

# Math 251: Calculus III

MWF 9:15 – 10:20 AM; DA 213

Spring 2017

**Instructor:** Professor C. Crawford  
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**Office Hours:**  
Monday 11:00 AM – 12:00 PM  
Tuesday 10:00 AM – 11:30 AM  
Thursday 2:45 PM – 3:45 PM  
Also by appointment

**Course Description:** This is the third course in calculus covering functions of several variables. Topics include vectors in 3-dimensional space, partial derivatives, multiple integrals, and an introduction to the calculus of vector fields.

**Prerequisite:** Math 152 Calculus II, or equivalent, **with a grade of C or better.**

**Required Text:** *Calculus 8<sup>th</sup> Edition* by James Stewart. We will be covering chapters 12-16. The *Student Solutions Manual* is optional.

**Calculator:** You will need a calculator with trigonometric, logarithmic, and exponential functions. A graphing calculator such as one of the TI-8x or -9x series is recommended. Calculators are typically **not** allowed on quizzes or exams.

## Grading:

<b>Homework Checks/(Lecture Questions)</b>	<b>50 pts</b>	<i>Tentative Dates: 2/8, 2/22, 3/15, 4/5, 4/19, 5/3</i>
<b>Quizzes(Labs &amp; Projects)</b>	<b>75 pts</b>	<i>Tentative Dates: 2/15, 3/1, 3/29, 4/12, 5/10</i>
<b>Seminar</b>	<b>10 pts</b>	<i>Typically Wednesdays at 4pm.</i>
<b>2 Exams</b> (100 pts each)	<b>200 pts</b>	<i>Tentative Dates: 3/8, 4/26</i>
<b>Final Exam</b>	<b>150 pts</b>	Friday 5/19 at 8:00-10:00 AM
	<b>485 pts</b>	

Your final letter grade for the course will be based on the percentage of total points earned. Excessive and consistent disruptions (e.g. tardiness, leaving class for drinks or the restroom, cell phones, etc.) may result in lowering your grade up to one full letter grade. **All cell phones must be turned completely off and put away.** Having a cell phone out during an exam or quiz will result in an automatic 0 grade for the exam or quiz.

**EXAMS:** Two exams are *tentatively* scheduled for **March 1** and **April 26**. You must take all exams in class on the announced dates (subject to change at my discretion). **No make-up exams will be allowed.** See below for the replacement policy.

**FINAL EXAM:** The cumulative final exam will be on **Friday, December 19 from 8:00 - 10:00 AM.**

**EXAM REPLACEMENT POLICY:** You will have the option of replacing your lowest exam score will with your final exam percentage (if this is to your benefit), so *there is no need for make-up tests.* You will not be allowed to take an exam early or late for any reason. If you miss an exam, your final percentage will serve as the score for the missed exam. Only the missed exam score will be replaced.

**QUIZZES:** **Five** quizzes are *tentatively* scheduled for the following **Wednesdays: February 15, March 1, March 29, April 12, and May 10.** Quizzes will be given during the first 15-20 minutes of class. *You will not be allowed to take a quiz early or late for any reason.* A score of zero will be recorded for each missed quiz. For every 3 quizzes, I will drop 1. The total points of your remaining quizzes (along with any labs, projects, and the seminar paper – see below) will be scaled to 75 points.

**LABS AND PROJECTS:** Occasionally I may assign a lab or a project that will typically be done outside of class. Each lab or project will count as one quiz, however you will **not** be allowed to drop a lab or project grade.

**HOMEWORK CHECKS:** Six Homework Checks are *tentatively* scheduled for February 8, February 22, March 15, April 5, April 19, and May 3. The dates may change or additional homework checks may be given – you will be given advance notice. **On these dates, you will turn in all of the assigned homework requested for that week.** I will grade a few problems for accuracy and supporting work – usually no credit is given for answers only. The remaining ungraded problems may be observed to assess effort and included in the grade. ***It is your responsibility to do your homework in a neat and organized manner.*** You may turn in the homework by 3:30pm (unless otherwise noted) on the due date without penalty. You will not be allowed to turn in homework late for any reason. If you know that you will miss a scheduled Homework Check, then you may turn in all relevant homework ***before 3:30pm*** – either in person, under my door, or via email. A zero will be recorded for each missed Homework Check. For every 3 Homework Checks (and worksheets graded as Homework Checks), I will drop 1.

**NOTE about HOMEWORK and IN-CLASS WORKSHEETS:** Although homework problems will typically be assigned every class, I will not be collecting it each class (see Homework Checks above). ***So you must be disciplined to keep up with the assigned homework.*** You will often work on in-class worksheets that I also do not normally collect. However, I reserve the right to collect either – you will be given advance notice. Homework and/or worksheets scores will be considered either as additional Quizzes or Homework Checks. *Late homework will not be accepted.*

**LECTURE QUESTIONS:** You may be given several Lecture Questions/Worksheets during the semester. Some of them will be handed out at the end of class and due the next day at the beginning of class. They are typically brief questions that pertain to a previous lecture or will prepare you for the next day’s lecture. They will be worth 5 points each. For every 3 that are graded, I will drop 1. *Late Lecture Questions will not be accepted.*

The remainder of your Homework Checks and Lecture Question scores will be scaled to 50 points.

**SEMINAR:** As part of your grade, you are required to attend one of the math seminars held Wednesdays 4:00-5:00 PM in CS 213 and hand in a 1-2 page Summary/Evaluation Paper. Seminar Summary/Evaluation Papers receive a holistic (overall) grade based on the guidelines below.

Seminar Summary/Evaluation Paper Guidelines	
Attend the seminar and submit a written paper.	~60%
Clearly summarize the main point(s) and some details of the talk. [Note: You will often not understand everything in the talk, nor are you expected to. But you should be able to explain the main point(s)/some details clearly (e.g. Imagine trying to explain what you did understand to another math/science major who was not in attendance.)]	~20%
Evaluate the topic. [Note: The evaluation is not a critique of how well the speaker presented the material, but more about the ideas presented and their potential impact on you and to the broader science or education community. You should also consider any limitations or questions you have about the talk along with possible extensions for further work.]	
The paper should be clearly organized, well-written, and respectful. It should be error-free and neat. (1-2 pages, double-spaced, 1"- margins)	~20%

**Policies and Academic Integrity:** You are expected to adhere to the College Academic Integrity Policy as stated in the *E-Book* as it applies to this class. For example, *obtaining or attempting to use unauthorized materials or information or unauthorized help from another person or source is considered **cheating**.*

- Test and quizzes, whether take-home or in-class, are to be your own work unless otherwise stated.
- Calculators and notes are not allowed on quizzes and tests unless otherwise stated. If calculators are allowed, you may not store any notes or unauthorized programs on the calculator.
- Having a cell phone out during an exam or quiz will result in an automatic 0 grade for the exam or quiz.
- **You may work with others on your homework and are *encouraged* to do so.** But you must turn in your own homework unless specifically stated as group work requiring one submission.
- Individual projects should be your own work. All group members should make quality contributions to group projects.

**Accommodations:** The College will make reasonable accommodations for persons with documented disabilities. A student with a disability that may have some impact on work in this course should contact Dr. Corinne Smith, Disabilities Service Coordinator, at 630-617-6448 and ***then contact me.***