

Math 261: Calculus I (Section 1042) East Los Angeles College Fall 2019

Instructor: Regis Smith (smithr@elac.edu)

Classroom: G5-118 TR 9:30am–12:00pm

Final Exam: Thursday, December 12, 9:30–11:30 A.M.

Text: *Calculus*, 5th edition, by James Stewart (ISBN: 0-534-39339-X)

Office: G5-111W (323) 265-8887

Office Hours: Monday/Wednesday 12:10-12:30, 1:20–1:35, 4:30–6:00; Tuesday 2:00-3:30; and by appointment

Brief Course Description

This course covers basic differential and integral calculus of elementary functions, with numerous applications. In addition, weekly extra credit exercises are given to develop your background in algebra and trigonometry.

Grading

Your grade is based on the average of weekly homework assignments (10%), quizzes (15%), three term exams (50%), and the final exam (25%). All assignments within the same category are weighted equally. I use the standard grading scale after rounding to the nearest tenth.

90.0%+ A 80.0-89.9% B 70.0-79.9% C 60.0-69.9% D, < 60% F

There will be 14 extra credit assignments and/or quizzes on algebra/trig worth 0.5% each added to your final grade.

Textbook & Calculators

The textbook for this class is *Calculus*, by James Stewart, **5th edition**. I will lend you a copy for free, or you can purchase a copy online for around \$5. You may use later editions if you wish.

Either a calculator or computer is required for completing some homework assignments. Any \$10 scientific calculator which can compute logarithms and tangents is fine. Computer algebra systems such as Mathematica and Maple are available on the Math Tutoring Center (G5 basement) computers. Online systems such as CoCalc (<https://cocalc.com>) and Wolfram Alpha (<http://www.wolframalpha.com/>) can be used.

Homework

Homework is assigned weekly, and must be submitted at the end of class on the due date. If homework is submitted (1) on time, and (2) on 8.5×11 ruled sheets with straight edges, and (3) with exactly one staple (no paper clips or clamps), you will receive 20% extra credit on the assignment. **A 10% per weekday deduction is removed for late homework.**

Quizzes

A quiz is a short, unscheduled test. All quizzes are “open-book”. Usually calculators are not needed on quizzes.

Exams

There will be three term exams (Sept 19, Oct 17, Nov 14), and a final exam (Dec 12). Term exams are closed book, one hour long, and comprehensive. You are required to bring a government-issued identification to all exams. The final exam lasts for two hours.

Students with Disabilities

Students with disabilities who need reasonable accommodation should promptly alert the instructor, then provide verification of disability to the Disabled Students Program located in E1-106 or call (323) 265-8787 to make an appointment. If a student with a disability feels that accommodations offered are inappropriate or insufficient, (s)he should seek the assistance of the DSP&S Coordinator and/or the Vice President of Student Services.

Cheating

Cheating on any assignment will result in a grade of zero on that assignment, and a two day suspension from class. You will receive no credit for all assignments due during a suspension. Egregious forms of cheating, such as having someone take an exam in your place, or repeated cheating, may result in expulsion from the district (all nine LACCD campuses).

Course Learning Outcomes

The following are a subset of the objectives in this class which are tested every semester.

- Given a function, students will calculate its derivative using the definition.
- Given a polynomial function of degree n , students will find the absolute maxima and absolute minima on a closed, bounded interval
- Given a polynomial function of degree n , students will: find the critical numbers and find the local maxima and local minima, if they exist.

Important Dates to mark on your calendar

Friday, September 6: Last day to drop without paying fees

Thursday, September 19: EXAM 1

Thursday, October 17: EXAM 2

Monday, November 11: Holiday (Veterans Day)

Thursday, November 14: EXAM 3

Sunday, November 17: Last day to withdraw with a W

Thursday, November 28: Holiday (Thanksgiving)

Thursday, December 5: Last day of class

Thursday, December 12: Final Exam

Homework List (DRAFT SUBJECT TO CHANGE)

Homework will be assigned from the text and also from handouts given in class. Here are the assignments from the text (with due dates to be announced). The True/False quizzes at the end of each chapter are useful in testing your conceptual understanding of the material.

Chapter 1

Section 1.1 # 1, 2, 5-8, 10, 16, 19, 22, 23-46, 48-66 mult of 3

Section 1.2 # 3, 4, 8, 10, 13, 15, 16

Section 1.3 # 1-8, 12, 15, 16, 23, 24, 31, 32, 35-40, 43, 47, 48, 54, 57, 62

Section 1.4 # 22, 31, 34

Page 55 TRUE-FALSE QUIZ # 1-6 (bottom of the page)

Chapter 2

Section 2.1 # 4, 5, 7

Section 2.2 # 2-14, 16, 17, 19-22, 24-36 mult of 3

Section 2.3 # 1, 2, 3, 6, 9, 10, 12-30 mult of 3, 32-38, 39-60 mult 3

Section 2.4 # 1-6, 13, 15, 16, 23, 30, 41

Section 2.5 # 1, 2, 3-39 mult 3, 41-44, 47, 57, 58, 60

Section 2.6 # 1, 2, 3, 5, 7, 9, 11-27 eoo

Page 122 TRUE-FALSE QUIZ # 1-14

Chapter 3

Section 3.1 # 3-7, 10(a), 14, 17, 19, 24-36 mult 3

Section 3.2 # 1-4, 5-13 odd, 14, 16, 19, 20, 22, 26, 35, 40, 45

Section 3.3 # 1-43, 51-54, 55(a), 57-62, 65-66, 67-87 eoo

Section 3.4 # 2, 7, 10, 14, 20, 26, 29, 33

Section 3.5 # 3-15 mult 3, 17-23 odd, 26(a), 30, 33, 36, 39, 42, 47

Section 3.6 # 3-42 mult 3, 43, 45, 53, 54, 64, 74

Section 3.7 # 1, 3-42 mult 3,

Section 3.8 # 1-4, 5-21(a) eoo, 26, 30, 31, 36, 38, 39, 42, 43, 53, 54, 57

Section 3.9 # 1, 3-36 mult 3

Section 3.10 # 1, 3-48 mult 3

Pages 213-214 TRUE-FALSE QUIZ # 1-12

Chapter 4

Section 4.1 # 1, 3-6, 9-57 mult 3, 64

Section 4.2 # 2, 5, 12, 15, 18, 21, 26, 27

Section 4.3 # 1-10, 12-42 mult 3, 47, 49, 50, 57, 60

Section 4.4 # 2-5, 7, 8, 9-30 mult 3, 34, 36, 37, 41, 44, 48, 50, 52, 58

Section 4.5 # 2, 10, 19, 22, 29, 31, 38, 39, 43-46, 50

Section 4.6 # 2, 4, 8, 10, 26

Section 4.7 # 1-4, 5-61 eoo

Section 4.8 # 6, 13, 16, 22

Section 4.9 # 6-8, 11, 14, 17, 20, 28, 39

Section 4.10 # 1, 2, 3-36 mult 3, 39-41, 43, 47, 48, 54, 56, 60, 63, 67, 71

Page 308 TRUE-FALSE QUIZ # 1-17

Chapter 5

Appendix E Pages A38-A39 # 1, 2, 4, 8, 12, 16, 20, 22, 26, 30, 32, 41, 42, 44, 48

Section 5.1 # 2, 3, 11, 18, 20, 22

Section 5.2 # 2, 4, 9, 18, 22, 27, 35, 36, 47, 50, 52, 56, 62

Chapter 7

Section 7.1 # 1-16, 23, 25, 26, 39-42

Section 7.2 # 13, 15-18, 23-45 odd, 52

Section 7.3 # 1-8, 9-73 eoo,

Section 7.4 # 3-36 mult 3, 39-53 odd, 65, 66, 69, 70, 76, 78

Section 7.5 # 1-14, 20, 22-34 even, 43, 49, 54, 59-69 odd, 78

Chapter 5

Section 5.3 # 3-60 mult 3, 63-68

Section 5.4 # 1-4, 5, 8, 13, 17-37 eoo, 38, 39, 43, 45, 53, 56, 59

Section 5.5 # 1-6, 7, 8, 13, 16, 22, 24, 27, 30, 37-53 eoo, 57, 58, 61, 76, 77

Page 368 TRUE-FALSE QUIZ # 1-14

Chapter 6

Section 6.1 # 1-4, 5-25 eoo, 27, 28, 30, 31, 34, 38, 41, 44

Section 6.2 # 3-18 mult 3, 19-30, 42, 44, 48, 52, 53, 56, 61

Section 6.3 # 3-33, mult 3, 37-45 odd

Section 6.4 # 1-29 eoo

Section 6.5 # 3-23 eoo