Syllabus for MATH 150B
Calculus II
California State University Fullerton

“The ultimate goal of a meteorologist is to set up differential equations of the movements of the air and to obtain, as their integral, the general atmospheric circulation, and as particular integrals the cyclones, anticyclones, tornados, and thunderstorms.”

—Andrija Maurović

Class Meetings: We meet twice per week—Monday and Wednesday

MW 12:00 – 1:50, McCarthy Hall 404

Prerequisites
Math 150A

Text
The text for the course is the book *Essential Calculus: Early Transcendentals* by James Stewart (Cengage-Learning; Custom Edition, 2E). This edition was made specifically for CSU Fullerton and is available in the campus bookstore.

Course Description
This course is the second semester in a three-semester sequence in calculus. Topics covered include techniques of integration, improper integrals, applications of integration, an introduction to differential equations, parametric equations, and sequences and series.

Student Learning Goals: See the Standards List for a more detailed breakdown.

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

- Understand the concept of integration and how to perform it analytically and numerically.
- Apply integration to solve problems from physics, differential equations, and the theory of infinite series.
- Understand how to compute derivatives and integrals involving parametric equations.
- Develop an understanding of the convergence of sequences and series, and perform various tests to check convergence.

Homework
Homework is an essential part of the course, but not one that will directly give you points for the course content standards. The main purpose is for you to learn by practicing, and to prepare you for the assessments.
Homework is due the Wednesday of the week following its appearances on the calendar. So, the homework from Monday and Wednesday of a given week is due the next Wednesday. **You may not reassess a standard until you have completed the homework assignment relevant to that standard.**

**Quizzes**

To help you self-assess your understanding of the material, there will be short quizzes and any material we’ve covered is fair game for those quizzes. Attached to each quiz is a score sheet listing the standards assessed on the quiz. You will not receive a score for the entire quiz, but rather a score for each standard. These scores will go into the gradebook, but should be thought of as (in)formative grades, not summative grades. Missing a quiz does not adversely affect your grade, and there are no make-up quizzes.

**Exams: Two superquizzes and one comprehensive final exam**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Last day to ADD with a permit</td>
<td>Monday, February 8</td>
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<tr>
<td>Last day to drop w/o a grade of “W”</td>
<td>Monday, February 8</td>
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<tr>
<td>Superquiz #1</td>
<td>Wednesday, February 24</td>
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<tr>
<td>Last day to drop w/o a serious and compelling reason</td>
<td>Friday, March 4</td>
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<tr>
<td>Superquiz #2</td>
<td>Wednesday, April 13</td>
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<tr>
<td>Last day to drop</td>
<td>Friday, April 22</td>
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<tr>
<td>Final Exam</td>
<td>Friday, May 20, 12:00–1:50</td>
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The exams do count toward your standards grade in a significant way as they are a primary way for you to demonstrate mastery of the content. Should you miss one of these opportunities, there is no penalty, but **there are no make-up superquizzes** either. Please note that the date of the final exam is **not** negotiable; send the date to your parents now and tell them to buy your plane ticket home for the next day or later.

**Extra Credit**

There are likely to be a few opportunities to earn random extra credit (labeled XP in the gradebook) in this class—particularly by doing something that benefits the entire class (or, more importantly, me). For instance, if you are the first to spot a mistake in my materials and bring it to my attention, I will reward you for your attention to detail. However, earning these points is no substitute for learning the material, and this is reflected by their value in the gradebook.

**Standard Based Grading: For more information, see the Grading F.A.Q.**

I will make explicit all of the skills/concepts I expect you to learn in this course through a list called the standard list; the assessments will help to determine whether you have done so. If you show that your ability on a given standard has changed, I will change your grade for that standard accordingly. The available methods for showing a change in ability is not limited to written assessments, but may include a private meeting, or any other method upon which we decide. The possible scores for each standard are between **incomplete** (1) and **mastery** (4)

**Only a score of 3 or above will count toward your overall grade!**

with the following interpretation of each score:
4 You have mastered the skill, demonstrating complete comprehension of the concepts and fully describing your solution in a clear, coherent fashion, making no errors.

3.75 You have completely mastered the skill, but perhaps made a small notational, arithmetic or algebraic error.

3.5 You demonstrated that you have conceptual understanding and can apply the skill to solve complex problems, but perhaps made serious notational, arithmetic or algebraic errors, or failed to show all the steps in your reasoning.

3 You demonstrated basic competency, that is basic conceptual understanding.

2 You have not demonstrated basic competency, but have heard of the skill and know enough to write down something. Your solution is confusing or full of serious errors.

1 You made no progress on the problem.

Grade Breakdown: All that matters is that you learn the material!

The scores you receive on standards make up, essentially, your entire final course grade.

| Content Standards | 100% |

Grading: Overall Score = Weighted Average of Standard Scores (converted to percent)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>97.00%</td>
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<tr>
<td>A</td>
<td>93.00%</td>
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<tr>
<td>A-</td>
<td>90.00%</td>
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<tr>
<td>B+</td>
<td>87.00%</td>
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<tr>
<td>B</td>
<td>83.00%</td>
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<tr>
<td>B-</td>
<td>80.00%</td>
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<tr>
<td>C+</td>
<td>77.00%</td>
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<tr>
<td>C</td>
<td>73.00%</td>
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<tr>
<td>D</td>
<td>50.00%</td>
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<tr>
<td>F</td>
<td>&lt; 50.00%</td>
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Note that I only use plus/minus grading for grades above a C. I do not curve the class grades, nor will I arbitrarily inflate the class grades.

Attendance & Participation: 29 meetings—each meeting is 3.4% of the class.

If you miss any classes during the first week without notifying me or the departmental office within 24 hours of the meeting, I reserve the right to drop you from the course.

I am a lecturer; that is my style. It turns out, though, that consistent lecturing rarely produces the desired learning outcomes. Consequently, this course will involve many opportunities for you to engage with the material on your own and in groups with me as your guide. Just as in a military battle, when you engage, there will be occasional tactical and strategic errors as well as collateral damage. I don’t expect you to be perfect. On an unrelated note, I tend to tell a lot of jokes. Please pretend they are funny.

Cheating: It’s not worth it, so don’t do it.
Obtaining or attempting to obtain credit for work by the use of dishonest, fraudulent, or unauthorized means is cheating. Submitting work which is not yours is plagiarism. Students caught cheating, plagiarizing, or helping another student cheat or plagiarize are subject to academic penalties and will be reported to the Judicial Officer on campus. See the university policy statement on Academic Dishonesty for details.

Calculators, Smartphones, Tablets, and Laptops

Using technology inappropriately bothers me, and is also distracting to your classmates. Wait until class ends to check your text messages and email. Whether calculators are allowed will vary by assessment. It is unnecessary to purchase a graphing calculator for this course, but one may be helpful.

Special Needs

During the first week of classes, inform me of any disabilities or special needs that you have that may require special arrangements related to attending class sessions, carrying out written assignments, or taking examinations. Students with disabilities need to document the disability at the Disability Support Services office in University Hall 101.

Mental Health Issues

As a student, you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating, and/or lack of motivation. These concerns or other stressful events may lead to diminished academic performance or reduce your ability to participate in daily activities. Counseling and Psychological Services (CAPS) is available to assist you in addressing these and other concerns you may be experiencing. You can make an appointment by calling (657) 278-3040.

Emergency Numbers: Campus Police 911
Information 657-278-4444

Keep your contact information updated so that the university can notify you in case of an emergency. During class, if you hear an alarm, immediately stop what you are doing, quickly grab your possessions and walk to the nearest exit. Take the stairs to the ground floor and move at least 50 feet away from the building. For more information, download the emergency preparedness document from the CSU website.