

MTH-191 – Calculus I Course Syllabus

Course Code:

MTH-191

Course Title:

Calculus I

Course Description:

This is a first-semester single variable college calculus course. Students learn topics including limits; L'Hôpital's Rule; continuity; transcendental functions; derivatives; antiderivatives; applications of derivatives; including optimization; maximum and minimum problems; business; economics; sports; engineering; physics; Newton's method; and applications of integration. A graphing calculator is required for this course. See the time schedule for the current brand and model.

Prerequisites:

Academic Reading and Writing Levels of 6; Academic Math Level 7

Outcomes and Objectives:

[Please refer to the MTH-191 Master Syllabus](#)

Required Text and Materials:

Please confirm edition with [WCC Website](#) or go to the WCC Bookstore and use the Find the Course Materials feature to view the required and recommended course materials: <https://washtenaw.bncollege.com/course-material/course-finder>.

- Textbook: Calculus of a Single Variable: Early Transcendental Functions – 7th Edition, Larson and Edwards
- You may substitute the physical textbook with the eBook purchased through WebAssign or the WCC bookstore. This text covers all of the material in Calculus I and II.
 - Students intent on taking Calculus III should consider purchasing the full text: Calculus: Early Transcendental Functions – 7th Edition, Larson and Edwards
- WebAssign Account: WebAssign is an online tool that administers all of the homework and quizzes for the course. A WebAssign account can be purchased through the WCC bookstore or at www.webassign.net. The optional digital eBook can be purchased through WebAssign at www.webassign.net.
- TI-84 Graphing Calculator: A graphing calculator will be used and is essential for success in this course. (TI-83 and TI-83 Plus are also acceptable.)

Course Policies and Procedures and Grade Requirements:

Course Objectives:

By the end of this course you will be able to:

- Compute limits

- Determine continuity of functions
- Compute derivatives
- Use differentiation to solve application problems
- Use the Fundamental Theorem of Calculus
- Compute elementary definite and indefinite integrals

Minimum Computer Literacy Skill Requirements

Expectations of participants in this course include a general knowledge of computers, file management skills, word processing skills, and Internet skills.

Minimum Technology Requirements

Access to Blackboard and the World Wide Web are required. Course content will be delivered in multiple formats, including but not limited to document, video, and audio formats. Students must install the recommended plugin-ins for each type of media.

Expectations and Availability of Instructor

It is my intent to respond to your emails as soon as I am able, but please allow me 24 hours before you send me a follow up reminder email.

Expectations and Code of Conduct of Students

General Communication

- Expectations for the tone and civility used in communicating with the instructor and fellow students
- Use the rules of netiquette

Email Communication

- I receive email messages from students in a number of courses. So that I can be most efficient and effective in communicating with you, make sure your subject line consists of topic of mail. For example, if Brianna Simpson was a student in MTH-191-D02 class and she was sending an email about Assignment #1, her subject line would say: Simpson, MTH-191-D02: Question about Assignment #6
- Under the 2007 IS Security Plan faculty members may only use their WCC email account and may not forward their email to another non WCC account. Faculty members may only respond to a student's WCC email account address. Although a student may forward their WCC email to a different account, faculty may not respond to correspondence from the forwarded account. These security measures are in place to protect any communication between faculty, staff, and students. Federal law (FERPA) now prohibits grades being sent by email, all grades will be posted on Blackboard under My Grades. If you wish to discuss your grade please contact me by phone or come to see me during my office hours.

Rules of Conduct for Course Participant:

Participant Performance Objectives

The overall goal of a WCC online course is to provide a structure for you to become a more independent, self-motivated, life-long learner. In addition, there are specific skills you will acquire if you complete all the activities and assignments. Online courses are the same as on-campus courses minus having to attend class on a

specific day and time. This means that you are expected to complete the same amount of course work as a student taking the same class on-campus. This requires students to have good time management skills. The class week begins on Monday morning and ends on Sunday at 11:59 p.m.

On campus, MTH 191 meets for five hours a week. We also expect on-campus students to spend 10 – 15 hours a week outside of class. This means an online student should expect to spend 15 – 20 hours a week on the course.

The following tips are recommended for successful completion of the course

- Read the assigned textbook section before viewing the corresponding video lecture.
- Print out the assignment schedule for this class or refer to these items in Blackboard often.
- Begin assignments before the due date. In the event you are unsure of the instructions, you will have time to ask for clarification.
- No instruction will be given on the due date.
- Actively participate in the discussion board. Within this forum students can deepen their understanding before being quizzed or tested.
- Do not wait until the last hour to submit homework, complete an assignment, or take a quiz or test.
- If Blackboard becomes unavailable due to WCC's site failure the day an assignment or test is due, students will be given an extension of time equal to the amount of time that Blackboard is unavailable. Students are responsible for finding alternate sites to do their work if their provider becomes unavailable i.e. public library, friend's home, WCC campus. Note: Under special circumstances where weather or an unusual catastrophe causes a power outage to the community at large, exceptions will be on a case-by-case basis, based on circumstance and proof of occurrence.
- Be sure to contact me in advance of anything that might interfere with remaining in Active Status. With appropriate notice and circumstances, I will work with you to preserve your Active Status! Whenever in doubt, or in the case of emergencies, contact me as soon as possible.
- Stay in touch by email with your questions or concerns. At least a few times per week, check for any emails from me and reply if I request you do so.

Time Commitment

The time required to complete the course activities is approximately 15 to 20 hours per week. It is recommended that you become disciplined about logging in and participating in the online classroom at least 5 days each week. This will allow you to keep a steady pace over the semester. The course schedule has been developed to have you learn the material for one section by Monday and a second section by Wednesday to prepare you for quizzes and exams.

It is important that you have at least the minimum amount of time (15 – 20 hours) to devote to this course in order to achieve the course objectives and your personal goals.

Schedule

The due dates for your modules, quizzes, and exams can be found by going to the Course Schedule button on the left. Graded assignments have due dates that are not negotiable--they are required due dates. For activities that are not graded, suggested due dates have been provided to keep you on track.

For example, if you have a quiz that is due on Friday you must submit that posting by that due date. To prepare for this quiz, however, you may have to complete the content in a module before the quiz on Friday. The Course Schedule gives you a suggested date to complete the reading in order for you to score a high grade on your posting.

In order to qualify to take quizzes, you must complete the homework the quiz covers with 85% or more of the homework questions answered correctly. This means that waiting until the last second to complete homework assignments may result in being locked out of a quiz.

Stuff You Should Know" Assignments:

Your first assignment is to complete the "[Stuff You Should Know](#)" problems.

This document contains problems that represent the mathematical skills and knowledge you should have before taking Calculus I.

The first WebAssign quiz (Quiz Mod 1 Unit 1) will be on this material. You can retake this quiz up to 100 times. You must pass this quiz by the due date on the course schedule or be dropped from the course.

Late Assignments:

All work must be submitted on time. Quizzes and exams will only be accessible during a specific window of time. Only in cases of extenuating/dire circumstances (not for convenience), the instructor may accept late work. This will be the exception, not the rule. Approved late work will receive a reduced grade.

Success Teams

In an online course it is more difficult to build relationships with other students who can help you with questions and alternative explanations of the material. In this course your instructor will organize students into Success Teams of three or four. The purpose of the Success Teams is to:

- Give students more resources for assistance;
- Provide the opportunity to share struggles and successes with other students;
- Build a stronger classroom community into the structure of the online course

In each learning unit, there will be a Practice Problems assignment. You may complete this assignment with the assistance of your success team members. Each student will hand in separate work, but it is expected that you will work on the Practice Assignments as a team. This is your opportunity to work with your classmates to solve problems and answer questions.

Organization of the Course and Student Responsibilities:

The content of the course is organized into eight modules. Each module (with the exception of the introductory module) consists of four units. The pace of the course

is designed to cover two units per week. Each module may include the following learning activities.

1. Textbook Reading

Textbook reading is a required and essential part of the course. Before beginning a unit, read the corresponding section of the textbook.

2. Video Lectures

Each module has a series of video lectures. Be sure to watch these videos before attempting the practice problems, the homework, or the quizzes.

3. Reinforcement Activities

These activities are meant to give you an opportunity to interact with the material you are learning, while you are learning it. Here you will be an active participant in the learning process instead of a passive one.

4. Practice Problems and Applications

In each unit there are practice worksheets provided in .pdf format. These assignments are short and their purpose is for you to check your understanding of the material in the readings, video lectures, and flash activities. You are encouraged to make use of the discussion boards and your Success Team to ensure you understand these problems before moving on.

5. Homework Assignments (You must earn 85% or above to take the corresponding quizzes)

Homework will be included in each unit. The homework will be completed using WebAssign. This can be accessed through the Homework button in Blackboard. You will need a separate set of login information that you will setup when you register for WebAssign. Each homework assignment can be taken 100 times before the due date. You will need to retake the homework assignments until you receive 85% or better in order to be eligible to take the corresponding quiz.

6. Quizzes (Graded – 10 points each)

Quizzes covering two units will be given to check understanding of the material. You must earn a 85% or better on the two corresponding homework assignments to be eligible to take a quiz. Quizzes will also be administered through WebAssign and each quiz is worth 10 points toward the final grade. You can retake quizzes up to 3 times before the due date. The lowest quiz score will be dropped before the final grade is calculated. This is a graded event.

7. Module Study Guide

In the last unit of each module, there is a study guide for the Module. Ensure understanding of all the concepts listed in the study guide before taking the exam.

8. Chapter Exam (Graded – 200 points each)

Exams will be given at the end of each chapter. Each exam is worth 200 points toward your final grade. You only have one attempt on each exam. This is a graded event.

Exams must be taken in the WCC Testing Center. If this is not feasible for you, contact your instructor as soon as possible to make other arrangements.

9. Final Exam (Graded – 450 points)

A final exam will be given at the end of the semester. This exam will cover the basics of each module and will be worth 450 points toward your final grade. You

must earn at least a 40% on the final exam in order to pass the course. You only have one attempt on the final exam. This is a graded event.

Exams must be taken in the WCC Testing Center. If this is not feasible for you, contact your instructor as soon as possible to make arrangements to take all exams in a proctored environment.

Discussion Board

- The discussion board is meant to encourage students to communicate with their success teams as well as other students in the class. It is so students can share perspectives and references with each other to better understand the “big picture.” Therefore, it will enhance your learning if you read each other’s postings and reply to them.
- The instructor will not be posting questions or comments in the discussion board unless there is a content issue that pertains to the entire class.
- Students are expected to be courteous when responding to one another. The use of foul language, bashing, ridiculing, or responding in a threatening manner will not be tolerated and will be cause for removal from the class. This is a time to practice diplomacy.
- Read and consider your classmates’ postings, and respond constructively. Offer personal experiences relevant to the discussion only.

Grade Determinants

The final course grade will be determined by scores on quizzes, exams, and the final exam.

Graded Items Percentage of Final Grade

Quizzes: (16 – lowest quiz dropped @ 10 pts each) 150 points = 12.5%

Exams: (3 @ 200 pts each) 600 points = 50%

Final: (1 @ 450 points) 450 points = 37.5%

Total: 1200 points = 100%

Academic Integrity:

Plagiarism and other forms of academic dishonesty will result in discipline according to the [WCC Student Rights & Responsibility guidelines](#). Always complete your own work using your own words. If you do use information, ideas, or words from other sources, credit that source using MLA or APA format.

Accommodation of Special Needs:

[Learning Support Services Department](#) provides support to students who may need accommodation for documented disabilities, or other learning need. WCC will work with you to accommodate any of your individual learning needs, however, I need to know of any requests in advance in order to make the necessary arrangements.

WCC Student Policies and Support Information:

Review the material within the Washtenaw Community College Student Policies and Support Information for additional policies and procedures that affect you and your course. Find this information [on this shared page](#).