

Syllabus
MATH 253. Calculus III
CRN 33741
SPRING 2023

Instructor: Dr. Micah Warren, Fenton 318, 541-346-5618.

**Syllabus subject to change

Time and Location: M,T,W, F. 2:00-2:50, 252 STB

Office Hours: Tuesday 3:00 - 4:00
Thursday 2:00 - 3:00 or by appointment.

Final: 14:45 Tuesday, June 13 (Verify this for yourself before booking flights)

Standard Course description: Standard sequence for students of physical and social sciences and of mathematics. Introduction to improper integrals, infinite sequences and series, Taylor series, and differential equations.

Textbook: <https://openstax.org/details/books/calculus-volume-2>

Prerequisites: Prereq: MATH 252

Learning Outcomes: The course aims to equip students with a variety of tools for analyzing sequences and series. These tools include the ε - N definition of limit to show that sequences do not converge, as well as standard series convergence tests. Students will learn to estimate sums using the integral test, the alternating series test, and the comparison test where possible. They will also gain the ability to calculate radii of convergence for power series, find Taylor series, and represent common transcendental functions as power series. Using Taylor's remainder theorem, students will be able to approximate values of transcendental functions to given levels of accuracy. Furthermore, the course will cover giving power series solutions to appropriate differential equations and recognizing solutions when they are common transcendental functions.

Grading: There will be weekly assignments, quizzes, two midterms and a final. They will count toward the grade as follows. We may work in webwork - which will be part of the homework.

Homework 20%
Quizzes 20% (total)
Midterms 15% (each)
Final 30%.

Grades are "curved" in the general sense that I won't be using "90% => A" etc. Historically, my exams have mean score in the 60-70% range. At the end of the course the grades will be computed and curved, however the correspondence between position on the curve and the letter grades is not predetermined.

Homework: Homework will be assigned on Canvas, and turned in by hand. It will be due on Friday at the beginning of class. No late homework accepted. Lowest score will be dropped. Not all selected problems will be scored. You are encouraged to work with each other on the homework. Each assignment should be written up on your own. As a general rule, you are responsible for (that is, may be expected to know on an exam) any material that was covered by a homework problem, whether or not a similar example was covered in lecture.

Webwork: Some webwork may be assigned occasionally. This is available through the webwork website: <https://webwork.uoregon.edu/webwork2/Math253-33741/>

While I will post the announcement of the webwork on Canvas, the due dates and actual assignments are controlled on the webwork site, which is not Canvas. So please pay attention to the webwork site as Webwork \neq Canvas. If I don't post a link directly to the assignment, it's still due when it's due on the Webwork website. The canvas assignment is simply a courtesy announcement so that it shows up in you to do list, it's not the assignment itself.

Quizzes: Short quizzes on Friday (20-25 minutes) reviewing material up through wednesday. Lowest quiz will be dropped.

Exams: No calculators/smart watches, etc are available for the exams. Obviously, no collaboration on the exams. I expect the exams to happen on the fourth and eighth weeks.

Final:The final exam is cumulative and scheduled for 14:45 Tuesday, June 13. (**Please confirm this for yourself before booking airline tickets) The same rules apply as for other exams Faculty legislation prohibits final exams from being administered early.

Makeup policy:

- Webwork: No make-up policy for webwork. Do or do not.
- Written Homework: No make-up policy for homework. You have a full week. Do or do not. One homework is automatically dropped.
- Quiz: Similarly while the lowest quiz score will automatically be dropped, one additional quiz can be dropped provided you follow the following policy which is reason-neutral: No later than the day of the absence, you must email me confirming that you were not there and telling me when you think you will return. You are not required to tell me why you were not there. You're free to, but to be clear, I can't ask you to tell me and you certainly do not have to.
- Exams: You are allowed to replace the lower of your two midterm scores with the final score, provided it's higher. That being said, this option is not recommended. Please do what you can to not miss the midterms.
- Final: If you miss the final we're looking at either an incomplete or a bad grade. The incomplete policy requires the reason for missing the final be out of your control. This policy gives me some discretion. Faculty rules prohibit giving the final early. For full details on the (recently updated) incomplete policy, see <https://registrar.uoregon.edu/current-students/incomplete-policy>.

Attendance and Classroom environment: I won't be taking attendance or prioritizing your life for you, but in class, you shouldn't be texting or doing coursework for another class. If you have a paper for another course due at 3:00, that's your own problem - you should leave the class and finish the paper. However, I have loads of anecdotal evidence that attending class regularly is highly *correlated* with scoring well in a class.

If you have a question, please ask me. At any one point in time during the class, there may be a large portion of class who is not quite with me, for whatever reason- oftentimes a stupid question is just what other students need to refocus their attention. In fact, there is well-documented evidence that attention spans during a lecture will almost always fail every fifteen minutes. I keep this in mind and welcome opportunities to reset. If you ever want me to take a two minute break, just stop me and tell me! If it's good for you it's probably good for the rest of us.

Academic dishonesty: Any type of academic dishonesty will not be tolerated. In the event of academic dishonesty, the offense will be reported to the Office of Student Conduct and Community Standards and the student will be sanctioned up to receiving a failing grade in the course.

Students with Disabilities: If you are a student with a documented disability, please meet with me during the first week of class to discuss your needs. If you have not already requested a notification letter from Disability Services outlining recommended accommodations, please do so soon.

Other general university policies: Please see general universal policies (some of which are covered above, some which aren't) : <https://canvas.uoregon.edu/courses/196884/pages/general-university-classroom-policies>

Academic Misconduct: The University Student Conduct Code, available at

<https://conduct.uoregon.edu>,

defines academic misconduct. Students are prohibited from committing or attempting to commit any act that constitutes academic misconduct. By way of example, students should not give or receive (or attempt to give or receive) unauthorized help on assignments or examinations without express permission from the instructor. Students should properly acknowledge and document all sources of information (e.g. quotations, paraphrases, ideas) and use only the sources and resources authorized by the instructor. If there is any question about whether an act constitutes academic misconduct, it is the students obligation to clarify the question with the instructor before committing or attempting to commit the act. Additional information about a common form of academic misconduct, plagiarism, is available at

<https://researchguides.uoregon.edu/citing-plagiarism>.

Accessible Education: The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability-related barriers to your participation. You are also encouraged to contact the Accessible Education Center in 360 Oregon Hall at 541-346-1155 or uoaec@uoregon.edu.

Accommodation for Religious Observances: The university makes reasonable accommodations, upon request, for students who are unable to attend a class for religious obligations or observance reasons, in accordance with the university discrimination policy which says “ Any student who, because of religious beliefs, is unable to attend classes on a particular day shall be excused from attendance requirements and from any examination or other assignment on that day. The student shall make up the examination or other assignment missed because of the absence. To request accommodations for this course for religious observance, visit the Office of the Registrar’s website

<https://registrar.uoregon.edu/calendars/religious-observances>

and complete and submit to the instructor the “ Student Religious Accommodation Request” form prior to the end of the second week of the term.

Basic Needs: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in the course is urged to contact the Dean of Students Office (346-3216, 164 Oregon Hall) for support. This UO webpage includes resources for food, housing, healthcare, childcare, transportation, technology, finances, and legal support:

<https://blogs.uoregon.edu/basicneeds/food>.

Inclement Weather: It is generally expected that class will meet unless the University is officially closed for inclement weather. If it becomes necessary to cancel class while the University remains open, this will be announced on Canvas and by email. Updates on inclement weather and closure are also communicated in other ways described here:

<https://hr.uoregon.edu/about-hr/campus-notifications/inclement-weather>.

Mental Health and Wellness: Life at college can be very complicated. Students often feel overwhelmed or stressed, experience anxiety or depression, struggle with relationships, or just need help navigating challenges in their life. If you’re facing such challenges, you don’t need to handle them on your own—there’s help and support on campus.

As your instructor if I believe you may need additional support, I will express my concerns, the reasons for them, and refer you to resources that might be helpful. It is not my intention to know the details of what might be bothering you, but simply to let you know I care and that help is available. Getting help is a courageous thing to do for yourself and those you care about.

University Health Services help students cope with difficult emotions and life stressors. If you need general resources on coping with stress or want to talk with another student who has been in the same place as you, visit the Duck Nest (located in the EMU on the ground floor) and get help from one of the specially trained Peer Wellness Advocates. Find out more at health.uoregon.edu/ducknest.

University Counseling Services (UCS) has a team of dedicated staff members to support you with your concerns, many of whom can provide identity-based support. All clinical services are free and confidential. Find out more at counseling.uoregon.edu or by calling 541-346-3227 (anytime UCS is closed, the After-Hours Support and Crisis Line is available by calling this same number).

Reporting Obligations: I am an assisting employee, not a designated reporter. For information about my reporting obligations as an employee, please see Employee Reporting Obligations on the Office of Investigations and Civil Rights Compliance (OICRC) website. Students experiencing sex or gender-based discrimination, harassment or violence should call the 24-7 hotline 541-346-SAFE [7244] or visit safe.uoregon.edu for help. Students experiencing all forms of prohibited discrimination or harassment may contact the Dean of Students Office at 541-346-3216 or the non-confidential Title IX Coordinator/OICRC at 541-346-3123. Additional resources are available at

<https://investigations.uoregon.edu/how-get-support>.