

**MATH. 2433. SEC. 005, CALCULUS AND ANALYTIC GEOMETRY,
SPRING 2024,
MWF 12:30-1:20 PM, 323 PHSC**

Instructor: Tomasz Przebinda, Room 524, PHSC; home page: <http://tomasz.przebinda.com/>;
e-mail: tprzebinda at gmail.com;

Office hours: via zoom by appointment.

Text: Calculus, by James Stewart, Cengage Learning,
Equivalently, we shall use an excellent cost free book “Calculus” by Gilbert Strang, available online:

<https://ocw.mit.edu/ans7870/resources/Strang/Edited/Calculus/Calculus.pdf>

Course outline: We shall cover most of the material contained in chapters 10 - 13 of Stewart’s book.

Upon completion of this course, students will be able to do the following:

1. Define sequences and series.
2. Determine the convergence or divergence of a series using various tests.
3. Solve problems involving parametric curves.
4. Solve problems involving polar coordinates.
5. Perform operations with vectors.
6. Use vector functions to calculate space curves.

Homework: There will be weekly assignments, to be handed in on Wednesday at the beginning of the class. Please hand in your homework on time. Late assignments cannot be accepted.

Calculators: No calculators are required for this class and no calculators or any other electronic devices are going to be allowed on exams. On the other hand, while doing homework you are encouraged to use any computer program (my favorite is wolframalpha.com) in order to help you understand the material.

Exams: There will be three midterm exams, on Wednesday February 28, Wednesday March 27, Wednesday April 24, and the final exam on Tuesday, May 8, 1:30-3:30 pm. All exams are going to be taken in class, room 323 PHSC.

Final grade: final exam 39% + first midterm17% + second midterm17% +thirda midterm 17% +homework 10%

Students with Disabilities: Any student having a disability that may interfere with the demonstration of his or her abilities should contact me as soon as possible to arrange accommodations necessary to ensure full participation in the course.

Grade of Incomplete: The grade of “I” is a special-purpose grade given when a specific task needs to be completed to finish the course work. This is typically a term paper or other special assignment, so rarely makes sense in a mathematics course. An “I” cannot be given to avoid a low grade in cases where the course work is not strong.