

Mayville State University

Math 265, Calculus III, #34968

Spring 2025

Four (4) Credit Hours

Course and Instructor Information

Instructor Name: Mr. Fred P. Strand

Contact Information: CB 108B, fred.strand@mayvillestate.edu, Office #:701-788-4684, Cell #: 701-371-4393

Hours of Availability: 9:00am or By Appointment

Instruction Mode: On campus face-to-face

Time Zone: All times indicated throughout this syllabus reflect Central Time (CT).

Meeting Times and/or Location: CB 105 8:00 – 8:50am M,T,W,Th Final Exam: Wednesday, May 14 @ 8:00am

Course Materials and Technologies

Required

Text: Calculus, 7th Edition(2012), Stewart, Brooks/Cole, Belmont, CA.

Technology: A graphing calculator(I will use a TI84). Your computer with appropriate software.

Course Description

This course will cover multivariate and vector calculus including partial derivatives, multiple integration, applications, line and surface integrals, Green's Theorem, Stoke's Theorem and Divergence Theorem.

Pre-/Co-requisites: Math 166

Course Objectives

To successfully complete this course, the learner will be expected to meet the following objectives, as aligned to Mathematics Education Program Approval Standards through North Dakota's Education Standards and Practices Board ([ND ESPB](#)):

1. Students will be able to determine Indeterminate Forms- apply L'Hospital's Rule.
2. Students will be able to classify and solve Improper Integrals.
3. Students will be able to explain Partial Derivatives: apply skills and solve applications.
4. Students will be able to interpret multiple integration: apply skills and solve applications.
5. Students will be able to demonstrate space geometry: lines, planes & surfaces in space.
6. Students will be able to use parametric functions.
7. Students will be able to model 2-3 Dimensional Vectors.
8. Students will be able to describe functions of several variables.
9. Students will be able to calculate directional derivatives, gradients and differentials.
10. Students will be able to model conics in rectangular and polar forms.

Standards Alignment (Mathematics Education Program Approval Standards-ND ESPB):

- 11010.1 Mathematical Practices and Processes: The program requires the candidate to demonstrate the following: a. makes sense of problems and perseveres in solving them, b. reasons abstractly and quantitatively, c. constructs viable arguments and proofs, d. critiques the reasoning of others, e. uses mathematical models, f. attends to precision, g. identifies elements of structure, h. engages in mathematical communication

Mayville State University

Course Expectations

- Students will be completing written assignments, which they will be sharing with their classmates on a daily basis.
- Course notes will be taken and used on quizzes and exams.
- Class discussions will be an integral part of this course, and students are expected to participate in our class discussions and projects.
- Class attendance is expected.

Learning Experiences:

1. Participate actively in class discussions and activities.
2. Assignments will be given in class or in a detailed handout.
3. Submit all assignments on designated due dates.
 - Reduction in points earned if late.
4. Exams will be taken on the scheduled date unless prior arrangements have been made.
5. Read all reading assignments.

Instructional Strategies:

Class discussion, lecture, cooperative grouping, written assignments, instructor feedback- both oral and written, exams, board work, and other methods that may occur during the course.

Instructor/Student Communication

- Students are accountable for all academic communications sent to their Mayville State University e-mail address. And, are responsible for checking the Blackboard course shell regularly.
- Students can expect me as your instructor, to respond to your correspondence in a timely manner. Generally, I will respond within hours of receiving your contact, but I will respond within 24 hours.

Assignments and Assessments

This course will cover chapters 12, 13, 14, & 15. Assignments will be shared during class sessions and all assessments and due dates will be announced by the instructor.

Evaluation and Grading

Your grade will be determined using a percent based on total points.

Points will be earned by completing the following:

- Homework Assignments (at 20 points each) [handed in when asked to]
- 1-2 quizzes per chapter (at 20-25 points each)
- 3-5 exams (at 80 to 100 points each)
- Possible projects (points will vary)

Late work will result in a point reduction for that assignment.

Letter grades will be assigned only at the end of the semester. Points will be assigned for all work during the semester.

A final course grade will be assigned based on the following system:

$$90 - 100 = A \quad 80 - 89 = B \quad 70 - 79 = C \quad 60 - 69 = D \quad 0 - 59 = F$$

I expect students to pay full attention during class discussions. This means CELL PHONES are off and computers are for class work only.

Mayville State University

Enrollment Verification

On-Campus Course Statement

The U.S. Department of Education requires instructors to conduct an activity which will validate student enrollment in this course. Class attendance will be used to verify enrollment in on-campus courses. If you do not attend, your enrollment in this course will be at risk.

Important Student Information

In the Announcements section of the Blackboard Institution Page, you can view and download the Important Student Information document for the current academic year. It includes information about:

- ✓ Land Acknowledgement Statement
- ✓ Academic Grievance Concerns and Instructor English Proficiency
- ✓ NetTutor - Online Tutoring Program
- ✓ Starfish - Student Success System
- ✓ Students with Documented Disabilities
- ✓ Student Learning Outcomes / Essential Learning Outcomes
- ✓ Academic Honesty
- ✓ Emergency Notification
- ✓ Continuity of Academic Instruction for a Pandemic or Emergency
- ✓ Family Educational Rights and Privacy Act of 1974 (FERPA)
- ✓ Diversity Statement (Title IX)

Course Timeline/Schedule

This course will cover chapters 12, 13, 14, & 15. Assignments will be shared during class sessions and all assessments and due dates will be announced by the instructor throughout the semester.

The Academic Program Student Learning Outcomes document can be found in your course shell. It contains all learning outcomes pertaining to Essential Studies courses and all majors and minors. The document has an index, so you can quickly find the degree you are pursuing.

As part of Mayville State's effort to demonstrate continuous improvement in achieving student learning outcomes, this course:

introduces SLO # 1 introduces SLO # 2 introduces SLO # 3 introduces SLO # 4

Conceptual Framework

Teacher Education courses are based upon the Conceptual Framework: Reflective Experiential Teacher. See the document 'Conceptual Framework' provided in the course shell.

Changes: The instructor reserves the right to amend, adjust, or otherwise modify the syllabus at any time during the course.