

Math 45-02: Differential Equations for Science and Engineering (50059)
MTWTh 10:30-12:05 a.m., BRH 218

Instructor: Dr. Wim van Warmerdam

Campus office: BRH-121

Office hours: MTWTh 12:05 p.m., and by appointment in-person or online.

Office Phone: 916-278-7074

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Online course information: Canvas

Text: A First Course in Differential Equations with Modeling Applications, by Zill, Cengage Learning, 11th Edition, 2018. We will not be using WebAssign for homework. An e-book is acceptable, and you don't need to bring your text to class.

Catalog Description: First order differential equations, second order differential equations with constant coefficients. Laplace transforms, small systems of linear differential equations, numerical methods, introduction to second order differential equations with variable coefficients.

Prerequisite: Math 31.

Attendance: You need to attend regularly to succeed in this or any college course. I will take attendance, but it will not count towards your course grade.

Messages and Announcements: I send messages to the class and to individual students through My Sac State. You are responsible for reading these messages and for any announcements made in class.

Homework: Homework is a vital part of the learning process. If you don't do the homework, you will likely not pass the course. Homework problems for a section in the text are assigned the day we finish that section in class. Homework problem numbers will be posted on Canvas.

I will not collect or grade homework because all solutions are available online. However, starting the second week of class we will have a daily homework quiz except on exam days. The quiz will consist of one problem from the previous week's assigned homework and will be given at the beginning of class. Your cumulative quiz score, with the lowest score dropped, will count as one midterm exam. There will be no make-up quizzes. Quiz dates and coverage are posted on Canvas.

Note: We will be covering a semester's worth of material in six weeks, making this equivalent a 7.5-unit course. You can expect to spend up to 15 hours per week outside of class doing homework and studying for this course.

Exams/Grading: In addition to the homework quizzes (1/6 of your course grade), we will have 4 midterm exams (each 1/6 of your grade), and a comprehensive final (1/6 of your grade). Your final exam score, if it is higher, will replace your lowest midterm exam score. Grading scale: A: [90-100%], B: [80-90%), C: [70-80%), D: [60-70%), F: <60%, with +/- grades within those intervals. Please see Canvas for the exam rules and policies.

Save your midterm exams. They will serve as a study guide for the final exam.

Calculators: Calculators will not be needed or allowed during exams.

Make-up Exams: If you are unable to take an exam with the class, your score on the final exam will replace the zero of the (first) missed exam. See the Exam Rules and Policies document on Canvas.

Math Lab: The Math Lab is a tutoring center designed to assist students enrolled in lower division mathematics and statistics courses. Students may use this facility on a drop-in basis in-person (BRH-118) for assistance with course-related problems encountered in homework assignments and in preparation for examinations. Their summer hours are M-Th 9 a.m. – 2 p.m.

Classroom Rules: Please remove all communication and entertainment devices from your desktop and put them away. Listening to music or podcasts, using your laptop or electronic pad (for other than taking notes), text messaging, or checking your cell phone during class are not permitted. See the Classroom Rules document on Canvas.

Class Cancellation: Contact the Math Department office (278-6534) if I am more than 15 minutes late for class. If I have not notified the department that I am on my way, then class is cancelled for the day.

Disability Access Center (DAC) Sacramento State is committed to ensuring an accessible learning environment where course or instructional content are usable by all students and faculty. If you believe that you require disability-related academic adjustments for this class, please immediately contact the Disability Access Center to discuss eligibility. A current accommodation letter from the DAC is required before any modifications, above and beyond what is otherwise available for all other students in this class, will be provided.

Intellectual Property: Handouts, exams, and Zoom recordings are for students' personal academic use only. The content may not be distributed in any form or manner, whether in their entirety or in part, without my permission.

Students may not record (audio or video) in this class without my permission except in accordance with ADA accommodations. Any recordings made in connection with a disability accommodation are for the student's personal academic use only and may not be distributed without my permission in any manner.

Academic Honesty: Students, faculty, and related staff are bound by the CSUS [Academic Honesty Policy](#).

Standards of Conduct: In this course we will follow the **Hornet Honor Code**:

As proud members of the Sacramento State Hornet community, we commit ourselves to actively promoting honesty, integrity, respect, and care for each person, ensuring a welcoming campus environment, and striving to help each member of our Hornet family feel a strong sense of belonging.

As Hornets, we will:

- Promote an inclusive campus and community.
- Listen and respect each other's thoughts, interests, and views.
- Value diversity and learn from each other.
- Engage daily with mutual trust, care, and integrity.
- Support a culture of honor and adhere to campus policies for honesty, ethics, and conduct.
- Be proud to be Sac State Hornets.

Student Health and Counseling Services: Your physical and mental health are important to your success as a college student. Student Health and Counseling Services (SHCS) in The WELL offers medical, counseling, and wellness services to help you get and stay healthy during your time at Sac State. SHCS offers: Primary Care medical services, including sexual and reproductive healthcare, transgender care, and immunizations; urgent care for acute illness, injuries, and urgent counseling needs; pharmacy for prescriptions and over-the-counter products; mental health counseling, including individual sessions, group counseling, support groups, mindfulness training, and peer counseling; athletic training for sports injury rehabilitation; wellness services, including nutrition counseling, peer-led health education and wellness workshops, and free safer sex supplies; violence and sexual assault support services. Most services are covered by the Health Services fee and available at no additional cost. Visit: <https://www.csus.edu/student-life/health-counseling/>

Masks: If you have contracted a cold or the flu, please wear a mask while in the classroom to reduce the risk of transmission to your classmates. If you have a persistent cough or sneeze and are not wearing a mask, you will be asked to leave the room.

Crisis Resources: If you are experiencing challenges with food, housing, financial or other unique circumstances that are impacting your education, help is just a phone call or email away. The CARES office provides case management support for any enrolled student. Visit: <https://www.csus.edu/student-affairs/crisis-assistance-resource-education-support/>

Title IX: The University requires faculty and staff to report any personal disclosures of sexual misconduct including rape, dating/domestic violence and stalking to the Title IX Coordinator. Students who do not wish to report their experience to me or the Title IX Coordinator may speak to someone confidentially by contacting Student Health and Counseling Services.

Links to Other Information and Campus Resources:

- [Academic Advising](#)
- [Information Resources and Technology](#)
- [Reading & Writing Center](#)
- [Student Rights and Responsibilities](#)