

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

**Online NURS 3317 Pathophysiology for the Registered Nurse (3 credit hours)**  
Spring 2017

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

Instructor: Dr. Peg Gray-Vickrey, DNS, RN, Provost and Professor of Nursing  
Office: Founder's Hall, Suite 429-D  
Phone: 254-519-5746  
Mobile: 239-634-1539  
Email: gray-vickrey@tamuct.edu

### **Office Hours:**

Office Hours are on Monday, 3:00 to 5:00 p.m. during the semester.  
Additional hours are available by appointment.

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

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

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

Student faculty communication by e-mails will be answered within 24 hours during the work-week and within 48 hours on weekends. Student feedback on papers and case studies will be provided within one week. 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. You may also send text messages using my mobile phone number.

### **911 Cellular:**

Emergency Warning System for Texas A&M University – Central Texas  
911Cellular is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in 911 Cellular through their myCT email account.

Connect at [911Cellular](https://portal.publicsafetycloud.net/Texas-AM-Central/alert-management) [<https://portal.publicsafetycloud.net/Texas-AM-Central/alert-management>] to change where you receive your alerts or to opt out. By staying enrolled in

911Cellular, university officials can quickly pass on safety-related information, regardless of your location.

## **COURSE INFORMATION**

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

The focus of this course is on the pathophysiology of frequently encountered conditions seen across the lifespan. Emphasis is placed on etiology, pathogenesis, epidemiology, risk factors, clinical manifestations, preventative & therapeutic measures, and current evidence-based research relevant to commonly occurring diseases.

### **Prerequisites/Co-requisites:**

None

### **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.
- Develop an evidence-based nursing plan of care for various complex case studies.

### **Professional Standards and Guidelines:**

The curriculum is guided by: American Association of Colleges of Nursing. (2008). [\*The essentials of baccalaureate education for professional nursing practice\*](#). Washington, DC.

- Essential I: Liberal Education for Baccalaureate Generalist Nursing Practice.
  - A solid base in liberal education provides the cornerstone for the practice and education of nurses. (sciences)

- Essential VII: Clinical Prevention and Population Health.
  - Health promotion and disease prevention at the individual and population level are necessary to improve population health and are important components of baccalaureate generalist nursing practice.

### **Required Textbook:**

Grossman, S. C., & Porth, C. M. (2014). *Porth's pathophysiology: Concepts of altered health states* (9th ed.). Philadelphia, PA: Wolters Kluwer/Lippincott Williams & Wilkins.

ISBN: 978-1-4511-4600-4

### **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 for 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:**

A=90.0-100 points  
B=80.0-89.9 points  
C=70.0-79.9 points\*  
D=60.0-69.9 points  
F=0-59.9 points

***\*A final grade of "C" or higher is required to pass the course. Final grades are not rounded up.***

## **GRADING CRITERIA RUBRIC**

### **Case Study Assignment Rubrics**

Case studies are about real life situations. A cases 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 case study will be graded on the following criteria: 1) subject knowledge and accuracy of information; and 2) bibliography, citations and writing fluency. Assignments submitted by the due date will receive a possible score between 0 and 9 points. The breakdown of the point distribution is provided in the grading section below.

Grading:

#### **Subject Knowledge and Accuracy (6 points)**

- Normal physiological principles, processes, and mechanisms are explained at the molecular, cellular, and organ levels.
- Physiological processes and mechanisms relating to the pathology are clearly explained.
- Answers focus on substantive ideas that are supported by relevant facts and examples.
- Explanations are clear and incorporate appropriate vocabulary.
- Thoughtful and convincing responses clearly demonstrate depth of subject knowledge.
- Information is derived from good quality, credible sources.
- All questions are answered completely.
- All content is current and accurate.

#### **Bibliography / Citations / Writing (3 points)**

- Two (2) or more sources used for the assignment (your textbook can be one of the sources).
- All material that is not considered "common knowledge" is cited.
- All quotations and/or paraphrasing are cited according to APA format.

- The full reference for each citation is found in the bibliography.
- References are listed alphabetically at end of assignment in the bibliography.
- Bibliography and citations follow APA format.
- Writing is free of grammatical errors.
- Sentences are complete, clear, and concise.
- Spelling is correct.

### **Module Reflection Paper Assignments**

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 must be completed and submitted via Blackboard. 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 assignment by the due date. In other words, if you answer the three required questions and submit the assignment by the due date, you will receive full credit for the assignment. If the assignment is not complete or if it is submitted late the maximum points awarded will be 0.5 points.

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

1. What is the most important/valuable thing you have learned in this module?
2. Answer one of the following:
  - a. Provide an example of how you were able to apply something that you learned in this module in your current practice.
  - b. Provide an example of what you will do differently in your clinical practice based on what you have learned in this module.

3. Identify an area in the module that you are confused about or would like more clarification on.
4. Do you have any feedback for the Instructor about this module? (optional)

### **Posting of Grades**

- Grades will be posted in the canvas grade book where you can monitor your status in the class.
- Grades on case studies and reflection papers will be posted within one week of submitting the assignment.
- Quiz grades are posted immediately after completion of 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**

**August 28, 2017 to September 17, 2017**

#### Module 1 Topics:

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

#### 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:

- Grossman & Porth- Chapter 5 (entire chapter)
- Grossman & Porth- Chapter 7 (pages 138-151)
- Grossman & Porth- Chapter 8 (entire chapter)
- Grossman & Porth- Chapter 27 (pages 673-683)
- Grossman & Porth- Chapter 28 (entire chapter)

#### Module 1 Graded Assignments:

- Quiz 1 is open between Monday, September 11, 2017 to Sunday, September 17, 2017
- Case Study 1 is due Monday, September 11, 2017
- Reflection Paper 1 is due Friday, September 15, 2017

### **Module 2: Pathophysiology of Infection, Inflammation and Immunity** **September 18, 2017 to October 1, 2017**

#### 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:

- Grossman & Porth- Chapter 12 (pages 252-267)
- Grossman & Porth- Chapter 13 (entire chapter)
- Grossman & Porth- Chapter 14 (entire chapter)
- Grossman & Porth- Chapter 15 (pages 329-336; 353-357)

#### Module 2 Graded Assignments:

- Quiz 2 is open between Monday, September 25, 2017 to Sunday, October 1, 2017
- Case Study 2 is due Monday, September 25, 2017
- Reflection Paper 2 is due Friday, September 29, 2017

## Module 3: Pathophysiology of the Cardiovascular and Respiratory Systems

October 2, 2017 to October 29, 2017

### Module 3 Topics:

- Structure and Function of the Cardiovascular System
- Disorders of Arterial and Venous Circulation
- Disorders of Blood Pressure Regulation
- Disorders of Cardiac Function
- 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:

- Grossman & Porth- Chapter 29 (pages 712-732)
- Grossman & Porth- Chapter 30 (pages 739-752, 754-757, 762-764)
- Grossman & Porth- Chapter 31 (pages 766-780)
- Grossman & Porth- Chapter 32 (pages 797-810, 824-829)
- Grossman & Porth- Chapter 34 (pages 867-881)
- Grossman & Porth- Chapter 37 (pages 958-967, 968-977, 981-984)

#### Module 3 Graded Assignments:

- Quiz 3 is open between Monday, October 23, 2017 to Sunday, October 29, 2017
- Case Study 3 is due Monday, October 23, 2017
- Reflection Paper 3 is due Friday, October 27, 2017

### **Module 4: Pathophysiology of the Renal, Gastrointestinal, and Hepatobiliary Systems October 30, 2017 to November 19, 2017**

#### Module 4 Topics:

- Structure and Function of the Kidney

- Disorders of Renal Function
- Acute Renal 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 Renal 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:

- Grossman & Porth- Chapter 38 (pages 998-1013)
- Grossman & Porth- Chapter 41 (pages 1083-1093)
- Grossman & Porth- Chapter 42 (entire chapter)
- Grossman & Porth- Chapter 45 (pages 1174-1192)
- Grossman & Porth- Chapter 46 (entire chapter)

#### Module 4 Graded Assignments:

- Quiz 4 is open between Monday, November 13, 2017 to Sunday, November 19, 2017
- Case Study 4 is due Monday, November 13, 2017
- Reflection Paper 4 is due Friday, November 17, 2017

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

**November 20, 2017 to December 10, 2017**

#### 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:

- Grossman & Porth- Chapter 19 (pages 461-465; 471-479)
- Grossman & Porth- Chapter 20 (pages 506-515)
- Grossman & Porth- Chapter 22 (pages 544-553, 562-569)

#### Module 5 Graded Assignments:

- Quiz 5 is open between Monday, December 4, 2017 to Sunday, December 10, 2017
- Case Study 5 is due Monday, December 4, 2017
- Reflection Paper 5 is due Friday, December 8, 2017

#### Important University Dates

- August 28, Add/Drop/Late Registration begins
- August 30, Add/Drop/Late Registration ends, 16-week and 1st 8-week classes
- September 4, Labor Day, CAMPUS CLOSED
- September 13, Last day to drop 16-week classes with no record
- November 10, Veteran's Day Observed, CAMPUS CLOSED
- November 10, Last day to drop with a Q or withdraw with a W (16-week classes)
- November 23-24, Thanksgiving, CAMPUS CLOSED
- December 15, Last day to withdraw from the University (16-week and 2nd 8-week classes)
- December 15, Commencement (End of Fall Term)
- December 25-January 1, WINTER BREAK CAMPUS CLOSED

#### TECHNOLOGY REQUIREMENTS AND SUPPORT

##### Technology Requirements.

This course will use the A&M-Central Texas Instructure Canvas learning management system.

You will need to have access to a computer with an internet connection.

Logon to A&M-Central Texas Canvas [<https://tamuct.instructure.com>].

Username: Your MyCT username (xx123 or everything before the "@" in your MyCT e-mail address)

Password: Your MyCT password

### **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.*

For issues with **Canvas**, select "chat with Canvas support," submit a support request to Canvas Tier 1, or call the Canvas support line: 1-844-757-0953, links to all are found inside of Canvas using the "Help" link.

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

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## **UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES**

### **Drop Policy.**

If you discover that you need to drop this class, you must complete a [Drop Request Form](https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf) [[https://www.tamuct.edu/registrar/docs/Drop\\_Request\\_Form.pdf](https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf)].

Professors cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the University Calendar for which the form must be completed, signed and returned. Once you return the signed 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, 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 reported 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.

### **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 Department 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 Department of Access and Inclusion at (254) 501-5831. Any information you provide is private and confidential and will be treated as such.

For more information please visit our [Access & Inclusion](https://www.tamuct.edu/student-affairs/access-inclusion.html) webpage [https://www.tamuct.edu/student-affairs/access-inclusion.html].

Texas A&M University-Central Texas supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and 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. For more information, please visit <https://www.tamuct.departments/index.php>. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines online](http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf), please visit the website [http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf].

### **Tutoring.**

Tutoring is available to all A&M-Central Texas students, both on-campus and online. On-campus subjects tutored include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Tutors are available at the Tutoring Center in Warrior Hall, Suite 111. If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, or any other question, contact Academic Support Programs at 254-519-5796, or by emailing Larry Davis at [Imdavis@tamuct.edu](mailto:Imdavis@tamuct.edu).

Chat live with a tutor 24/7 for almost any subject on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log-in and receive FREE online tutoring and writing support. This tool provides tutoring in over forty subject areas. Access

Tutor.com through Canvas.

### **The University Writing Center.**

Located in 416 Warrior Hall, the University Writing Center (UWC) at Texas A&M University-Central Texas is a free workspace open to all TAMUCT students from 10am-5pm Monday-Thursday with satellite hours in the University Library on Mondays from 6:00-9:00pm. Students may arrange a one-on-one session with a trained and experienced writing tutor by visiting the UWC during normal operating hours (both half-hour and hour sessions are available) or 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) to schedule an online tutoring session. 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 University Writing Center is here to help!

If you have any questions about the University Writing Center, please do not hesitate to contact Dr. Bruce Bowles Jr. at [bruce.bowles@tamuct.edu](mailto:bruce.bowles@tamuct.edu).

### **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 250,000 eBooks and 82,000 journals, in addition to the 72,000 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 twenty-four 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 on Skype 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](https://tamuct.libguides.com/) [https://tamuct.libguides.com/].

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