

SYLLABUS

MATH 152.1

Calculus II

Spring 2024

Instructor: Ivan Sterling, 177SH, cell 240-431-8185, isterling@smcm.edu

Office Hours: TBA & by appt

Book: Calculus Volume 2, Openstax

Course Outline: Selected Sections from Chapters 1-6

Tests and Grades: There will be four exams (worth 80% of your course grade, 20% each). One of the four exams will be the non-comprehensive final. Homework will be part of your grade (worth 20%). The homework will be collected at the beginning of class on the day it's due. Late homework will not be accepted. After it is collected some of the homework problems will be selected for the TA to grade. The exam problems will be the same or similar to those in the homework and the examples worked in class. You may ask me your grade status at anytime in person or by email.

Dates-Times for the exams:

Fridays 2/9 3/8 4/5

Final: M 5/3 9-11:15am;

Extra Credit: You can earn up to two extra credit points by attending the NSM colloquia on Wednesday 2/7 and 3/20 in SH106 at 4:45. Please send me an at most two sentence summary of the lecture.

Grading (roughly): 90-100% A,A-; 80-90% B+,B,B-; 70-80% C+,C,C; 60-70% D+,D,D-; 0-60% F;

Teaching Assistant: Haley Grambrell, hmgrambrell@smcm.edu phone&OH-TBA

Review Sessions: Required! Tuesdays SH111 6:10-7:25

In this class, students can expect Engaged Learning at the Review Sessions.

For Business Use Only:

At the completion of MATH152, students will be able to implement basic techniques of integration as demonstrated by evaluating definite and indefinite integrals of various functions.

At the completion of MATH152, students will be able to use integrals to compute areas and volumes as demonstrated by finding the areas of regions bounded by curves and volumes of revolution.

At the completion of MATH152, students will be able to use tests for convergence or divergence of series as demonstrated by determining the convergence (absolute or conditional) or divergence of infinite series.

At the completion of MATH152, students will be able to use power series to represent functions as demonstrated by manipulating power series of elementary functions using derivatives and integrals.

At the completion of MATH152, students will be able to analyze first-order differential equations as demonstrated by interpreting slope fields and solving separable differential equations.