

- TIME : TR 7:15 – 9:20 AM
- ROOM : V-319
- TEXTBOOK : *Applied Calculus for the Managerial, Life, and Social Sciences*, 10th edition, by Soo T. Tan, publisher: Cengage Learning.
- INSTRUCTION : The usual class meeting will consist of working homework problems that gave you difficulty, lecture, and discussion. At the beginning of each class meeting, please put a list of homework problems you would like me to do on the far left side of the board. This allows me to come in and immediately begin.
- HOMEWORK : Homework will be assigned each class meeting. However, I do not collect homework. As in any math course, homework is an essential part of the learning process. Just as an athlete must practice his sport in order to become proficient, you must be willing to put in the time practicing the problems in order to become proficient in this subject. For most students, that means at least 2 hours out of class for every hour in class.
- QUIZZES : Quizzes will be given each Thursday at the beginning of the class. Please do not be late, as you will not be given any more time. The quizzes will be approximately 20 – 25 minutes in length, and you will be told the class meeting before which sections the quiz will cover. Each quiz contains problems that are similar to but not the same as the assigned problems from homework. The two lowest quizzes will be dropped. **There are no make-ups on quizzes.**
- EXAMS : There will be 5 exams given during the semester. Each exam is worth 100 points. You may make up exams if you give me advance notice that you will be missing a class meeting when a test will be given.
- GRADES : Grades will be assigned based on total points accumulated:

Quizzes	100 pts
Exams	500 pts
Final	200 pts
Total	800 pts

The scale I will use is as follows:

720 – 800 pts (90% - 100%)	A
640 – 719 pts (80 % - 90 %)	B
560 – 639 pts (70% - 80%)	C
80 – 559 pts (60% - 70%)	D
BELOW	F

ATTENDANCE : I will be taking attendance each class meeting. Mathematics is a subject that requires participation. During the class meeting as I lecture, I will often give hints as to how to study more effectively or how to solve problems in a quicker way. If you are not present for the lecture, you will be missing out on many helpful ideas not to mention the core content. It has been my experience that students who regularly do not attend class usually fail or withdraw. Therefore, if any student misses more than 8 hours of class (that is 4 class meeting) during the course of the semester, you may be dropped by me. Be aware that leaving class early constitutes an absence. Sometimes, however, some students fall through the cracks and I miss them. If it is your intention to withdraw from the course, do not assume that I have withdrawn you. You must check with the records department as to your status for the course. If I have withdrawn you, great! But, if I haven't, you will be able to initiate the process yourself.

E-MAIL : lsowinski@sierracollege.edu

OFFICE HOURS : T-W 9:30 – 10:00

ELECTRONIC DEVICES: Cell phones and Ipods, MP3 players etc. are very distracting to me as well as to those students around you. Please do not use your phone or your ipods or mp3 players while in class. I will give you one warning. If I see you using these devices after you have been given a warning, I will be asking you to give me your phone or Ipad or mp3 player until the end of class.

COURSE OUTCOMES : For all outcomes the student will work with algebraic, exponential and logarithmic functions.

1. Analyze functions and be able to graph (with and without technology), interpret graphs, find inverses and solve application problems.
2. Calculate the limits of a function including the limit at a point and the limit at infinity. Determine when limit exists and how limits relate to continuity of a function over an interval.
3. Calculate the derivative of a function from the definition, using rules for differentiation, and implicit differentiation.
4. Interpret the meaning of the derivative as it relates to the slope of the tangent line to a graph, the average or instantaneous rate of change, and intervals on which a function is increasing or decreasing.
5. Interpret the results of the first and second derivative test and use to find relative extrema on open and closed intervals.
6. Identify relative extrema, points of inflection, concavity, critical points, horizontal and vertical asymptotes, points of non-differentiability and use to sketch graphs of functions.
7. Analyze the differentials of a function and how it relates to approximate rates of change and real life problems.
8. Solve the "real life" situations using calculus. These should include (but not be limited to) the average and instantaneous rates of change; velocity and acceleration; related rates problems; optimization problems; and logistics growth problems.
9. Calculate the antiderivatives of basic algebraic functions.

STUDENT LEARNING OUTCOMES:

1. Evaluate limits of functions using limit laws and graphical methods and utilize limits to determine continuity.
2. Calculate derivatives and integrals of algebraic, exponential, and logarithmic functions.
3. Translate, model, and solve applied problems in the social and life sciences utilizing derivatives and integrals.
4. Construct graphs of algebraic functions using their derivatives.
5. Logically present clear, complete, accurate, and sufficiently detailed solutions to communicate reasoning and demonstrate the method of solving problems.

TITLE IX REPORTING:

As an instructor, one of my responsibilities is to help create a safe learning environment for my students and for the campus as a whole. Under Title IX as a member of the college community, I have the responsibility to report any instances of sexual harassment, sexual or domestic violence, and/or other forms of prohibited discrimination. If you would rather share information about sexual harassment, sexual violence or discrimination to a confidential counseling employee who does not have this reporting responsibility, please let me know so that I can get you in contact with them.