INSTRUCTOR INFORMATION

Instructor: Dr. Cherie Ichinose  
Email: cichinose@fullerton.edu  
Main Campus Office: MH 390D  
IRVC Office Hours: MW 10:00 - 11:00 IRVC 237

CLASS LOCATION AND TIMES

Math 150A Section 85-21470  
Monday/Wednesday 11:00 - 12:50 IRVC 109

COURSE COMMUNICATION

All course announcements and personal email are sent through TITANium, which only uses CSUF email account. Therefore, you **MUST check your CSUF email on a regular basis** (daily) for the duration of the course. Please email me directly with any questions about the course. You can expect a response within 24 hours (except weekends).

DESCRIPTION:

This course is the first semester in a three-semester sequence in calculus. The topics of functions, limits, differentiation, optimization, and integration will be covered.

REQUIRED TEXTS

Textbook: *Essential Calculus, Early Transcendentals, Custom Edition, 2E*; James Stewart

CALCULATORS:

A standard or scientific calculator with logarithmic, exponential, and trigonometric functions is required. **Graphing calculators will NOT be allowed during quizzes or exams.**

CLASS ATTENDANCE

Coming to class late or leaving early are not acceptable and a distraction to everyone. Daily class attendance is important for your success in this course. Attendance will not be taken on a regular basis after the drop deadline. Failure to attend class will almost certainly result in a lower grade, as you will miss important lectures and class discussions.
EXAMS

There will be **4 midterm** exams given in class on the dates indicated on the syllabus and a **comprehensive final** exam given during finals week. **There will be no make-up exams.** Students must bring student ID to all exams. All exams are closed notes. No cell phones, smart watches or other technology are allowed. Headphones are also prohibited during exams. Answers without justification will receive **no credit.**

The exams will cover the following:

<table>
<thead>
<tr>
<th>Exam</th>
<th>Text Sections</th>
<th>Exam Date</th>
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<tbody>
<tr>
<td>Exam 1</td>
<td>Chapter 1, Sections 1 - 6</td>
<td><strong>Monday, February 12th</strong></td>
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<td>Chapter 2, Sections 1 - 2</td>
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<tr>
<td>Exam 2</td>
<td>Chapter 2, Sections 3 - 5</td>
<td><strong>Monday, March 12th</strong></td>
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<td>Chapter 3, Sections 1 - 6</td>
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<td>Exam 3</td>
<td>Chapter 2 Sections 7-8</td>
<td><strong>Monday, April 16th</strong></td>
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<td>Chapter 3 Sections 3.4 &amp; 3.7</td>
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<td>Chapter 4, Sections 1-6</td>
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<td>Exam 4</td>
<td>Chapter 4 Section 7</td>
<td><strong>Monday, May 7th</strong></td>
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<td>Chapter 5, Sections 1 - 5</td>
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<td>Chapter 7, Section 7.1</td>
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<tr>
<td>Final Exam</td>
<td>All Preceding Sections</td>
<td><strong>Monday, May 14th</strong></td>
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The exams will be designed to test your understanding of the concepts being covered in the course. This means that the exams will not consist solely of problems that closely resemble homework problems. Instead, they may contain problems that combine two or more different concepts from different text sections or that test your understanding of a definition or theorem. Be prepared!

FINAL EXAM

The final exam in this course will be held at the **special exam time of Monday, May 14th at 12:00 - 1:50pm.** Note: This maybe different than on your schedule. All students are required to take the final exam at this time. It is your responsibility to make any necessary arrangements to be available at this time.

QUIZZES

There will be 11 short (10 to 15 minute) quizzes given in class as indicated on the syllabus. The lowest quiz score will be dropped in computing your course grade. **There will be no make-up quizzes.**
HOMEWORK
Homework will be assigned on a regular basis, and is generally due once a week (Monday). **Late homework will not be accepted.**

PRE-READING AND TICKET IN THE DOOR
Strong Calculus students come to class prepared. Prior to each class period you will be responsible for a pre-reading assignment and a pre-assessment (Ticket in the Door). You will then bring both to class the next day; this serves as the basis for the class discussion and work. Students present their solutions to Ticket in the Door (TITD) problems and then spend the rest of the class period engaged in problem solving of more difficult problems. To earn credit on the Ticket in the Door you must be in attendance the day it is discussed.

GROUP PROJECT
A group writing assignment will be assigned in order to satisfy the university writing requirements for GE courses. It will consist of an individual 2-3 page written assignment and a group recorded video. The prompt will be posted on TITANium 6 weeks prior to the due date.

WRITTEN WORK
For all written work for this course, you need to show your work and clearly indicate your reasoning in obtaining your answers in order to receive credit. Obtaining the correct answer is not in general as important as understanding the procedure for doing so or being able to explain your reasoning in obtaining the answer. Anytime you answer a question in a problem, you should also provide justification for your answer. Many of the problems in this course will require a written explanation rather than a sequence of mathematical calculations. Your work should be organized and neatly written up using correct and complete English sentences. Your work in this course will be assessed not only on the mathematical content and correctness of the solution, but also on the presentation of the solution, the correct use of grammar and mathematical notation, and writing style.
GRADING
Since there are absolutely no make-up exams, there are two possible grading schemes for this course. Your final grade will be the better of the two schemes.

<table>
<thead>
<tr>
<th>Scheme 1</th>
<th>Scheme 2</th>
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<tbody>
<tr>
<td>Pre-Reading and TITD</td>
<td>5%</td>
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<tr>
<td>Homework</td>
<td>10%</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Midterm Average</td>
<td>50%</td>
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<tr>
<td>Final Exam</td>
<td>20%</td>
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<tr>
<td>Group Project</td>
<td>5%</td>
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The plus/minus grading option will be used in this course. A grade of C- (1.7) or better in this course is required to satisfy the General Education requirement Area B4 Mathematics/Quantitative Reasoning and the requirements for most majors, however does not meet the requirement to move onto Math 150B. A grade of ‘D+’ (1.3) or below will not satisfy this General Education Requirement.

The grading scale for the course will be

- A+ 97% B+ 87% C+ 77% D+ 67%
- A 92% B 82% C 70% D 60%
- A- 89% B- 79% C- 69% F <60%

WITHDRAWAL POLICY
The university allows withdrawal on demand only during the first two weeks of classes. The withdrawal deadlines this semester are as follows:

- **Monday February 5th**, is the last day to drop without a grade of W. Students drop using Titan Online
- **Friday, March 2nd**, is the last day the Mathematics Department will be flexible on the approval of late withdrawal requests. Beginning **Monday, March 5th** authorization to withdraw shall be granted for only the most serious and compelling reasons, such as a documented physical, medical, emotional, or other condition which has the effect of limiting the student’s full participation in the class. Poor academic performance, related to a lack of effort or poor attendance, is not considered sufficient reason for withdrawal after the **April 20th deadline.** You must provide documentation for your reason for withdrawing.
CLASSROOM POLICY
Students are expected not to distract or disrupt their fellow classmates. All mobile phones, pagers, or other noisemaking devices must be turned off before the beginning of class. Laptop computers are not permitted to be used during class unless otherwise directed. If you need to leave the classroom during class for any reason, please do so quietly without disturbing your classmates. You are encouraged to participate in classroom discussion; however, any other talking is not permitted during class, even if you are whispering.

ACADEMIC INTEGRITY
Students who violate university standards of academic integrity are subject to disciplinary sanctions, including failure in the course and suspension from the university. Since dishonesty in any form harms the individual, other students, and the university, policies on academic integrity are strictly enforced. Examples of academic dishonesty include, but are not limited to:
• Unacceptable examination behavior: communicating with fellow students, copying material from another student’s exam or allowing another student to copy from an exam, possessing or using unauthorized materials, or any behavior that defeats the intent of an exam.
• Plagiarism: taking the work of another and offering it as one’s own without giving credit to that source, whether that material is paraphrased or copied in verbatim or near-verbatim form.

ACCOMMODATIONS FOR STUDENTS WITH SPECIAL NEEDS
On the CSUF campus, the Office of Disabled Student Services (DSS) has been delegated the authority to certify disabilities and to prescribe specific accommodations for students with documented disabilities. DSS provides support services for students with mobility limitations, learning disabilities, hearing or visual impairments, and other disabilities. Counselors are available to help students plan a CSUF experience to meet their individual needs. If you feel that you require such support services, contact the Office of Disabled Students Services, located in UH 101, at (657) 278-3117.
GENERAL EDUCATION REQUIREMENTS

This course may be used to satisfy the General Education requirement B4 (B: Scientific Inquiry and Quantitative Reasoning, 4: Mathematics/Quantitative Reasoning). A grade of “C-” (1.7) or better is required to complete courses in Area B4. A grade of D+(1.3) or below will not satisfy this General Education requirement. Students taking courses in subarea B4 shall:

a) Understand and appreciate the varied ways in which mathematics is used in problem-solving.
b) Understand and appreciate the varied applications of mathematics to real-world problems.
c) Perform appropriate numerical calculations, with knowledge of the underlying mathematics, and draw conclusions from the results.
d) Demonstrate knowledge of fundamental mathematical concepts, symbols, and principles.
e) Solve problems that require mathematical analysis and quantitative reasoning.
f) Summarize and present mathematical information with graphs and other forms that enhance comprehension.
g) Utilize inductive and deductive mathematical reasoning skills in finding solutions, and be able to explain how these skills were used.
h) Explain the overall process and the particular steps by which a mathematical problem is solved.
i) Demonstrate a sense of mastery and confidence in the ability to solve problems that require mathematical concepts and quantitative reasoning.

The General Education writing requirement in Math 150 shall be met and assessed by student writing assignments appropriate to the course, as required by the General Education writing requirement guidelines. Throughout the course, on homework, quizzes, and exams, students are required to write solutions to a variety of problems, both mathematically oriented and applied, and to provide written explanations of the procedures used to obtain solutions to such problems. Students’ work on these exercises will assessed not only on the mathematical content and correctness of the solution, but also on the presentation of the solution, the correct use of grammar and mathematical notation, and writing style.
STUDENT LEARNING GOALS AND RELATED OBJECTIVES

The following is a list of the main specific learning goals for Math 150A.

a) To complete a review of elementary functions, including transformations, function composition, and inverse functions; and to gain a detailed understanding of exponential and logarithmic functions.

b) To develop an understanding of the concepts of tangent lines and rates of change.

c) To understand and work with the concept of the limit of a function and the associated limit laws in order to evaluate limits of a function of one variable, and to apply this knowledge to tangent line and rate of change problems (i.e., the derivative).

d) To follow the development of derivative formulas and to apply these formulas to find derivatives of elementary functions, while maintaining comprehension of the interpretations of the derivative.

e) To learn about applying derivatives to find local extrema and inflection points for functions of one variable, and to use this information to sketch graphs of functions.

f) To gain experience with working with applications of the derivative, including exponential growth and decay, related rates, and optimization problems.

g) To study and understand the concept of an antiderivative of a function, and to find families of antiderivatives for some simple functions.

h) To grasp the meaning of the “area under the curve” problem, to be able to approximate such areas with left and right hand Riemann sums, and to evaluate the limit of these sums using summation formulas provided.

i) To understand the meaning of the definite integral, to learn to use the notation correctly, and to be able to interpret its meaning in terms of areas.

j) To learn how to use the Fundamental Theorem of Calculus to evaluate definite integrals and to find derivatives of definite integrals as a function of the upper limit.

k) To learn how and when to apply the method of substitution to evaluate a definite integral, and to be able to interpret a definite integral using the Net Change Theorem.

l) To understand how to apply the definite integral to find the area between two curves.
SUGGESTIONS ON HOW TO STUDY FOR THIS COURSE

1. Read and complete the pre-reading activity prior to class. Reading the next section will introduce you to new concepts and ideas before they are introduced. Come to class prepared to ask questions about any new concepts which are not clear after completing the pre-reading and Ticket in the Door activities.

2. Do all the assigned homework problems immediately after the sections have been discussed. Be sure you make an honest attempt at a problem before checking the answer. Many students become very good at working backwards from the answers to obtain the solutions to problems. Unfortunately, the answers are not provided on exams and quizzes.

3. If you have questions about the homework problems, get your questions answered as they arise, either in class, in your instructor’s office, or in the Math Tutoring Center in MH-553. Don’t save up your questions for the day before the exam.

4. Spend some time every day on the course. Spending comparatively little time each day will be more productive than saving up all your work for the weekend or for the week or day before the exam. You should expect to spend approximately 20 hours a week to be successful in this class.

5. Concentrate on learning the concepts behind the solutions to the problems rather than the solutions to individual problems. The point of the homework is to help you master these concepts, not to obtain answers to every problem. After working a series of problems, ask yourself what concepts were illustrated in the problems. Make sure that you understand not only how to apply a certain procedure to a given problem but also why the procedure can be applied and why it works.