

Math 253

Winter 2024

Lecture: MTWF 9:00–9:50, 195 Anstett Hall
Instructor: Nick Addington
Office: 208 Fenton Hall
E-mail: adding@uoregon.edu
Office Hours: Thursdays 9:00–11:00, and by appointment.
Web Page: <http://pages.uoregon.edu/adding/courses/253/>
Text: *OpenSTAX Calculus Volume 2*, available for free online

Grading. Your grade will be based on the following:

- **Quizzes (2%).** Daily, usually one problem at the end of class. The point of the quizzes is just to give you a sense of how well you're keeping up with the material. I will not give make-up quizzes, but I will drop the four lowest scores.
- **Homework (18%).** Due Fridays at the beginning of class. I encourage you to work together on the homework. I will drop the lowest score.
- **Two Midterms (25% each).** In class, Friday February 9 and Friday March 1.
- **Final Exam (30%).** Thursday March 21, 10:15–12:15, in the usual room.

Learning outcomes. The successful student will understand how a function is approximated by its Taylor series: what that means, how to compute it, and how to apply it. In the first third of the course we will study sequences and series of numbers, including criteria to show that they converge or diverge. In the second third we will study the Taylor series of a function, its interval of convergence, and Taylor's inequality which governs how well it approximates the function. In the last third we will study applications of Taylor series, including to differential equations.