

MATH 3306-115, CRN 80386, DIFFERENTIAL EQUATIONS

Fall 2017 rev. 08.16.2017

Texas A&M University-Central Texas

INSTRUCTOR AND CONTACT INFORMATION

Instructor: GEOFF DIESTEL

Office: 420N WARRIOR HALL(ONLY AVAILABLE VIRTUALLY)

Phone: 254-319-4741(CALL/TEXT)

Email: Use Canvas "Inbox" for course related communication. Use gdiestel@tamuct.edu for advising and other communication.

Office Hours:

Virtual Office Hours MWF 9am-10am or by appointment.

Mode of instruction and course access:

This is a 100% online course but regular one on one communication with professor is necessary.

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

Student-instructor interaction:

Students are to use Canvas Inbox for primary communication but call/text via phone are acceptable to get quicker responses. Generally, Canvas Inbox will be checked in morning and late afternoon daily M-F.

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: Solutions and applications of homogeneous and nonhomogeneous ordinary differential equations, including first-order equations and higher-order linear equations. Qualitative properties of solutions are investigated, as well as exact methods for solving differential equations and initial value problems including series, Laplace

transform, separation of variables, variation of parameters, and undetermined coefficients.

Student Learning Outcomes: (1) Classify a differential equation based on its order, linearity, and homogeneity (2) Determine exact solutions to various types of differential equation and initial value problems (3) Understand the modeling of physical problems as first and second order differential equations.

Required Reading and Textbook(s): *Differential Equations, 4th ed. By Bronson and Costa.* This text contains brief presentations of each topic and more details will be presented in Online Videos. This text contains dozens of worked out examples and dozens of similar practice problems with answers in the back of the book. **ALMOST ALL OF YOUR STUDY SHOULD CONSIST OF STUDYING WORKED OUT PROBLEMS AND DOING PRACTICE PROBLEMS.**

COURSE REQUIREMENTS

Course Requirements: (include point values for each- not just a percentage)

- *Each Week/Module will cover one or more Chapters from the text. Each week you will submit a list of Solved Problems from those chapters that you are having trouble understanding. You must submit specific details as to what you do not understand. You will also submit your work and final answers to selected Supplementary Problems from the text that do not match the answer in the back of the book. These will be worth 10 points each with points deducted only if your description of misunderstanding is not specific, i.e. "I don't get it" is not good enough.*
- *Additional Exercises similar to those from the text will be given bi-weekly with specific instructions as to the level of detail required to be submitted. 20 points each. Specific Rubrics will be given for each of these assignments.*
- *Midterm and Final Exams will be given and must be submitted within 24 hours of their availability. These will be made available at 6pm on the Wednesday of Week 4 and Week 8 respectively and will be due by 6pm the following day. These will only require 1 to 2 hours to complete but you have 24 hours. 30 points each*
- *This is a total of 320 points. There is no extra credit.*

Posting of Grades

- *All assignments will be graded with comments in Canvas within 48 hours of due date. An announcement will be sent when any assignments grades are available.*

COURSE OUTLINE AND CALENDAR

Complete Course Calendar

- *Weeks 1 and 2: Your questions related to the Solved and Supplementary Problems for Chapters 1 and 3 will be due Friday September 8th at NOON. See Assignments for details. Written Assignment 1 will be due Monday September 11th at MIDNIGHT.*
- *Week 3: Your questions related to the Solved and Supplementary Problems for Chapter 4 will be due Friday September 15th at NOON. See Assignment for Details.*
- *Week 4: Assignment 2 will be due Monday September 18th at MIDNIGHT. Midterm Exam*

will cover Chapters 1,3, and 4 will be posted Wednesday September 20th at 6pm and due by Thursday September 21st at 6pm.

- *Week 5: Your questions related to Solved and Supplementary Problems from Chapters 6 and 7 will be due Friday September 29th at NOON.*
- *Week 6: Assignment 3 will be due Monday October 2nd at Midnight.*
- *Week 7: Your questions related to Solved and Supplementary Problems from Chapters 8, 9, and 11 will be due Friday October 13th at NOON.*
- *Week 8: Assignment 4 will be due Monday October 16th at Midnight. Final Exam will be posted Wednesday October 18th at 6pm and will be due by Thursday October 19th at 6pm.*

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 1, Priority Deadline to Submit Graduation Application

September 4, Labor Day, CAMPUS CLOSED

September 5, Last day to drop 1st 8-week classes with no record

September 13, Last day to drop 16-week classes with no record

September 22, Last day to drop a 1st 8-week class with a Q or withdraw with a W

October 6, Deadline to submit graduation

October 20, Last day to withdraw from the University (1st 8-week classes WF)

October 23, Add/Drop/Late Registration begins, 2nd 8-week classes

October 26, Add/Drop/Late Registration ends, 2nd 8-week classes

October 30, Last day to drop 2nd 8-week classes with no record

November 10, Veteran's Day

November 10, Last day to drop with a Q or withdraw with a W (16-week classes)

November 17, Last day to drop a 2nd 8-week class with a Q or withdraw with a W

November 23-24, Thanksgiving, CAMPUS CLOSED

December 15, Last day to withdraw from the University (16-week and 2nd 8-week classes)

December 15, Last day to file for Degree Conferral (Registrar's Office)

December 15, Commencement (End of Fall Term)

December 25-January 1, WINTER BREAK

TECHNOLOGY REQUIREMENTS AND SUPPORT

Various available technologies may be used including Graphing Calculators, Online Calculators, and Maple(on-campus). Some will be discussed in class and your personal use of these technologies must be communicated on assignments and exams. However, assignment and exam rubrics will clearly state what details must be included for full credit. Thus, although some final answers may be obtained by technology, you will be required to show step by step details of many methods.

Technology Requirements.

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

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.

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].

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 ldavis@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 [WOnline](https://tamuct.mywconline.com/) [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at 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.

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/].

OPTIONAL POLICY STATEMENTS:

INSTRUCTOR POLICIES.

No late submissions will be accepted without documented excuses. No extensions will be given unless some extreme circumstances arise due to technical problems with Canvas availability.

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.

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