

**MATH 262: Calculus II**  
**East Los Angeles College**  
**Spring 2020**

Instructor: Regis Smith (smithr at elac dot edu)  
Office: G5-111W (323) 265-8887  
Office Hours: Monday/Wednesday 12:15-1:35, 4:30-5:00; Thursday 2:00-4:00, and by appointment  
Classroom: G5-118 Monday/Wednesday 9:30-12:00  
Text: *Calculus*, by James Stewart, **5th edition** (ISBN: 0-534-39339-X)  
Required Calculator: Any calculator which retails for less than \$30.

This second semester introductory calculus course covers integration techniques, parametric equations, power series, and applications. The prerequisite course is MATH 261 or its equivalent.

**Textbook.** We use the out-of-print 5th edition of James Stewart's *Calculus* (ISBN: 0-534-39339-X). I have several copies and you can borrow one for free.

**Grading Summary.** Your grade is computed as a weighted average of your scores on several exams, quizzes, and homework assignments, as follows.

Homework	Quizzes	Term Exams	Final Exam
10%(+10%)	10%	50%	30%

Letter grades are assigned on the standard scale: 90% A, 80% B, 70% C, 60% D, <60% F. All individual assignments within the same category (quiz, homework, or term exams) are weighted equally. So the formula for computing your final average is

$$10\% \cdot (\text{HW Average}) + 10\% \cdot (\text{Quiz Average}) + 50\% \cdot (\text{Term Exam Average}) + 30\% \cdot (\text{Final Exam})$$

**Extra Credit Work.** You earn an additional bonus for completed homework assignments, equal to the value of the assignment in the final grade. This is the only extra credit available for the course.

**Make-up Work.** If you are absent and you would like to submit work late, you must provide *written* justification along with supporting documentation soon after returning to class. Supporting documentation is *required*. Your reason for being absent can not be frivolous.

### Students with Disabilities

Students with disabilities who need reasonable accommodation should provide verification of their disability to Disabled Student Program and Services (DSP&S), which is located in E1-106. Appointments can be made by calling (323) 265-8787. A letter from DSP&S outlining accommodations should be given to the instructor. If a student with a disability feels that accommodations offered are inappropriate or insufficient, they should seek the assistance of the DSP&S Coordinator and/or the Vice President of Student Services.

### Course Learning Outcomes

- Evaluate an indefinite integral using the method of partial fractions.
- Evaluate an integral using an appropriate method.
- Find the radius of convergence and interval of convergence of a given series

### Where to find Help

I am available during office hours, but if these are inconvenient for you, we can make an appointment to meet at another time. I am sometimes available on Friday mornings. Also, there is free tutoring daily at the Math Tutoring Center (G5 basement). You can make one-on-one appointments in the Math Tutoring Center (30 minutes) as well as the Learning Center (50 minutes). Their hours are as follows.

**Math Tutoring Center (G5 Basement)**

Monday–Thursday 9:00am–8:00pm

Friday/Saturday 9:00am–4:00pm

**Learning Center (E3-280)**

Monday–Thursday 8:30am–8:00pm

Friday–Saturday 9:00am–5:00pm

**Academic Honesty.** If you are caught cheating on any assignment, you will receive a zero on that assignment, and will be suspended from class for two meetings. You will not be able to make up any work assigned during your suspension. Exams and quizzes may be **videotaped** to discourage cheating. Recordings will only be viewed by the instructor and will be erased after grades are submitted. However, if you are caught cheating on video, a recording excerpt will be preserved as long as your grade may be in dispute, and may be viewed by others such as college deans and administrators.

**Goals.** After completing this class you should, at minimum,

- know how to find antiderivatives of certain rational, radical, trigonometric, logarithmic, exponential, and hyperbolic functions, as well as compositions of these and their inverses;
- know when to apply, and how to use l'Hospital's rule;
- know how to compute definite integrals over infinite intervals, or over intervals where a function is unbounded;
- recognize when a function might not have an antiderivative which can be expressed in terms of elementary functions, or when a definite integral can not exist;
- know how to use parametric equations to describe curves; find tangents to, lengths of, and areas inside parametric curves;
- know how to find tangents, lengths, and areas in polar coordinates;
- understand converge/divergence of sequences and series; know several techniques for determining if a sequence or series converges or diverges;
- know how to represent a function using power series, and find the radius of convergence of power series;
- know how to use the remainder term in Taylor's theorem.