CRN (13683) Math 2A-61Z Differential Equations Instructor: Bijan Sadeghi Asynchronous Office Hours: Email me on Canvas Academic Term: Summer 2025 E-Mail: sadeghibijan@fhda.edu

Textbook: A First Course in Differential Equations with Modeling Applications, 11th edition, by Dennis G. Zill, ISBN-13-978-1-111-82705-2. Your textbook should include a WebAssign access code. If not, you must purchase one separately.

Required Materials: The textbook, a graphing calculator (TI - 83 or 84 is preferred if you are buying a new calculator. If you already have a TI-82, 85 or 86, you can use that.) **Prerequisite:** Math 1D (with a grade of C or better).

Advisory: English Writing 211 and Reading 211 (or Language Arts 211), or English as a Second Language 272 and 273.

Attendance: You are expected to attend all class lectures in their entirety. You may be dropped from the class if you are absent two times. Dropping or withdrawal from the class is the students' responsibility. A student who discontinues coming to class and does not drop will get an "F" grade.

Cheating: Cheating is forbidden. There shall be no talking to, or unauthorized helping of other students, or copying from or looking at another student's paper during exams. A class/course grade of "F" will be given for any of the above infractions.

Students with Disabilities: Students with disabilities who qualify for academic accommodations must provide a notification from the Disability Support Services (DSS) and discuss specific needs with the instructor, preferably during the first two weeks of class. Disability Support Service determines accommodations based on appropriate documentation of disabilities. DSS is located in Student Community Services building, room 141 and their phone number is (408) 864-875

Homework: All of the homework will be done online. Once you have your WebAssign access code, go to www.webassign.net, log-in and register, and enter the **Class Code**:

deanza 68697191

Quizzes: There will be weekly quizzes held on Mondays; time TBD.
Exams: Two exams will be given during the quarter. No Make Ups.
Final Exam: A two-hour comprehensive final exam will be given on Friday, August 8th; time TBD. This exam is a must. A grade of "F" will be assigned to those who miss the final exam.

June	June 30 - Ch. 1	July 1- Ch. 2	July 2 - Ch. 2	July 3 - Ch. 3	July 4 - Holiday
July	July 7 -	July 8 -	July 9 -	July 10 -	July 11-
	Ch. 3	Ch. 4	Ch. 4	Ch. 4	Exam 1
July	July 14 -	July 15 -	July 16 -	July 17-	July 18- Ch.
	Ch. 4	Ch. 5	Ch. 6	Ch. 7	7
July	July 21-	July 22 -	July 23 - Ch	July 24 -	July 25-
	Ch. 7	Ch. 8	8	Ch. 8	Exam 2
July	July 28 -	July 29 -	July 30-	July 31 -	Aug. 1-
	Ch. 8	Ch. 9	Ch. 9	Ch. 9	Ch. 9
August	August 4 -	August 5 -	August 6 -	August 7 -	Aug. 8-
	Ch. 9	Ch. 9	Ch. 9	Ch. 9	Final Exam

Grading:

Homework	200 points
Exams (2)	200 points
Quizzes	100 points
Final Exam	200 points
Total	700 points

Percentage	Grade
[95-100]	"A+"
[90-95)	"A"
[88-90)	"A-"
[85-88)	"B+"
[80-85)	"B"
[77-80)	"B-"
[72-77)	"C+"
[65-72)	"C"
[61-65)	"D+"

[57-61)	"D"
[55-57)	"D-"
[0-55)	"F"

Footnote Information

MATH-2A-07Z: TI-83 Plus or TI-84 Plus calculator recommended. This is an online class that meets each week on scheduled days and times as noted in the class listing. Students must have access to a computer, the internet and an individual email address. Most De Anza classes will use the Canvas course management system. We recommend a laptop or desktop computer to successfully complete the course; a tablet or phone may not be adequate for all assignments and tests. Information about Canvas and Online Education Orientation can be found in Canvas on the Student Resources page: https://deanza.instructure.com/courses/3382. The Student Online Resources hub with extensive information and tips can be found at deanza.edu/online-ed/students/remotelearning.

Student Learning Outcomes:

- 1. Solve ordinary differential equations, including first order equations, higher order linear differential equations, and systems of differential equations, using various algebraic, numerical, power series, and transform methods, depending on differential equation and initial conditions encountered, and apply existence and uniqueness theorems.
- 2. Construct the solution curve from the phase portrait of a first order autonomous equation and classify the stability of the equilibrium solutions.
- 3. Determine whether a set of solutions for a homogeneous linear differential equation form a fundamental set of solutions; construct a general solution for a nonhomogeneous equation from a fundamental set of solutions and a particular solution.
- 4. Model situations in science which lead to ordinary differential equations, solve the equation, and analyze the solutions for scientific insights.
- 5. Compute the Laplace transforms and inverse transforms and apply these transforms to solve linear differential equations and system of linear differential equations.

Important dates

For deadlines to drop with a refund and without and with a "W" grade, go to MyPortal > Students Tab > My Courses> View your Class Schedule. Dates are enforced.

Student Learning Outcome(s):

• Construct and evaluate differential equation models to solve application problems.

• Classify, solve and analyze differential equation problems by applying appropriate techniques and theory.