

# MTH 253 : Calculus III

Includes infinite sequences and series (including Taylor series), vectors, and geometry of space. Graphing calculator required. TI-89 Titanium or Casio Classpad 330 recommended.

## Addendum to Course Description

This is the third course of four courses in the Calculus sequence.

**Credits** 5

### Prerequisites

Equivalent placement test scores also accepted.

### Subject

[Mathematics](#)

### Course Outcomes

Upon completion of the course the students should be able to:

- Analyze real world scenarios to recognize when series, vectors, and geometry of space are appropriate, formulate problems about the scenarios, creatively model these scenarios (using technology, if appropriate) in order to solve the problems using multiple approaches, judge if the results are reasonable, and then interpret and clearly communicate the results.
- Recognize series, vectors, and geometry of space concepts that are encountered in the real world; understand and be able to communicate the underlying mathematics involved to help another person gain insight into the situation.
- Work with series, vectors, and geometry of space in various situations and use correct mathematical terminology, notation, and symbolic processes in order to engage in work, study, and conversation on topics involving vectors and series with colleagues in the field of mathematics, science or engineering.

### Prerequisite Courses

[MTH 252](#)

[WR 115](#)

[RD 115](#)