Math 2A.27 – Fall 2017- T/Th 4:00-6:15pm – CRN:

Instructor: Jyothi Suresh   **Email**: suresh.jyothi@fhda.edu

Office hours: 3:30 -4:00 pm T/Th and or by appointment. I am always willing to help you – please do not wait till the end of the quarter when there is not much I can do for you.

Textbook: A First Course in Differential Equations with Modeling Applications (10th Edition) Dennis G. Zill Brooks/Cole 2013

Calculator: TI-83 / TI-84

• Bring your calculator to every lecture, quiz and exam (except when instructed otherwise). Always carry a complete set of extra working batteries.

 • During lectures and office hours, I can only provide help using the listed calculators. I do not provide any calculator help during quizzes and exams.

• Calculators which do symbolic mathematics (eg. TI-89/92/NSpire) are not allowed on quizzes or exams. You may use a TI-89 or TI-92 for lectures and homework, but you must have access to and know how to use one of the permitted calculators for quizzes and exams. If you only bring a TI-89 or TI-92 to a test, you may need to complete the test with no calculator.

 • You may use a TI-82, TI-85 or TI-86 in place of the listed calculators. However, I do not provide help with those.

• You may not share calculators during quizzes or exams. You may not give another student your calculator if you finish a quiz or exam early.

 • I do not lend out my own calculator.

Electronic Devices: The use of cell phones or any other electronic devices **will not be permitted during class**. If your cell phone rings during class, I might answer it! If you need to attend to an emergency call, please take the call outside the classroom.

Student Learning Outcomes:

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

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

Grades: Your course grade will be based on 3 components.

1. 3 one hour exams each worth 20% of your grade
2. One final exam worth 30% of your grade
3. Quizzes worth 10% of your grade.
4. I will not change a grade unless I made an error in computing it. Letter grades will be assigned approximately as follows: 90-100% = A,   80-89% =B, 70-79% =C,

60-69% =D, less than60% = F

Homework :

- Doing homework on a daily basis helps you to really understand the material, and makes lectures easier to follow. It allows you to discover and correct your confusions and misunderstandings, so you'll be less likely to make the same mistakes during quizzes and exams. Homework also develops critical thinking, since you will be asked to consider problems which are not explicitly discussed in lecture.
- Homework will be assigned each day but will not be collected or graded. It is your responsibility as college students to check that your answers and solutions are correct, and to correct any mistakes or misunderstandings.
- You should work in groups of 2 to 4 people on homework. Everyone should do all the homework separately, then discuss the questions you could not do or had difficulty with. Do not copy from one another. Do not simply split the assignment, then do a fraction of the total work and exchange solutions. (This splitting method usually results in everyone in the group failing from lack of practice.)
- Homework will be assigned for each lecture section. You should do as much of it as possible that day, ask questions about it the next day, and have it completed by the second day after the lecture.
- You should expect to spend at least 10 hours a week outside of class on homework, or an average of at least 2 hours per day. Each day, you should be finishing yesterday's homework, doing as much of today's homework as possible, and reading ahead for tomorrow's lecture.
- Don't let the homework pile up. Because we operate on the quarter system, we will cover the material fairly quickly. If you fall behind in homework by even just a few days, the lectures will get harder to understand, and the homework will take more and more time the further behind you get. So, a 2 hour homework set might take 6 hours to complete if you are behind by a week, and that still doesn't include all the other old homework you have to finish up.
- Give each question a solid effort before you start looking at the solution manual or asking someone for help. You will learn much more from trying to solve a problem yourself, than from watching someone else solve it for you. (I can watch other people play basketball all day long, but I will only really improve when I pick up a ball and start shooting baskets myself.) Reread the notes or textbook, or search for similar examples for ideas on how to proceed, then try again. IF YOU ONLY FOLLOW THE SOLUTIONS IN THE SOLUTION MANUAL, BUT YOU DO NOT LEARN TO SOLVE THE PROBLEMS WITHOUT HELP, YOU WILL PROBABLY FIND THAT YOU HAVE GREAT DIFFICULY WITH THE PROBLEMS THAT APPEAR ON TESTS.
- Homework assignments will only represent part of what you are expected to master. If you only do the assigned problems, you might or might not be able to achieve a C in the class. If you want a higher grade, you should do extra problems on your own, in order to get enough practice to truly master the material. Once you know how to do a certain type of problem, do another similar one to make sure you can do it without an example to follow. Then do another one. The more practice problems you do, the more confident you will feel, and the better you will do on the tests.
- I believe that homework accounts for about 50% of your learning in a math class. You should not expect to pass the class if you do not keep up with the homework. If you don't think you can commit at least 10 hours a week to this class, take it another quarter when you can make that time commitment.

Quizzes :

- Quizzes are designed to motivate you to keep up to date on the homework.
- Quizzes will be given periodically throughout the quarter. Each quiz will correspond to several related sections from the textbook. The exact day will be announced 2 days in advance. There are no make-ups for missed quizzes.
- Quizzes will cover sections up to and including 2 days before the quiz. If you do the homework the day of the lecture, and ask questions the next day, you should be ready for the quizzes.
- Some quizzes may be non-calculator.

Midterms:

- There will be three midterms during the quarter
- Midterm dates will be announced at least 3 days before the corresponding midterm is given.
- No midterm scores will be dropped. If you miss a midterm because of serious personal illness, injury or emergency,it must be supported by documentation (eg. accident, medical or police report) and you will be given a "filler score" based on the final score.
- If you miss two midterms, you cannot pass the course.
- The expectations for midterms and quizzes are very different. Because quizzes are given 2 days after material is taught, you may be given more time, because you are just starting to incorporate the subject matter. For midterms, I assume that you have had much more practice with the material, so that you are able to identify and execute solutions within a much shorter timeframe.
- To be fully prepared for the midterms (and final exam), consider creating individual strips of paper, each with a different problem, throw them all in a hat, then draw them out in random order and solve each. This will give you practice in identifying solution techniques without benefit of knowing which section the solution might be found in. Also consider creating and solving your own problems within your homework group.
- There will be demerits if your phone, tablet, computer or other noisemaking device makes an audible noise during a midterm or final exam. The demerit will consist of 10% of all points available on the test.

Final Exam:

- There will be a comprehensive final exam during the 12th week of the quarter.
- The final exam will last 2 hours.
- No arrangements will be made to reschedule the final exam. Do not plan on traveling out of the area before the final exam. (If a serious personal emergency prevents you from taking the final, you may request an incomplete beforehand. You will not be able to take the final exam before the next quarter begins.)

Academic Cheating is the act of trying to get credit for work that is not yours. I have a zero tolerance policy towards cheating. Cheating includes (but is not limited to): communicating with anyone else during any type of test; copying or submitting work from someone else or from any source (eg. book, website); altering or interfering with grading or attendance taking; using any electronic equipment during quizzes and exams that has not been authorized (eg. cell phones, tablets, computers, symbolic calculators); helping another student cheat. (This is not an exhaustive list.) My zero tolerance policy towards cheating is: if you are caught cheating, I will give you an F for the course (no second chances). In addition, if you are caught cheating, you will be reported to the division dean and Student Development, who may impose much stricter consequences (eg. probation, suspension, expulsion).

Help

- DeAnza College wants you to succeed, and we will help you as much as possible.
- Get help as soon as possible. Don't wait until you are 2 or 3 weeks behind class before asking for assistance.
- I will do all I can to help you, if you ask for help first. You must take responsibility for seeking assistance – it will not come looking for you.
- Some students begin using the help services during the 1st week. To start, learn where the services are located, when they are available, and if you have to follow any special procedures to use them. There are three primary sources of help if you are having difficulty with the material in this class.
- Homework group: Contact the other members of your homework group electronically or by phone, or arrange to meet up for more in-depth discussions.
- Office hours: If my office hours are not convenient, I can occasionally schedule other times to meet. Just ask.
- Math Tutorial Center: Free tutoring is available on either a drop-in basis, a regular weekly basis (with a designated tutor), or online 24/7. Ask in S43 or https://www.deanza.edu/studentsuccess for more details.
- Additionally, if you have or think you might have a disability, the Disability Support Services (DSS) and Educational Diagnostic Center (EDC) offer additional services. In addition to helping students with dyslexia, attention deficit disorder and other commonly recognized learning disabilities, these services are also designed to help students whose abilities and efforts significantly exceed their actual achievement. If you feel this describes your situation, please talk to me, so I can put you in touch with the appropriate people.
- Other Some specific advice on succeeding in Math 2A - If your foundation in algebra, precalculus, trigonometry and calculus is not good, you may find yourself struggling in Math 2A. It is strictly your responsibility to review your prerequisites as needed. Class time will not be spent on review of material from prior classes.