# Mayville State University

## MATH 166: Calculus II (27550)

Fall 2025
4 Credit Hours

### Course and Instructor Information

**Instructor Name:** Taylor Simon

**Contact Information**:

Office: Classroom Building Room 107 (enter through room 108 lobby door)

Email: taylor.simon@mayvillestate.edu

Work phone: 701-788-4726

**Hours of Availability:**

Monday 8:00 – 9:50am, Wednesday 11:00 – 11:50am

Available for meetings on other days/times by appointment.

**Instructional Mode**: On-campus face-to-face

**Course Dates:** August 25 – December 19, 2025

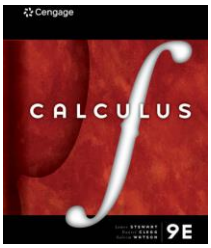
**Meeting Times and/or Location:** M T W Th 10:00am – 10:50pm. Classroom Building Room 105

**Final Exam Time and Location:** December 15th @ 10:00am. Classroom Building Room 105

**Zoom Link:** https://mayvillestate.zoom.us/j/88912258683?pwd=OLSgCkhUZFasq7MqgELiYa2GqxuyAK.1

### Course Materials and Technologies

#### Required




- MSU Technology Requirements
- **Book:** *Calculus* by James Stewart, Daniel K. Clegg, Saleem Watson | 9th Edition | Copyright 2021. ISBN: 978-1-337-62418-3
- Computer with access to internet. Use of phones/computers during exams/quizzes will not be allowed.
- A graphing calculator (I will use a TI-84 Plus).

### Use of Artificial Intelligence in this Course

AI tools may be used in this course if their purpose is to support your learning. The goal is always your own understanding, not just getting an answer. If you choose to use AI, treat its output as a starting point or building block—not a final product. Always aim to understand, question, and build upon what AI provides so that your own mathematical thinking continues to grow.

### Course Description

This course covers applications and techniques of integration; polar equations; parametric equations; sequences and series, and power series.

**Pre-/Co-requisites:** MATH 165

## 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 review integration techniques from Math 165.
2. Students will use methods such as integration by parts, trigonometric substitution, and partial fractions to evaluate definite and indefinite integrals.
3. Students will explore derivatives and integrals of exponential and logarithmic functions.
4. Students will analyze sequences and series.
5. Students will work with parametric and polar equations.
6. Students will use definite integrals to model and solve applied problems such as volumes, arc length, surface area, work, and fluid force.

**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

## Course Expectations

### Instructor/Student Communication

Students are accountable for all academic communications sent to their Mayville State University email address. You should check your university email at least once a day. You are also responsible for frequently logging into blackboard and attending office hours if needed.

### Assignments and Assessments

**Check-Your-Understanding Questions (CYUQ):** These assignments are posted in Blackboard. Always show your work. Written assignments can be submitted in Blackboard as a scanned PDF.

**Quizzes:** There will be weekly quizzes. The questions will be similar to the CYUQ. You can use your notes on quizzes, so take meaningful notes! 😊

**Tests:** There will be three cumulative tests – two throughout the semester and a final exam. Tests are cumulative to promote long-term learning.
**Test 1: September 25th, Test 2: November 6th, Final Exam: Monday, December 15th @ 10:00am**

## Evaluation and Grading

### Grading Policies

**Check-Your-Understanding Questions:** Below is an *example* of CYUQ for a lesson.

- p. 100: # 9, 11, 25, 26, 30, 32, 33, 36, 41, 43, 45, 57, 58

Problems with page numbers are from the book. Additional written questions are tied to the problems from the book.

- What is the slope of a line? How can you find it?
- Write down two facts about perpendicular lines.
- What problem was the most challenging for you and why?

Because you have access to the answers for the book problems, you will be required to mark these problems following the steps below. An example of marked student work is shown below. You do not need to mark the additional written questions.

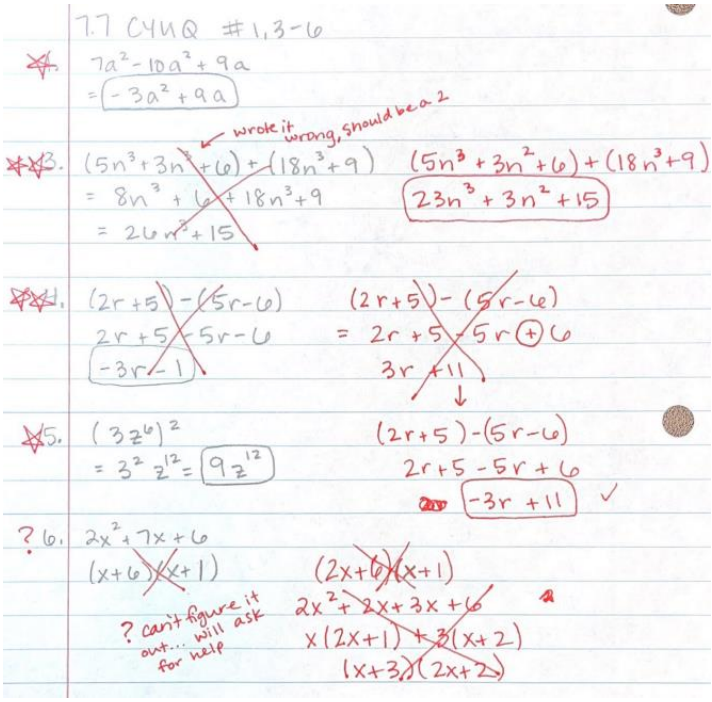
**Step 1:** Carefully read and complete a problem from the CYUQ in *pencil*.
**Step 2:** Check your answer in Blackboard.
**Step 3:** Using a red pen (any distinct color will work), mark your work as follows:

★ GOT IT ON THE 1ST TRY (one star): I got the problem right the first time I tried. I completely understand the problem.

★ ★ GOT IT ON THE 2ND TRY or 3rd or 4th… (two stars): I got the problem wrong on my first try. I did the problem again with a red pen until I got it right. I understand my mistake and understand the problem now.

**?** STILL DON'T GET IT: I tried my best (multiple times), but my answer is still wrong. I can't find my mistake. I will get help on this problem from a teacher, tutor, friend, or classmate.

Repeat this process for all CYUQ. Try to provide detailed explanations of your mistakes.




Each CYUQ assignment will be worth two points. One for the book problems and one for the additional written questions. These problems are intended to be a safe place for you to make mistakes and learn.

I will review your assignment for completion and provide feedback when necessary. You will receive a zero on the assignment if it is NOT self-marked, if you are missing the additional written questions, or if there is no work shown. If an assignment is submitted late, it will be worth 50% of the grade earned. CYUQs should be submitted within a week of the due date to receive any credit.

**Quizzes and Tests:** Quizzes are worth more points than CYUQ, and tests are worth more points than quizzes. Total points for each quiz/test will vary. If you are absent (unexcused) on the day of a test, 3 points will be deducted from your grade. If the final is taken at a date/time other than what is scheduled, the grade earned on the test will be dropped by one letter grade.
You can expect work to be graded within a week of the due date.

## Attendance/Participation Policies

Regular attendance and participation are expected. This includes asking and answering questions, working on in-class activities and assignments, etc. Read the book. Take meaningful notes. If illness or other circumstances prevent you from attending class, contact me **prior** to your absence. It is your responsibility to ask for work missed during an absence. You are responsible for keeping up with work assigned whether you attended class or not. Work is due on the due date even if you are absent. **If you miss class without notice, you have 2 weekdays to arrange make-up activities, quizzes, or assessments. After that, missed work will receive a zero.**

## Grading Scale

| | |
|---|---|
| A | 85 – 100 % |
| B | 70 – 84.9 % |
| C | 50 – 69.9 % |
| D | 35 – 49.9 % |
| F | 0 – 34.9 % |

## Breakdown of Grades

This class uses a total points grading system. Your final grade is calculated by dividing the total points earned throughout the semester by the total points available from assignments and assessments.

## Course Timeline/Schedule

During this course, we will work to cover topics from chapters 6, 7, 8, 10, and 11 of our required text. Due dates will be discussed in class.

## Instructions for Scanning Work

When scanning your work, **make sure that multiple pages are scanned into a single PDF document**.

Option 1: Use a scanner. Email the scan to yourself. Download your scan. Submit your scanned document in Blackboard.

Option 2: Download the app "CamScanner" to scan your documents. After scanning all your pages in **one** document, select the document and select "share." Then choose "Share PDF." Share to your email. Open the email on your computer and download the PDF to your computer. Submit this **single PDF** in Blackboard. The app is free to use unless you decide to make in-app purchases.

Option 3: If you have an iPhone, iPad, or Android, you can use your device to scan documents! This is different from hitting the camera button and taking a picture.

<u>iPhone/iPad Instructions</u>

a. Open a note or create a new note .
b. Tap , then tap "Scan Documents."
c. Place your document in view of the camera on your device.
d. If your device is in Auto mode, your document will be automatically scanned. If you need to manually capture a scan, tap or one of the Volume buttons.
e. Drag the corners to adjust the scan to fit the page, then tap "Keep Scan."

f. You can add additional scans to the document or tap "Save" when you are done.
g. Tap the arrow next to scanned documents for a drop-down menu. 

h. Select "Share" and email the scan to yourself.
i. Open the email on your computer and download the .pdf file. Submit to Blackboard.

Android Instructions

a. Open Google Drive app.
b. In the bottom right corner, tap "Add" 

,
c. Tap "Scan" or "Use Camera" .
d. Take a photo of the document you would like to scan.
   i. Adjust scan area: Tap "Crop" .
   ii. Take photo again: Tap "Re-scan current page" .
   iii. Scan another page: Tap "Add" .
e. To save the finished document, tap "Done"
f. Open the file in Google Drive and download it to your computer. Submit to Blackboard.

## Enrollment Verification

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)

This syllabus serves as a general guide for the course. The contents are subject to change at the instructor's discretion. Students will be notified of any modifications through class announcements/email.