday, April 15, 2022
- Quiz 4 AND ONE peer response are due Sunday, April, 17, 2022

### **Module 5: Pathophysiology of the Nervous System**

**April 18, 2022- May 13, 2022**

#### Module 5 Topics:

- Disorders of Motor Function
- Disorders of Brain Function
- Disorders of Memory

#### Module 5 Objectives:

1. Describe the etiology, pathogenesis, clinical manifestations, diagnosis and treatment of muscular dystrophy.
2. Describe the etiology, pathogenesis, clinical manifestations, diagnosis and treatment of myasthenia gravis.
3. Describe the etiology, pathogenesis, clinical manifestations, diagnosis and treatment of Parkinson disease.
4. Describe the etiology, pathogenesis, clinical manifestations, diagnosis and treatment of amyotrophic lateral sclerosis.
5. Describe the etiology, pathogenesis, clinical manifestations, diagnosis and treatment of multiple sclerosis.
6. Describe the autoregulation of cerebral blood flow.
7. Summarize the pathologies of ischemic and hemorrhagic stroke.
8. Differentiate between Alzheimer's disease, vascular dementia, frontotemporal dementia, Creutzfeldt-Jakob disease and Lewy body dementia.

9. Describe the etiology, pathogenesis, clinical manifestations, diagnosis and treatment of Alzheimer's disease.

#### Module 5 Assigned Readings:

- Porth's Pathophysiology - Chapter 15 (pages 431-447, 449-458)
- Porth's Pathophysiology - Chapter 16 (pages 469-481, 485-494)
- Porth's Pathophysiology - Chapter 18 (pages 524-528, 535-540)

#### Module 5 Assignments:

- Case Study 5 is due Sunday, May 1, 2022
- Reflection Paper AND Discussion post are due Friday, May 6, 2022
- Quiz 5 AND ONE peer reply are due Sunday, May 8, 2022
- Complete Blue "End of Course Survey" by May 13, 2022

#### Important University Dates for this Course:

##### January 2022

January 17, 2022 Martin Luther King, JR Day (University Closed)

January 18 (Tuesday) Classes Begin

January 20 (Thursday) ADD/DROP/LATE REGISTRATION ENDS (16 week & 1st 8 week classes)

##### February 2022

February 2 (Wednesday) Deadline to drop 16-week classes with no record

##### March 2022

March 14-18, 2022 Spring Break (No Classes – Administrative Offices Open)

March 25 (Friday) Deadline for Spring Graduation Application for Ceremony Participation

##### April 2022

April 4 (Monday) Registration Opens for Summer Semester

April 8 (Friday) Last Day to Drop 16 Week Classes with a Quit (Q) or a Withdraw (W)

##### May 2022

May 13 (Friday) Spring Term Ends

#### University Academic Calendar:

To see additional important university dates and deadlines, please go to the [University Academic Calendar](#)

[[http://catalog.tamuct.edu/undergraduate\\_catalog/general-information/academic20calendars20and20final20exam20schedule](http://catalog.tamuct.edu/undergraduate_catalog/general-information/academic20calendars20and20final20exam20schedule)]

## 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.**

Logon to [A&M-Central Texas Canvas](https://tamuct.instructure.com/) [https://tamuct.instructure.com/] or access Canvas through the [TAMUCT Online link](https://tamuct.onecampus.com/) 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.*

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## UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

### Drop Policy

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



[<https://dynamicforms.ngwebsolutions.com/casAuthentication.ashx?InstID=eaed95b9-f2be-45f3-a37d-46928168bc10&targetUrl=https%3A%2F%2Fdynamicforms.ngwebsolutions.com%2Fsubmit%2FForm%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.

### **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. Academic integrity is defined as a commitment to honesty, trust, fairness, respect, and responsibility. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. Academic misconduct is any act that improperly affects a true and honest evaluation of a student's academic performance and includes, but is not limited to, working with others in an unauthorized manner, cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student's work, collusion, and the abuse of resource materials. All academic misconduct concerns will be referred to the university's Office of Student Conduct. Ignorance of the university's standards and expectations is never an excuse to act with a lack of integrity. 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 report](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)].

### **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 Office of Access 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](#) Canvas page (log-in required) [<https://tamuct.instructure.com/courses/717>]

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

Texas A&M University-Central Texas supports students who are pregnant 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](#) 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, on a remote online basis. Visit the Academic Support Community in Canvas to view schedules and contact information. Subjects tutored on campus include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Student success coaching is available online upon request.

If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, success coaching, or have any other question, contact Academic Support Programs at (254) 501-5836, visit the Office of Student Success at 212F Warrior Hall, or by emailing [studentsuccess@tamuct.edu](mailto:studentsuccess@tamuct.edu) .

Chat live with a 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 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. For the Fall 2021 semester, 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 WOnline at <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 by making an appointment via WOnline at <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.

### **University Library**

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 400,000 eBooks and 82,000 journals, in addition to the 96,000 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. 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](http://tamuct.libguides.com/index) [http://tamuct.libguides.com/index].

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## **OPTIONAL 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 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 254-501-5800.