

GROSSMONT COLLEGE
Math 285: Differential Equations
Fall 2016 Syllabus

perseverance *noun*

1. steadfastness in doing something despite difficulty or delay in achieving success.

“The three great essentials to achieve anything worthwhile are, first, hard work; second, stick-to-itiveness; third, common sense.” ~Thomas A. Edison

Class Meets: Tues/Thurs: 11:00 – 12:15 pm, Bldg 53, Room 553 (3 units, Section 2215)

Instructor **Jenny Vanden Eynden** (pronounced vān-dĕn ěn-dĕn)

Contact Info: Email: jenny.vandeneinden@gcccd.edu

Phone/Voice Mail: 619-644-7294

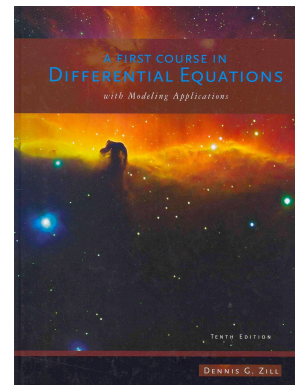
Website: www.grossmont.edu/people/jenny-vanden-eynden/

Office Hours: Bldg 70, Room 212 (located on the 2nd floor of the TechMall)

Tues, Wed, Thurs: 10:15 – 10:45pm,

Mon, Wed: 2:00 – 3:45pm,

or by **appointment**



Prerequisite: “C” grade or higher or “Pass” in Math 280 (Calculus II) or equivalent. You are responsible for knowing/remembering Calculus topics.

Textbook: *Differential Equations with Modeling Applications* by Dennis G. Zill, 10th edition
 ISBN: 978-1111827052 or *E-book on WebAssign.com*: Class Key: **gcccd 8001 6907**

Supplies: A graphing calculator. The math department recommends the TI-84 or TI-84plus. I will be using a TI-84plus in class, however you will be expected to calculate derivatives/integrals without the aid of a calculator and there may be portions of exams or entire exams where calculators can NOT be used. The TI-Nspire CX CAS, TI-Nspire CAS with Touchpad, TI-89, TI-92, TI-Voyage200, (or equivalent) can NOT be used during exams or quizzes. *NOTE:* Calculators can not be shared during exams/quizzes, so please bring your own calculator to every class period.

Overview: The course is an introduction to ordinary differential equations including both quantitative and qualitative methods as well as applications from a variety of disciplines. Introduces the theoretical aspects of differential equations and systems of equations, including establishing when solutions exist and various techniques for obtaining solutions (series solutions, Laplace transforms, separation of variables, variation of parameters, etc). Satisfies GE for: Grossmont College, CSU B4, IGETC 2A. Transfers to: CSU, UC. (CAN MATH 24)

Student Learning Outcomes:

Each student who successfully completes this course will be able to do the following:

- Categorize differential equations and use appropriate theorems, formulas, and algorithms to solve them.
- Use the appropriate technology to solve problems requiring differential equations.
- Formulate, analyze and differentiate mathematical conceptions requiring differential equations and manipulate them numerically, graphically and symbolically as well as have the ability to transition between these representations.
- Communicate the mathematical process and assess the validity of the solution.

Grading:

Your grade for the course is based on:	
• Homework	worth 10%
• Quizzes/Projects	worth 10%
• 3 Exams (20% each)	worth 60%
• <u>Final Exam</u>	worth 20%
TOTAL	100%

For Pass/No Pass option: 70 – 100 % = **Pass**,
 Below 70% = **No Pass**

The grading scale for this course is:

98 – 100 %	A+
92 – 97 %	A
90 – 91 %	A–
88 – 89 %	B+
82 – 87 %	B
80 – 81 %	B–
78 – 79 %	C+
70 – 77 %	C
60 – 69 %	D
Below 60%	F

You can NOT get a passing grade in this class without taking the FINAL EXAM!

Blackboard: Information and materials for this course, including checking your current grade, take-home quizzes and exam reviews, will be available on Blackboard. <http://gcccd.blackboard.com/>

Homework: Math is a subject learned by *doing*, not just watching. Therefore *doing your homework* is very important to succeed in this class. The homework assignments are designed to **prepare you for exams and quizzes**. Although I am NOT collecting homework for credit, it is very important for your success to do the recommended homework assignments.

- Homework from the textbook will be assigned daily, about 1 section per day.
- Mostly I assign odd numbered problems so that you can check your answers in the back of the textbook. There is also an optional Student Solutions Manual available.
- I expect you to attempt all assigned exercises before the next class meeting.
- Can't figure out a problem? Get help!
 - Ask questions in class
 - Talk to other students and form study groups
 - Come to my office hours for help
 - Get tutored in the Math Study Center (70-112/113) or in the Tutoring Center (70-202).
- I will also answer homework questions at the beginning of class.
- **Do not attempt to take exams and quizzes in this class without doing homework!**

Quizzes: Weekly take-home quizzes, will be given in this course. Because of this, it is important that you come to class everyday and on-time! Quizzes will be due at the BEGINNING OF CLASS (11:00am) **Late Quizzes will NOT be accepted, however you can email a photo or scan of your quiz if sent before 11:00am.** If you missed getting a take-home quiz, you should contact the instructor for a copy or look on Blackboard. However you are still responsible for turning in all take-home quizzes on-time with the rest of the class. If you fail to turn in a quiz, you will earn a zero. However, your *lowest quiz score will be dropped*.

Exams: There will be 3 in-class exams and a **cumulative** Final Exam. **No exams will be dropped. Again, NO EXAMS WILL BE DROPPED.** Exams will include questions over material assigned in the text, readings and handouts, as well as material presented in class. If you do not take an exam, you will receive a ZERO for it.

Late exams may ONLY be taken by PRIOR ARRANGEMENT or in the case of a DOCUMENTED emergency.

Remember that it is **your responsibility** to contact me (by email, phone, mailbox, or in person) **immediately** (within 24 hours) if a conflict arises. No cell-phones will be allowed during exams.

Final Exam: The final is **MANDATORY** and **CUMULATIVE** and will be given
Tuesday, December 13, 11:35 am – 1:35 pm, Room 553
 You can NOT get CREDIT in this class without taking the final exam!

Attendance: Attendance is expected at each class meeting. Bring your text and calculator to every class. **You can be dropped from the class for having more than 2 unexcused absences.** Late arrival and early departure from class may be counted as an absence. Please discuss any anticipated absences with me as soon as possible. In the event of an absence, you are responsible for:

- all material covered in class
- turning all assignments in **on time**
- any schedule changes or class announcements

The last day to drop this class with a “W” recorded **November 10 (Thursday)**. It is YOUR responsibility to drop the class by this date if you choose to do so. After this date, anyone still enrolled in the class will receive a letter grade (or P/NP) at the end of the semester.

Classroom Conduct: Class time is valuable. You are expected to be courteous to each other and to the instructor. You will be asked to leave the class for display of behavior the instructor deems as disruptive to the class environment. **During class, all phones, music players, and other distracting electronic devices must be turned off or put in silent mode AND put away.**

Absolutely NO CELL PHONE USE, WEB SURFING or TEXTING is allowed in class!
 If you are disruptive in class (after being warned), you could be suspended from the course for up to 2 days. If you use a cellphone, smartphone, iPad, iPod or any other **unapproved** device during an in-class exam, you will earn ZERO POINTS on that assessment, which will adversely affect your grade in the course.

At Grossmont College and in this class, we promote acceptance of all people, including those of diverse age, ancestry, color, disability, ethnicity, perspective, national origin, religion, gender, gender identity, sexual orientation, education, or socioeconomic status.

Derogatory comments about another's race, ethnicity, accent, appearance, intelligence, or sexual orientation will not be tolerated on any level.

Please see the Grossmont College Catalog for a full statement of the Student Code of Conduct.

Academic Integrity:

All work (which includes homework, take-home exams and in-class exams) that you complete in this class should be your own. The use of unauthorized materials, communication with other students during an exam, copying solutions from WolframAlpha.com or other sources, attempting to benefit from the work of another student, allowing a student to copy your work and similar behaviors that defeat the intent of an assignment/exam/quiz is **unacceptable**.

The faculty, administration, and staff of Grossmont College, in creating a culture of academic excellence, value honesty and integrity in all aspects of learning, working, and participating in the college community. Moreover, we believe that those who value learning would never view cheating (copying or otherwise presenting work that is not one's own) and plagiarism (presenting another writer's ideas, materials, images, or words as one's own without proper citation) as viable choices within an academic environment.

It is incumbent on faculty, in particular, to communicate expectations to students with regard to academic honesty in each class, and **it is the responsibility of each student to understand the actions and behaviors that constitute cheating or academic dishonesty within each class as well as in other venues on campus**. Students are encouraged to ask questions of their instructors and are expected to read the college's statement on academic fraud (located in the class schedule).

Penalties for actions inconsistent with classroom, library, and college expectations for academic integrity range from a failing grade on an assignment, exam, or project (which may lead to a failing grade in the course) to, under certain conditions, suspension, or expulsion from a class, program, or the college. For more information, please consult with your instructor or contact the office of the Associate Dean of Student Affairs and this website:

<http://www.grossmont.edu/campus-life/student-affairs/academic-integrity.aspx>

Students w/ Disabilities

Students with disabilities who need accommodations in this class are encouraged to notify the instructor and contact Disabled Student Programs and Services (DSP&S) **early in the semester** so that reasonable accommodations may be implemented as soon as possible. Students may contact DSP&S in person in building 60, room 120 or by phone (619) 644-7112 (voice) or (619) 567-7712 or (877) 561-8975 (both Video Phone).

<http://www.grossmont.edu/student-services/offices-and-services/dsps/default.aspx>

Math Study Center:

The MSC (rooms 70-112 & 70-113) is centrally located on the first floor of the Tech Mall (connected to the LRC/Library). They provide math tutoring on a walk-in basis. The MSC a great place to work on homework, study for a math exam and/or work on schoolwork from another class. Computers are available for educational use. The MSC is open Monday through Friday.

Hours:	Monday through Thursday:	8:00am – 9:00pm
	Friday:	8:00am – 3:00pm

Call (619) 644-7706 for further information.

Tutoring Center:

One-on-one tutoring is available in the Tutoring Center located on the 2nd floor of the Tech Mall in room 70-202. All Grossmont College students may receive free tutoring for many subjects they are enrolled in at Grossmont College. Tutoring is by appointment only. Students are allowed up to 2 hours of tutoring a week per subject, with a maximum of 5 hours per week. Appointments are scheduled in advance and the Tutoring Center is open Monday through Friday. Call (619) 644-7387 for their current hours.

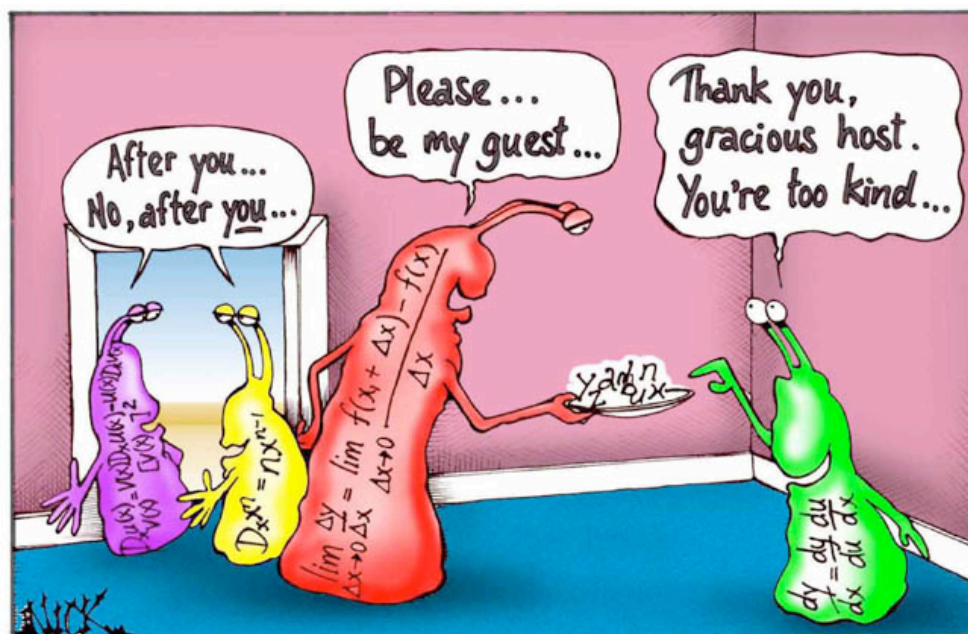
Expectations: Enrolling in a course represents a commitment to attend class and to participate fully in the learning process. I expect you to:

- Turn off your cell phone and any other disruptive devices before coming to class.
- Come to every class meeting on time and prepared.
- Be attentive, take notes, and remain seated until class is over.
- Participate in class—active learners get more out of class time!
- Be respectful of your classmates and myself.
- Do (this means attempt/try/check) all the homework assigned by the next class meeting.
- Ask questions about the material before, during and after class, or during office hours.
- Put in the effort required to succeed in this course!
- Keep a positive attitude and **persevere!**

Important Dates

September 2:	Last day to drop without a “W” (and for refund)
September 5:	Holiday (Labor Day)
November 10:	Last day to drop classes with a “W”
November 24:	Holiday (Thanksgiving)
December 13:	Final Exam, 11:35 am – 1:35 pm, Room 553

This course adheres to the policies outlined in the Grossmont College Catalog. See the Academic Policies stated in the catalog.



Deferential equations.

Math 285, Fall 2016
Grossmont College

Vanden Eynden
Section #2215

TENTATIVE SCHEDULE (as of 8/23/16)

Week of:	Tuesday	Thursday
Week 1 8/23 , 8/25	Intro, 1.1	1.1, 1.2
Week 2 8/30 , 9/1	1.2	1.3
Week 3 9/6 , 9/8	2.1	2.2
Week 4 9/13 , 9/15	2.3	2.4
Week 5 9/20 , 9/22	2.5	3.1
Week 6 9/27 , 9/29	In-Class Exam 1	4.1
Week 7 10/4 , 10/6	4.2	4.3
Week 8 10/11 , 10/13	4.4	4.5
Week 9 10/18 , 10/20	4.6	4.7
Week 10 10/25 , 10/27	4.8	5.1
Week 11 11/1 , 11/3	In-Class Exam 2	6.1, 6.2
Week 12 11/8 , 11/10	6.2	6.3
Week 13 11/15 , 11/17	7.1	7.2
Week 14 11/22 , 11/24	7.3	<i>Thanksgiving Holiday NO CLASS</i>
Week 15 11/29 , 12/1	8.1	In-Class Exam 3
Week 16 12/6 , 12/8	8.2	Review for Final
Week 17 12/13	<i>NO CLASS</i>	Final Exam 11:35 - 1:35pm

FINAL EXAM: Tuesday, December 13, 11:35 PM – 1:35 PM, Room 553