KENNESAW STATE UNIVERSITY

COLLEGE OF SCIENCE AND MATHEMATICS
DEPARTMENT OF MATHEMATICS
MATH 1190: CALCULUS I
FALL SEMESTER 2025

MATH 1190: Calculus I- 80362 AML-80363 GZD

This is a Core IMPACTS course that is part of the Mathematics area.

Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:

- How do I measure the world?

Completion of this course should enable students to meet the following Learning Outcome:

- Students will apply mathematical and computational knowledge to interpret, evaluate, and communicate quantitative information using verbal, numerical, graphical, or symbolic forms.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Information Literacy
- Inquiry and Analysis
- Problem-Solving

Course Information

Class meetings: Tuesday-Thursday- 8:00-9:40 AM

Modality and Location: Face to Face course; W.Clair Harris Textiles 133

Instructor Information

Name: Neda Yazdianpour
Email: nyazdian@kennesaw.edu
Office Location: Crawford, building E 107
Office phone: NA

Office Hours: Tuesdays and Thursdays 4:45 pm-5:30 pm. Or by appointment (If these days and time is not suitable for you, I am also available for online appointments. Please let me know your preferred option).

Preferred method of communication: Email. Please use my regular email address: nyazdian@kennesaw.edu

Communication:

Your emails should originate from your KSU netid@student.kennesaw.edu account, and the subject line of the message should begin with your course name and section number and include the time the class meets. please use my KSU email (nyazdian@kennesaw.edu) for all correspondence and put your course name and your section number in the subject box. Expected response time within 24 hours if received M-Th, following Monday if received F-Su).I have classes scheduled from morning until evening on Tuesday &Thursday. Due to these back-to-back classes, I might not be able to read and respond to your emails on the same day

Course Description

4 Credit Hours
Prerequisite: MATH 1113 or by placement.
This course is the first in the calculus curriculum and introduces the central concepts of calculus. Topics include limits, continuity, derivatives of algebraic and transcendental functions of one variable, applications of these concepts and a brief introduction to the integral of a function.

Required Course Materials

Textbook: Calculus, Early Transcendentals, 4th edition by Jon Rogawski, Colin Adams, and Robert Franzosa *(see D2L course MATH 1190 Shared Course Materials → Basic Course Information → Rogawski 4th Ed. Information for about how to give students access to the eText and other materials!)*

Calculator: Texas Instruments TI-30XIIS™ scientific calculator (This is the **only** calculator model that will be permitted on exams; no exceptions will be made.)

Online Resource: Achieve by Macmillan. This is the textbook publisher's online homework, assessment, and tutorial resource. It includes access to the complete eText version of the textbook, prerequisite review materials, numerous interactive figures, tutorial videos, the students' solutions manual, and much more. Separate instructions will be provided on how to access and enroll in the appropriate Achieve course.

Technology Requirements: A computer with a stable internet connection, webcam (internal and/or external), an app/program for scanning or converting files to PDF format, a printer, etc

Other: For online quizzes we use Respondus Lockdown Browser and Monitor. Some quizzes will be held online but you need to attend in class to be able to take it. You are not allowed to take your quizzes outside your classroom. You can bring your computers to class or use the computers in classroom. Some quizzes are on paper and some of them online, I will inform you in advance

Student Learning Outcomes

Upon completing this course, students will be able to:

1. Evaluate limits and continuity of functions by using algebraic manipulations and looking at graphs and tables.
2. Calculate derivatives of algebraic, trigonometric, exponential, and logarithmic functions.
3. Use derivatives to solve applied problems.
4. Calculate integrals of algebraic, trigonometric, exponential, and logarithmic functions.
5. Use integrals to solve applied problems.

Expectations of Successfully Completing MATH 1190

It is expected that upon successful completion of MATH 1190, students are able to calculate derivatives and basic antiderivatives with fluency and without being provided with formulas. To be successful in MATH

1190, students are expected to be able to apply prerequisite knowledge without being provided with formulas. Students who need a review of prerequisite content such as evaluating basic trigonometric functions or graphing basic functions should consult the prerequisite review module provided in D2L.

Day One Access

MATH 1190 is part of a textbook program called Day One Access. The week before classes begin, you should receive an e-mail from KSU University Stores with instructions on how to access the course content (please check your junk folder if not in your inbox). The purpose of Day One Access is to make sure that you have access to the digital course materials on or before the first day of class at a highly competitive rate. Everyone enrolled in the course will automatically have access to the digital course materials through January 10, 2025. Those who have not opted-out or dropped the class by January 10, 2025, will receive a charge from the bookstore on their Owl Express student account the following week.

You have the ability to Opt-Out through Friday, August 22, 2025, via the link in the e-mail sent to you by University Stores. Once you opt out, you will immediately receive a confirmation e-mail. If you do not receive this e-mail, you did not successfully opt out. If, after multiple tries, you are unable to successfully opt out via the link, please e-mail dayone@kennesaw.edu **prior to** the opt-out deadline and request to be manually opted out. You must include your name, student ID number, and the course info. E-mails sent after the deadline will not be acknowledged.

You should also login and register your materials via the link in D2L by Sunday, August 31. If you do not do register by this date, you may temporarily lose access and an access code may be requested despite not having opted out. If this happens, please e-mail dayone@kennesaw.edu. (**DO NOT** purchase an access code if this happens, as you will not be refunded. Please wait for a response to your email.)

Students who are Repeating MATH 1190: If you are repeating this course and paid for access to Achieve in the previous semester, then you are eligible to re-use your access at no additional cost. To do this, you need to follow these instructions: (1) Opt-Out of Day One Access. You need to follow the instructions in the email you received about Day One Access and click your personalized link, **AND** (2) Carefully fill out this form: Fall 2025 Repeat Student Survey using your KSU e-mail address. Once you have completed these steps, you will be manually added back into the course. (If you follow the steps and notice that you were not added back to the course, you should contact your instructor immediately.)

Requirements and Assignments

Homework will be completed in Macmillan Achieve, for due date of each homework check **Achieve**

Assessments

Exam Policies
All midterm exams will be held during your class time in classroom, in case of switching to online method, all exams will be held online and will be monitored using Respundus Lockdown Browser (You need to have webcam). Tests and the final exam can be attempted only ONCE and cannot be completed after the due dates. You will not be allowed to use any outside material (books, notes, formula sheet, homework, webpages, applications, etc.) on the tests and final exam. Only a pen/pencil, eraser, blank paper. Please do not cheat, if so, you will lose points or you will receive a ZERO for your test and you will be reported to SCAI as well.

Grading Policies

Grading Policy:

Homework: 20%
Quiz: 10%(5% each)
Midterm Exams: 40%(20 % each)
Final Exam: 25%
Participation: 5%
Total 100%

***Extra credit points (Bounces): Up to 10%
a) Extra credit quiz (I will announce the number of quizzes and their dates in classroom)
b) There are some class activities such as participation in the discussion, ...

Grading Scale:

A for 90% or above
B for 80% or above but less than 90%
C for 70% or above but less than 80%
D for 60% or above but less than 70%
F for less than 60%

I will round up grades if they are > or = .5 or above, for example, an 89.6 is an A, but 79.2 is a C.

Note: Please note that I do not replace/remove lower grades. All grades earned throughout the course will be considered in determining your final grade

Grading Expectations: Grades for quizzes and exams will be posted within **two weeks** of the due date. Grades for assignments will be graded automatically and are available in the **Macmillan gradebook**
Course Policies

Attendance Policy
On-time attendance is expected. During class, you'll engage in extra credit graded learning activities, which is for your participation in the discussion and quizzes, so it is important that you're present each meeting. Students are responsible for making up any material they miss if they fail to attend class. Students who wish to be excused from a class (and any associated quiz/assignment that day) must notify the instructor in advance. You are allowed to have two absences without penalty (in case you do have an unavoidable emergency).

Missed Exams
In order to be excused from a test, you must
(1) notify the instructor before the start of the test (or as soon
after as the circumstances allow) of your unavoidable emergency and
(2) provide official documentation
excusing your absence in a timely manner. If you meet both conditions, then your grade on the final exam will replace the score on the missed test. If you fail to meet either of the two conditions, you will receive a 0 on the test. If you miss the final exam, there is NO make-up exam, and you will receive a ZERO. This will prevent you from passing the course

Quizzes
Two mandatory quizzes and some optional extra credit quizzes will be held during the semester. The date of the mandatory quizzes are shown in the Schedule Course table. I will announce the number of extra credit quizzes and their dates in classroom. Some quizzes will be held online (in Macmillan/D2L using LockDown Browser) and some of them on the paper. To take your quiz you need to attend in class.

Moreover, you can receive some extra credit point by participating actively in class discussion, at the end of the semester you can raise your grade by 10 points. Try to take advantage of this opportunity to raise your final grades! You won't see your extra credit points for class activities in D2L, as I will add them to

your final grade at the end of the semester. However, you will be able to see your extra credit quiz grades on D2L/Macmillan Grade book. If you cheat even in one of your quizzes, you won't receive any extra credit points !!!!!
Late work: Late assignments will not be accepted under any circumstances. Additionally, there will be no opportunities for make-up exams

Instructional Continuity Plan
Kennesaw State University (KSU) may decide to close campuses, operate on a delayed schedule, or transition to remote instruction for inclement weather or in case of emergency.

The University will announce campus closures, delayed schedules, or remote instruction through KSU Alerts sent to your cell number on file and to your university email account. In addition, announcements will be posted on KSU's home page: www.kennesaw.edu.

Our class continuity plan includes:

1. Communication: Please check D2l Brightspace or e-mail for necessary instructions.
2. Virtual Classes: If in-person classes are not possible, we may transition to virtual classes using MS Teams.
3. Assignments and Assessments: Deadlines for assignments and assessments may be adjusted to accommodate the emergency situation.

We understand that emergencies create unique challenges. If you need additional support during an emergency, reach out via e-mail. The university also offers resources such as counseling and academic support, which can be accessed remotely.

Policy on the Usage of Artificial Intelligence

AI Use Prohibited:
You are expected to generate your own work in this class. When you submit any kind of work, you are asserting that you have created it completely on your own unless you indicate otherwise using quotation marks and proper citation for the source(s) you used to help you. Submitting content that has been generated by someone other than you, or that was created or assisted by an AI generative tool is cheating and constitutes a violation of the KSU Code of Academic Integrity.

MATH 1190 Final Exam

The Final Exam for students in **all** sections of MATH 1190 is **Thursday, December 11 from 10:30 am to 12:30 pm**. The location of your exam will be announced by your instructor a few weeks prior to the exam.

Important Links

- Federal, BOR, and KSU Syllabus Policies and Student Resources
- Fall 2025 Academic Calendar
- Fall 2025 Final Exam Schedule

General Education Program Information

MATH 1190 is a Core IMPACTS course that is part of the Mathematics and STEM areas. Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help master course content, and support students' broad academic and career goals.
This course should direct students toward a broad Orienting Question:

- Mathematics: How do I measure the world?
- STEM: How do I ask scientific questions or use data, mathematics, or technology to understand the universe?

Completion of this course should enable students to meet the following Learning Outcomes:

- Mathematics: Students will apply mathematical and computational knowledge to interpret, evaluate, and communicate quantitative information using verbal, numerical, graphical, or symbolic forms.
- STEM: Students will use ~~the scientific method and laboratory procedures or~~ mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.

Course content, activities, and exercises in this course should help students develop the following Career-Ready Competencies:

- Mathematics: Information Literacy, Inquiry and Analysis, Problem-Solving
- STEM: Inquiry and Analysis, Problem-Solving, Teamwork

Course Schedule

Extra credit quiz dates: Students will be informed in advance, either in class or via email. Only the last quiz date is listed in the following table.

Week 1

PREREQUISITE REVIEW (CHAPTER 1)
SECTION 2.1 (THE LIMIT IDEA: INSTANTANEOUS VELOCITY AND TANGENT LINES)
SECTION 2.2 (INVESTIGATING LIMITS)

Week 2

SECTION 2.3 (BASIC LIMIT LAWS)
SECTION 2.4 (LIMITS AND CONTINUITY)

Week 3

SECTION 2.5 (INDETERMINATE FORMS)
SECTION 2.6 (THE SQUEEZE THEOREM AND TRIGONOMETRIC LIMITS)
SECTION 2.7 (LIMITS AT INFINITY)

Week 4

SECTION 2.8 (THE INTERMEDIATE VALUE THEOREM) QUIZ 1 (TUESDAY SEP 9TH)

Section 3.1 (Definition of the Derivative)

Week 5

Exam 1(Tuesday sep 16th)

Section 3.2 (The Derivative as a Function)

Section 3.3 (Product and Quotient Rules)

Week 6

Section 3.4 (Rates of Change)

Section 3.5 (Higher Derivatives)

Week 7

Section 3.6 (Trigonometric Functions)

Section 3.7 (The Chain Rule)

Week 8

Section 3.8 (Implicit Differentiation)

Section 3.9 (Derivatives of General Exponential and Logarithmic Functions)

Quiz 2(Thursday-October 9th)

Week 9

Section 3.10 (Related Rates)

Section 4.2 (Extreme Values)

Week 10

Section 4.3 (The Mean Value Theorem and Monotonicity)

Section 4.4 (The Second Derivative and Concavity)

Week 11

Section 4.5 (L'Hôpital's Rule)

Section 4.7 (Applied Optimization)

Exam 2 (Thursday, Oct 30th)

Week 12

Section 5.1 (Approximating and Computing Area)

Section 5.2 (The Definite Integral)

Week 13

Section 5.3/5.8 (The Indefinite Integral/Antiderivatives of Inverse Trig. and General Exponential Functions)

Section 5.4 (The Fundamental Theorem of Calculus, Part 1)

Week 14

Section 5.5 (The Fundamental Theorem of Calculus, Part II)

Section 5.6 (Net Change as the Integral of a Rate of Change)

Week 15

Review

EXTRA CREDIT QUIZ(DEC 4TH)

Finals Week

Final Exam: Thursday, December 11, 10:30 am to 12:30 pm, Location TBA