

## **Syllabus: MTH 312 Advanced Calculus II**

**Course credits:** 3.0

**Meets:** TR 2:00 pm - 3:20 pm in SHEP 101.

**Instructor:** Yevgeniy Kovchegov

**Email:** kovchegy@math.oregonstate.edu

**Office Hours:** TR 1:25pm - 1:55pm and 3:25pm - 3:55pm in Kidder 60, or by appointment via Zoom

**TA:** Sahir Gill

**TA's office hours:** M 12:00pm - 2:00pm and F 12:00pm - 1:00pm in Kidder 314

**Grading scheme:** Homework 60%, Midterm 20%, Final Exam 20%

**Prerequisites:** MATH 311 or instructor's approval. A minimum grade of C- is required in MTH 311

**Textbooks:** Stephen Abbott, *Understanding Analysis* (Second Edition)

**Course Description:** This is the second term in Advanced Calculus series.

**Course Content:** sequences of functions; pointwise and uniform convergence of sequences of functions; series of functions; Weierstrass M-Test; power series; Taylor series; Riemann integral; integrability; the Fundamental Theorem of Calculus; improper integrals; additional topics.

**Learning goals:** The goal of the course is to promote understanding, expertise, and experience in advanced calculus. In particular, the successful student will be able to prove basic results about sequences of functions, pointwise and uniform convergence, series of functions, integration, improper integral. Additional topics may include introductory aspects of multivariable calculus.

**Homework:** The homework assignments will need to be submitted in PDF format via Canvas and before the respective deadline. Late homework will not be accepted.

**Midterm and Final exams:** There will be one take-home midterm and one take-home final exam.

**STUDENTS WITH DISABILITIES:** Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at <http://ds.oregonstate.edu>. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

**ACADEMIC HONESTY AND STUDENT CONDUCT:** Students are expected to be familiar with Oregon State University's Code of Student Conduct. Please review this statement at <https://beav.es/codeofconduct>

**REACH OUT FOR SUCCESS:** University students encounter setbacks from time to time. If you encounter difficulties and need assistance, it's important to reach out. Consider discussing the situation with an instructor or academic advisor. Learn about resources that assist with wellness and academic success at <http://oregonstate.edu/ReachOut>. If you are in immediate crisis, please contact the Crisis Text Line by texting OREGON to 741-741 or call the National Suicide Prevention Lifeline at 1-800-273-TALK (8255)