Edison State Community College
Fall 2026 Syllabus

MTH 221S-001FS	Calculus/Analytic Geometry I
Prerequisites:	Satisfactory math assessment score and four years of college preparatory mathematics (including pre-calculus) or a grade of "C" or better in MTH-122S and MTH123S, or MTH128S

Days: MW **Time:** 9:00 – 11:15 am
Building: West Hall **Room:** 222

Instructor Name: Dr. Brian Murphy PhD: Atmospheric Science, Purdue, 2015
MS, Physics, Purdue, 1985
Office Phone: (937) 778-7945
Office Location: West Hall 225
E-mail address: bmurphy2@edisonohio.edu

Office Hours: On campus: MW 7:30 – 9:00 AM
Online via teams: W 3:00 – 5:00 PM; T 10:30 – 11:30 AM

Text
Strang, G, Herman, E, *Calculus vol. 1,* Openstax
https://openstax.org/details/books/calculus-volume-1

Calculator:
A TI-30XIIS or equivalent basic non-graphing scientific calculator is permitted for exams and quizzes**. Cell-phone calculators and graphing/calculus-capable calculators are not on permitted for exams and quizzes.**

Additional Resources:
Blackboard: https://edisonohio.blackboard.com/webapps/login/
XYZ homework pass: www.xyzhomework.com

Grading:
Four components will determine your grade in this class. These components are
1) Homework, 2) Quizzes, 3) Exams, and 4) the Final Exam.

Grading Allocation: Homework 20%, Quizzes 10%, 3 Exams 51% and Final Exam 19%.
The grading scale is
90% - 100% --- A
80% - 89% --- B
70% - 79% --- C
60% - 69% --- D
0% - 59% --- F

All scores will be maintained in Blackboard's online grade book.

Homework: Homework will be done online using XYZ homework. There will be homework assigned for each section of material used from the text.

Exams: There will be three exams during the semester and a comprehensive Final Exam

Final Exam: The final exam is cumulative and must be taken. **If you fail to take the final exam, you will receive a failing grade for the course.**

Makeups/Late submittals:
Due date extensions for late homework may be granted for documented extenuating circumstances.
Submission of written documentation is required.

Quizzes cannot be made up, but may be excused for documented extenuating circumstances.
Submission of written documentation is required.

Tests cannot be missed. Occasionally, with prior approval or with documented extreme circumstances, they can be made up, but this is entirely at the discretion of the instructor.
Submission of written documentation is required.

Attendance:
Please attend all classes and complete all homework in XYZ homework on time. Staying current is crucial to success in this class. A student who misses class is expected to study the missed content and ask questions as needed. You are responsible for all announcements and material assigned or discussed in a class regardless of whether you attended.

Final Withdrawal Date
Last day to withdraw for Fall semester 2026 semester is November 2.

Academic Honesty Statement:
Any academic dishonesty or deception, such as cheating, copying or plagiarism will not be tolerated. Incidents may result in loss of credit for work, removal from the course, or a failing grade for the course.

Testing Your Faith Act Policy
Edison State Community College is committed to providing an environment respectful of students' beliefs. Students are permitted to be absent for up to 3 days each semester based on their faith, religion, or spiritual belief system with no academic penalty. Students must complete the Testing Your Faith Act Accommodations Form, https://www.edisonohio.edu/services-support/registration-records, located in "Forms" and provide a copy to their individual faculty within 14 days from the start of the course. The entire policy can be found in the student handbook at https://www.edisonohio.edu/services-support/student-resources.

NOTE: This syllabus and the information contained within it are subject to change without notice.

Week	Dates	Topics	Notes
Week 1	Aug. 24 Aug. 26	**1.1 – 1.3** Pre-calc review **1.4. – 1.5** Pre-calc **r**eview	
Week 2	Aug. 31 Sept. 2	**1.5-** Pre-calc review **2.1**-A preview of calculus **2.2**-The limit of a function	
Week 3	Sept. 7 Sept. 9	 **2.3**-The Limit Laws **2.4**-Continuity	**Labor Day** **Monday, Sept. 7** **College closed** Quiz 1 (9/9)
Week 4	Sept. 14 Sept. 16	**3.1-**Defing the Derivative **3.2-**The Derivative as a Function **3.3**-Differentiation Rules	Quiz 2 (9/16)
Week 5	Sept. 21 Sept. 23	**3.3-**Differentiation Rules **3.4-**Derivatives as Rates of Change **3.5-**Derivatives of Trigonometric Functions **Exam 1** (9/23)	
Week 6	Sept. 28 Sept. 30	**3.5**-Derivatives of Trigonometric Functions **3.6-**The Chain Rule **3.7-**Derivatives of Inverse Functions	Quiz 3 (9/30)
Week 7	Oct. 5 Oct. 7	**3.8-**Implicit Differentiation **3.9-**Derivatives of Exponential and Logarithmic Function	Quiz 4 (10/7)
Week 8	Oct. 12 Oct. 14	**4.1-**Related rates **4.2-**Linear Approximations and Differentials	Quiz 5 (10/14)
Week 9	Oct. 19 Oct. 21	**4.3-**Maxima and Minima **4.4-**The Mean Value Theorem **Exam 2** (10/22)	
Week 10	Oct. 26 Oct. 28	**4.5-**Derivatives and the shape of a graph **4.6-**Limits at Infinity and Asymptotes	Quiz 6 (10/28)
Week 11	Nov. 2 Nov. 4	**4.7-**Applied Optimization problems **4.8**-L'Hopital's Rule	Quiz 7 (11/4)
Week 12	Nov. 9 Nov. 11	**4.9**-Newton's Method **4.10**-Antidereivatives	 **Veteran's Day** **Wednesday, Nov. 11** **No classes**
Week 13	Nov. 16 Nov. 18	**5.1-**Approximating Areas **5.2-**The Definite Integral	Quiz 9 (11/18)
Week 14	Nov. 23 Nov. 25	**5.3**-The Fundamental Theorem of Calculus **Exam 3** (11/25)	Building closed Nov. 26 – Nov. 29 Thanksgiving.
Week 15	Nov. 30 Dec. 2	**5.4-**Intergration formulas and the Net Change Th. **5.5-**Substitution	
Week 16	Dec. 7 Dec. 9	review Comprehensive final exam	Classes end Dec. 12

HW#0		Due 8/29/2026
HW#1	over sec. 1.1, 1.2	Due 9/02/2026
HW#2	over sec. 1.3, 1.4	Due 9/05/2026
HW#3	over sec. 1.5, 2.1	Due 9/09/2026
HW#4	over sec. 2.2, 2.3	Due 9/12/2026
HW#5	over sec. 2.4	Due 9/16/2026
HW#6	over sec. 3.1, 3.2	Due 9/19/2026
HW#7	over sec. 3.3	Due 9/30/2026
HW#8	over sec. 3.4, 3.5	Due 10/03/2026
HW#9	over sec. 3.6	Due 10/07/2026
HW#10	over sec. 3.7, 3.8	Due 10/10/2026
HW#11	over sec. 3.9	Due 10/14/2026
HW#12	over sec. 4.1	Due 10/17/2026
HW#13	over sec. 4.2	Due 10/24/2026
HW#14	over sec. 4.3, 4.4	Due 10/28/2026
HW#15	over sec. 4.5	Due 10/31/2026
HW#16	over sec. 4.6	Due 11/07/2026
HW#17	over sec. 4.7	Due 11/14/2026
HW#18	over sec. 4.8	Due 11/18/2026
HW#19	over sec. 4.9, 4.10	Due 11/21/2026
HW#20	over sec. 5.1, 5.2	Due 12/02/2026
HW#21	over sec. 5.3, 5.4	Due 12/05/2026
HW#22	over sec. 5.5	Due 12/08/2026