

Calculus II

University of San Diego, Spring 2019

Instructor: Kyle Havens	Course: Math 151	Section: 4
Days: Monday, Tues. & Thurs.	Time: 5:30-6:50p (6:25p on M)	Units: 6
Cell: (619)990-4714	Room: SH209	Office: SH149
Website: www.havensmath.com	Email: khavens101@gmail.com	Hours: See schedule

Required Materials:

1. Graphing Calculator (TI-83+ or TI-84+ recommended)
2. Textbook: *Calculus, Concepts & Contexts*, 4th Edition by Stewart

Prerequisite: A grade of "C-" or better in Calculus I.

Course Topics: This course is a continuation of the first semester single variable calculus course. Topics include review of differentiation and integration, advanced integration techniques as well as applications, infinite sequences and series, power series, Taylor and Maclaurin series with applications, and differential equations.

Student Learning Outcomes: To successfully complete this course, students must demonstrate the ability to:

- Explain calculus concepts such as improper integral, convergence of sequences and series, power series, Taylor series, and solutions of differential equations. This includes theorems with complete assumptions.
- Apply calculus concepts to evaluate lengths, areas, and volumes, to solve simple differential equations, to model practical problems from various areas, and to interpret solutions obtained from the models.
- Determine convergence of sequences and series using a variety of methods, represent functions with Taylor and Maclaurin series, and determine error of approximating functions with Taylor polynomials.
- Clearly communicate complete solutions to problems verbally and in writing. This involves using complete sentences to explain individual steps in the solutions, correct notation and proper units.
- Explain, interpret and correctly apply definitions. Provide examples and to illustrate definitions.
- Use valid reasoning (be able to provide a logical sequence of statements that follow each other) and be able to identify invalid reasoning. Provide counterexamples to disprove statements that are not always true.
- Determine and explain when particular theorems apply to a situation and apply them correctly.
- Prove simple theorems.

Class Performance: Your final grade in my class will be calculated with the following weighting system.

25%	Final Exam	Cumulative. You must get a "D" on the final exam to pass.
45%	Test Average	The average score of your in-class tests.
10%	Quizzes/projects	The average score of your quizzes/projects
20%	Homework	Written, assigned in class and posted online

Letter Grade: The letter grade you receive will be based on your total score from the above system.

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

Grade Requests: All requests for an opportunity to improve your grade due to personal circumstances will be denied. Borderline grades may be rounded if student has good attendance (max of one unexcused absence).

Final Exam: The final exam is cumulative and will be held at the following time:

Tuesday, May 21st from 5:00pm to 7:00pm

Workload: Regular attendance is necessary, as it is difficult to catch up with the material when you miss class. The pace of the course will be quite fast. We cannot omit any of the topics as the course is a prerequisite for other math courses. Your success in these upper-division courses depends on your mastery of Calculus II material. Please brace yourself for possibly a rough ride. I am here to help you. Office hours are held Monday and Wednesday after class from 10-11am. A student is supposed to spend at least two hours at home for each in class.

Calculators: Because of the increased availability of various symbolic algebra/calculus tools such as computer software and advanced calculators, the computational aspect of the course has been somewhat reduced. Computations are less important than setting up the problem correctly. In this course, the concepts count much more than computations. When doing your homework, in addition to problems that I will ask you to solve completely manually, and where I will require that you show all the steps of your work, you may be encouraged to use integration tables, advanced calculators, or various Web tools to solve other problems.

Quizzes/Projects: Each quiz will be graded on a 4 point scale. No make-up quizzes. A score below a 3 can be made up and turned in by the next class session to improve the score up to a 3. I will notify you the class period before a quiz will occur. Each project will be given in advance so that you will have approximately 2 weeks to work on it. You may collaborate on the projects but each project must be turned in individually. Copying a project will not be tolerated. Each project is worth 10 points and will be graded based on neatness, effort, and correctness.

Homework: Homework will be assigned and collected approximately once per week. The assignments will be graded partly on effort. I will assign many odd-numbered exercises that have answers in the back. All work must be shown as a correct answer with no work is worth very little. No late assignments will be accepted unless you arrange it with me in advance. Your two lowest homework scores will be dropped if you have good attendance. Homework problems posted at www.havensmath.com. You are responsible for keeping up with the homework.

Exams: There will be a total of three normal examinations covering roughly one or two chapters of material. No notes or books are allowed on exams unless specified. Calculators are allowed on exams. Cell phones are not allowed on exams. Missing an exam will result in a zero on that exam. A test can be made up only if you have a verifiable emergency and if you notify me in advance about your absence. The final exam is cumulative.

Students with Disabilities: Any student with a documented disability needing academic adjustments or accommodations is requested to speak with me during the first two weeks of class. All discussions will remain confidential. A student attempting to access Disability Services for the first time should begin by contacting the Director of Disability Services and/or the Learning Disabilities Specialist in Serra Hall, Room 300 (619-260-4655). It is the student's responsibility to schedule an "intake" meeting with the Director as soon as possible.

Academic Dishonesty: Please be aware of the academic integrity policy of this University. It is located at (<https://www.sandiego.edu/conduct/documents/Honor-Code.pdf>). Cheating and plagiarism are serious offenses and will be treated seriously. Although I encourage you to study together, unless specifically designated as a group assignment all work you hand in should be your own. Allowing another student to copy your work is equally as serious of an offense.

Behavioral Expectations:

- Cellphones on silent.
- Be in class on time and don't leave class early. If you are late or leave early you will be marked as absent for that class period.
- Participate! Be attentive, take notes, and ask questions.
- Don't talk while I am lecturing or while other students are asking questions.
- Comments about another's race, ethnicity, accent, appearance, intelligence, or sexual orientation will not be tolerated on any level.

Math 151 - Course Schedule

<u>Week of</u>	<u>Monday</u>	<u>Tuesday</u>	<u>Wed</u>	<u>Thursday</u>	
1/28/2019	Course Introduction	Review Ch. 3		Review Ch. 5	
2/4/2018	5.6	Office Hours 5.6, 5.7		Office Hours 5.7	
2/11/2018	5.7	Office Hours 5.8, 5.10		Office Hours 5.10	
2/18/2018	6.1	Office Hours Review and Catch-Up		Exam #1	
2/25/2018	6.2	Office Hours 6.2, 6.3		Office Hours 6.3, 6.4	
3/4/2018	<i>Spring Break</i>				
3/11/2018	6.4	Office Hours 6.5, 6.6		Office Hours Ap. H	
3/18/2018	8.1	Office Hours 8.1, 8.2		Office Hours 8.2, 8.3	
3/25/2018	8.3	Office Hours Review and Catch-Up		Exam #2	
4/1/2018	8.3	Office Hours 8.4		Office Hours 8.4	
4/8/2018	8.4	Office Hours 8.4		Office Hours 8.5	
4/15/2018	8.6	Office Hours 8.6, 8.7		No Class Easter Break	
4/22/2018	No Class Easter Break	Office Hours 8.7		Office Hours 8.7, 8.8	
4/29/2018	8.8	Office Hours 8.8, Ap. I		Office Hours Ap. I	
5/6/2018	7.1, 7.3	Office Hours Review and Catch-Up		Exam #3	
5/13/2018	7.3, 7.4	Office Hours 7.4, Review		No Class Study Day	
5/20/2018	<i>Finals Week</i>	FINAL EXAM 5/21 @ 5PM		<i>Finals Week</i>	