Course Syllabus

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Edit

Introduction

Welcome to Section 103 of MATH 261. This is a section dedicated to math majors, and things are going to be a bit different from every other section around.

While the content covered will largely be the same as in the other sections, the focus of this section will be more on a conceptual understanding of the material, as well as the development of some mathematical fluency.

From the point of view of evaluation, I am really hoping that this course can be **more intense** but **less stressful** than a traditional course. In particular, I would like to keep you engaged throughout the semester with the course, rather than allowing for the tune-out-for-a-while-then-go-full-immersion-when-exam-approaches attitude which naturally happens with the traditional course structure.

High stakes exams (midterms and a traditional final) have thus been eliminated. They have been replaced with a steady stream of "small" evaluations (described in detail in the later parts of the syllabus). I encourage you to work with each other, and to talk to me as much as needed; do not be afraid of asking questions of showing that you are confused. Being confused and making mistakes are natural stages of learning!

Essential Dates

Any important dates for any bureaucratic action pertinent to this course can be seen at **CSU's academic calendar** (https://calendar.colostate.edu/academic/) .

Assessment, quizzes, and homework deadlines are contained in the Course Summary below.

Office hours

Office hours will be by appointment. Talk to me after class or send me an email to schedule. I am usually available to make an appointment within 24hrs of your request.

You can also get help at the calculus center, see schedule posted on the front page of the class.

Textbook

We will cover roughly Chapters 12-16 of Thomas' Calculus, written by Thomas, Weir, and Hass. Also, MyMathLab might be packaged with the book if you buy the book through the CSU Bookstore. We will

not be using MyMathLab as part of the course, but you are welcome to use it on your own if you would like. Previous editions of the book have very similar content, but a few of the problem numbers might be different, so careful if you work on the additional recommended homework; you are welcome to buy an older version if you want, or to look for it online (I am certainly not going to police if you found a free online copy somewhere).

Methodology

Ideally you should read the section we are talking about before I lecture on it, and steer my lecture towards covering the topics that are more confusing or just harder to you. I know that in practice that is really hard to do, but please try - this course contains a shit-ton (technical term) of material, and it would be really helpful for me to focus especially on what is more difficult for you. Of course, in absence of your input I will make my best guesses of it, but you will be (or not) surprised that sometimes we professor really don't get what is hardest for you!

Grade

The total number of points that can be accrued in this course is **400**, distributed as follows:

MINI-QUIZZES: there will be 35 short quizzes, essentially one for each section of the book covered. These quizzes consist in two or three TRUE/FALSE questions, to test basic concepts in the material covered. It should typically take 5 to 10 minutes to complete a mini-quiz, but the time limit has been set to 30 minutes to try and prevent it being stressful. The mini-quizzes contribute 100 points (25%) of the final grade.
HOMEWORK: there are 10 homework assignments, each consisting of 5 problems. These are typically computational in nature. You are supposed to submit your homework through Canvas as a PDF file. *For full credit, the homework must not only contain correct answers, but ALSO show work, and have sentences explaining the computations that are being done.* If it is unclear to you how much and what you should write in your homework, model your work on the solutions that will be distributed after each homework is due. The homework contribute 100 points (25% of the final grade).
MMA (Module Material Assessments): there are seven quizzes, at the conclusion of each learning module (with the exception of modules 7 & 8 that are treated together). These quizzes contain a mixture of conceptual and computational questions. In these quizzes only final answers will be collected and evaluated. The MMA component of your grad is 150 points (37.5% of your final grade).

BUILD YOUR OWN FINAL: the final will have two components, a written and an oral one.

- **written:** you will write a list of questions (no fewer than 50 and no more than 100), that encompass all the relevant material covered throughout the course. These questions can be written throughout the semester (in fact I recommend that you populate the list as we cover material rather than do a big jam at the end) and you can get unlimited feedback from me about the set of questions you are

writing in the process. I will stop giving feedback on questions on the **second to last** week of classes.

- **oral:** you will be responsible to be able to answer your questions orally. The oral examination will go as follows. One (or possibly two depending on time) of the questions from your list will be selected at random (probably by a drawing) and you will answer that question, as well as potential follow-up questions that might arise from your answer. The oral part of the exam will be recorded and made available to you. I am expecting this oral part to take 5-10 minutes per person.

The final exam will be worth 50 points (12.5% of the final grade). **20 points** (5% of the final grade) will be assigned for the **written part**: in order to get a perfect score the questions must be well written and organized, and they must cover all the most important topics covered in the course (of course not every aspect of every topic must be covered, so for example it would be OK if there is not a specific question about cylindrical coordinates, but it would not be OK if there no question about any type of coordinates and coordinate changes or how they are used in multiple integration). Remember, you can get feedback from me on this part all the way till the **second to last** week of classes, so it should not be hard to get to a perfect score on this part if you put work in!

30 points (7.5% of the final grade) will be given for the **oral part:** in order to get a perfect score here the answers must be clear and articulate, and you must be able to also answer any natural follow-up question arising from your own answer, as I don't want to make it possible to get a perfect score just by memorizing the answer to 50 questions.

Resource: discussions

Sometimes it is hard to coordinate times and schedules to talk to one another. In order for you to be able to talk to each other about the class at asynchronous times I have set up a discussion board for every week (under the tab discussions in Canvas). You are welcome to go there to ask questions, answer each others' questions, and have any useful interaction needed about the material of the class. I will monitor the discussions but ideally only intervene if things are going a bit astray, or if the collective mind hive is stuck on some issue.

Academic integrity

The University has an Academic Integrity Policy and Student Conduct Code (see the CSU General Catalog) which is enforced in Math 261. With respect to Math 261, joint effort on homework is encouraged. However, with respect to quizzes and MMA's, the Honor's Pledge is specifically: **"I will not give, receive, or use any unauthorized assistance."** Students judged to have engaged in cheating will receive a score of 0 for that assignment. Also, for the student who received a 0 on an assignment due to cheating, Repeat/Delete will not be an option for the grade earned the semester cheating occurred. A second offense will result in an F for the course. Cases of flagrant academic dishonesty will be brought to the attention of the TILT Academic Integrity Program. Put simply: Don't cheat. Academic dishonesty puts everyone in an unfortunate and unpleasant situation!

AI usage

Please do NOT ask an AI to solve problems for you. If I catch some of the typical AI-gibberish that can come out when asking an AI a math question, I have no choice but voiding the work you submit, and that will have a big impact on your grade. You may, if so you wish, ask an AI to polish your language: this means you can write your answers first, then ask an AI to clean them up; then you should give another good look at what the AI produced and check that it did not introduce some errors. If you do choose to follow this route, please include in your solution both the final polished answers as well as the prompts that you fed the AI - I will not grade the raw prompts but having them there will show me that you have used the AI appropriately.

Deadline Extensions

Deadlines for all work have been set already, so you should have plenty of time to organize yourself to meet them. If something unexpected and highly disruptive pops up, ask me about the possibility of an extension. Please notify me as soon as possible.

Additional Help

There are several resources available to you. The Calculus Center (www.math.colostate.edu/calculus-center/index.shtml) offers help with any remedial (Trig, Calc 1, Calc 2) difficulties you are having. They have tutors comfortable with Math 261 – see their website for details. TILT has free tutors available Sunday – Thursday, 5 p.m. – 10 p.m.

ADA

The American with Disabilities Act requires that reasonable accommodations be provided for students with physical, cognitive, systemic, learning and psychiatric disabilities. Please contact the course coordinator at the beginning of the course to discuss any such accommodations you may require for the course.

Last but not least: inclusiveness

Everybody is and should feel welcome in this course. I try my best to have an inclusive and safe environment for everyone, but help me improve if you notice any shortcoming, or any possibility for improvement. Feel free to share your favorite pronouns, or to come to my office and talk about any issue, mathematical or not, that may influence your experience of this class.

Course Summary:

Date	Details	Due
Wed Jan 21, 2026	**Q - Section 12.1 (https://colostate.instructure.com/courses/219074/assignments/2936523)**	due by 11:59pm

Date	Details	Due
Fri Jan 23, 2026	Q - Section 12.2 (https://colostate.instructure.com/courses/219074/assignments/2936504)	due by 11:59pm
Mon Jan 26, 2026	Q - Section 12.3 (https://colostate.instructure.com/courses/219074/assignments/2936507)	due by 11:59pm
Tue Jan 27, 2026	HW1 (https://colostate.instructure.com/courses/219074/assignments/2936536)	due by 11:59pm
	Q - Section 12.4 (https://colostate.instructure.com/courses/219074/assignments/2936525)	due by 11:59pm
Wed Jan 28, 2026	Q - Section 12.5 (https://colostate.instructure.com/courses/219074/assignments/2936512)	due by 11:59pm
Fri Jan 30, 2026	Q - Section 12.6 (https://colostate.instructure.com/courses/219074/assignments/2936494)	due by 11:59pm
Mon Feb 2, 2026	HW2 (https://colostate.instructure.com/courses/219074/assignments/2936538)	due by 11:59pm
	Catch up and review for Module 1	to do: 11:59pm
Wed Feb 4, 2026	Module Material Assessment 1 (https://colostate.instructure.com/courses/219074/assignments/2936520)	due by 11:59pm
	Q - Section 13.1 (https://colostate.instructure.com/courses/219074/assignments/2936529)	due by 11:59pm
Fri Feb 6, 2026	Q - Section 13.2 (https://colostate.instructure.com/courses/219074/assignments/2936493)	due by 11:59pm
Mon Feb 9, 2026	Q - Section 13.3 (https://colostate.instructure.com/courses/219074/assignments/2936495)	due by 11:59pm
Tue Feb 10, 2026	Q - Section 13.4 (https://colostate.instructure.com/courses/219074/assignments/2936528)	due by 11:59pm
Wed Feb 11, 2026	Q - Section 13.5 (https://colostate.instructure.com/courses/219074/assignments/2970652)	due by 11:59pm

Date	Details	Due
Fri Feb 13, 2026	HW 3 (https://colostate.instructure.com/courses/219074/assignments/2936535)	due by 11:59pm
	Catch up and review for Module 2	to do: 11:59pm
Tue Feb 17, 2026	Module Material Assessment 2 (https://colostate.instructure.com/courses/219074/assignments/2936499)	due by 11:59pm
	Q - Section 14.1 (https://colostate.instructure.com/courses/219074/assignments/2936490)	due by 11:59pm
Wed Feb 18, 2026	Q - Section 14.2 (https://colostate.instructure.com/courses/219074/assignments/2936513)	due by 11:59pm
Fri Feb 20, 2026	HW4 (https://colostate.instructure.com/courses/219074/assignments/2936539)	due by 11:59pm
	Q - Section 14.3 (https://colostate.instructure.com/courses/219074/assignments/2936505)	due by 11:59pm
Mon Feb 23, 2026	Q - Section 14.4 (https://colostate.instructure.com/courses/219074/assignments/2936527)	due by 11:59pm
Tue Feb 24, 2026	Q - Section 14.5 (https://colostate.instructure.com/courses/219074/assignments/2936496)	due by 11:59pm
Wed Feb 25, 2026	Catch up and review for Module 3	to do: 11:59pm
Fri Feb 27, 2026	HW5 (https://colostate.instructure.com/courses/219074/assignments/2936540)	due by 11:59pm
Mon Mar 2, 2026	Module Material Assessment 3 (https://colostate.instructure.com/courses/219074/assignments/2936497)	due by 11:59pm
Tue Mar 3, 2026	Q - Section 14.6 (https://colostate.instructure.com/courses/219074/assignments/2936502)	due by 11:59pm
Wed Mar 4, 2026	Q - Section 14.7 (https://colostate.instructure.com/courses/219074/assignments/2936500)	due by 11:59pm

Date	Details	Due
Fri Mar 6, 2026	HW6 (https://colostate.instructure.com/courses/219074/assignments/2936541)	due by 11:59pm
	Q - Section 14.8 (https://colostate.instructure.com/courses/219074/assignments/2936501)	due by 11:59pm
Mon Mar 9, 2026	Q - Section 14.9 (https://colostate.instructure.com/courses/219074/assignments/2936521)	due by 11:59pm
Tue Mar 10, 2026	Catch up and review for Module 4	to do: 11:59pm
Fri Mar 13, 2026	Module Material Assessment 4 (https://colostate.instructure.com/courses/219074/assignments/2936506)	due by 11:59pm
Sun Mar 22, 2026	Cylindrical and Spherical Coord Practice (https://colostate.instructure.com/courses/219074/assignments/2936533)	due by 11:59pm
Mon Mar 23, 2026	Q - Section 15.1 (https://colostate.instructure.com/courses/219074/assignments/2936526)	due by 11:59pm
Tue Mar 24, 2026	Q - Section 15.2 (https://colostate.instructure.com/courses/219074/assignments/2936511)	due by 11:59pm
Wed Mar 25, 2026	Q - Section 15.3 (https://colostate.instructure.com/courses/219074/assignments/2936532)	due by 11:59pm
Fri Mar 27, 2026	HW7 (https://colostate.instructure.com/courses/219074/assignments/2936542)	due by 11:59pm
	Q - Section 15.4 (https://colostate.instructure.com/courses/219074/assignments/2936518)	due by 11:59pm
Mon Mar 30, 2026	Q - Section 15.5 (https://colostate.instructure.com/courses/219074/assignments/2936514)	due by 11:59pm
Tue Mar 31, 2026	Q - Section 15.6 (https://colostate.instructure.com/courses/219074/assignments/2936524)	due by 11:59pm

Date	Details	Due
Wed Apr 1, 2026	Q - Section 15.7 (https://colostate.instructure.com/courses/219074/assignments/2936498)	due by 11:59pm
Fri Apr 3, 2026	HW8 (https://colostate.instructure.com/courses/219074/assignments/2936543)	due by 11:59pm
Mon Apr 6, 2026	Catch up and review for Module 5	to do: 11:59pm
Wed Apr 8, 2026	Module Material Assessment 5 (https://colostate.instructure.com/courses/219074/assignments/2936510)	due by 11:59pm
	Q - Section 15.8 (https://colostate.instructure.com/courses/219074/assignments/2936509)	due by 11:59pm
Fri Apr 10, 2026	HW9 (https://colostate.instructure.com/courses/219074/assignments/2936544)	due by 11:59pm
	Q - Section 16.1 (https://colostate.instructure.com/courses/219074/assignments/2936517)	due by 11:59pm
Mon Apr 13, 2026	Q - Section 16.2 (https://colostate.instructure.com/courses/219074/assignments/2936491)	due by 11:59pm
Tue Apr 14, 2026	Q - Section 16.3 (https://colostate.instructure.com/courses/219074/assignments/2936508)	due by 11:59pm
Wed Apr 15, 2026	Catch up and review for Module 6	to do: 11:59pm
Fri Apr 17, 2026	Module Material Assessment 6 (https://colostate.instructure.com/courses/219074/assignments/2936530)	due by 11:59pm
Mon Apr 20, 2026	Q - Section 16.4 (https://colostate.instructure.com/courses/219074/assignments/2936515)	due by 11:59pm
Tue Apr 21, 2026	Q31 (https://colostate.instructure.com/courses/219074/assignments/2936503)	due by 11:59pm
	Q - Section 16.5 (https://colostate.instructure.com/courses/219074/assignments/2936522)	due by 11:59pm

Date	Details	Due
Wed Apr 22, 2026	Q - Section 16.6 (https://colostate.instructure.com/courses/219074/assignments/2978723)	due by 11:59pm
Fri Apr 24, 2026	HW10 (https://colostate.instructure.com/courses/219074/assignments/2936537)	due by 11:59pm
	Q - Section 16.7 (https://colostate.instructure.com/courses/219074/assignments/2936531)	due by 11:59pm
Mon Apr 27, 2026	Q - Section 16.8 (https://colostate.instructure.com/courses/219074/assignments/2936492)	due by 11:59pm
Tue Apr 28, 2026	Catch up and review for Module 7	to do: 11:59pm
Fri May 1, 2026	Modules Material Assessment 7 (https://colostate.instructure.com/courses/219074/assignments/2936519)	due by 11:59pm
Wed May 6, 2026	Final Exam (https://colostate.instructure.com/courses/219074/assignments/3018188)	due by 11:59pm