Math 223 – Introduction to Calculus – Fall 2025

Syllabus

This syllabus includes information common to all sections. Your own instructor will give you additional details.

Prerequisites

You need a good background in algebra and trigonometry, which is usually satisfied by a High School precalculus course or Binghamton University's Math 108. The Mathematics Department administers a Placement Test, which is designed to identify students who do not have adequate preparation for the course. The Placement Test is an absolute prerequisite for Math 223: you **must** pass it or you will not be allowed to take the course. See https://www2.math.binghamton.edu/p/calculus/placementtest for details.

Textbook and WebAssign

``Calculus Single Variable'' by James Stewart, Ninth Edition (with WebAssign Access Code), Cengage Learning, 20 Channel Center Street, Boston, MA 02210. The version available in the University Bookstore covers the material in Calculus II as well.

Logging into WebAssign for the first time you will need to self-enroll yourself with a “Class Key”. The “Class Key” will be provided to you by your instructor. You will also eventually need an access code. If you buy the book through the Binghamton University Bookstore then it comes with an access code. This is a Multi-term Access Code and can be used for multiple semesters including Calculus II & Calculus III. This is the most affordable package with textbook that you'll find. If you do not buy the textbook package through the Bookstore, then you'll need to purchase “Cengage Unlimited” (1-semester, 4 months). This also comes with an access code that will last you for multiple semesters including Calculus II & Calculus III and includes the ebook. It can also be purchased through our bookstore. You will have temporary free access to WebAssign for two weeks into the semester without an access code. If you already purchased the textbook/WebAssign package or Cengage Unlimited (1 semester) from our bookstore a previous semester, then you do not have to buy it again. WebAssign comes with the ebook for the textbook. All information regarding how to login with Class Key and purchase an access code can be found here Binghamton University WebAssign Registration

Your username is your Binghamton University username, and the institution code is “binghamton”.

WebAssign Login Page

Objectives and Course Contents

MATH 223 covers the precalculus needed for calculus and some introductory differential calculus, covering Appendices A-D and Chapter 1 of the text. There will also be some precalculus topics covered in

class which are not covered in the text. The precise sections to be covered are listed in the weekly schedule. The objective of the course is to acquire mastery of the material covered in the course in the following senses:

1. Mathematical understanding, as demonstrated by the ability to solve appropriate mathematical problems.

2. Practical understanding, as demonstrated by the ability to solve appropriate word problems in the sciences, in engineering and in the social sciences.

A calculator is not required for this class. In fact, their overuse is heavily discouraged. Neither calculators nor any other electronic item, e.g., a cell phone as clock, may be visible to you during tests.

Help outside of class

The **Math Help Rooms**, located on the 2nd floor of Whitney Hall, are staffed by the instructors who teach the course and are open during most business hours. Students can walk in any time it's staffed and ask questions of any of the instructors there, not just their own instructor. Click here for the Help Room Schedules. There are no Help Room or office hours after the final exam during the week of midsemester grading.

There is free tutoring offered though University Tutoring Services. All information regarding tutoring can be found here http://www.binghamton.edu/clt/tutoring-services/index.html

Exams and Grading

The class will have two written exams, a midterm and final. These are paper tests, graded by your instructor, and you will not be allowed to re-take these. These exams are taken during normal class times. **Your average on both exams must be at least a 50% in order to pass the course, regardless of what your other course scores are.**

The midterm and final exam will each count for 35% of your final grade. Homework on WebAssign including “warmup exercises” will count for 15% of your grade. The remaining 15% of your grade is determined by quizzes which could include written assignments and attendance.

WebAssign Homework	15%
Quizzes (in class), Written Assignments, Attendance	15%
Exam 1	35%
Exam 2	35%

One final, extremely important, note about grading: instructors do not “give grades.” Instructors simply award points based on the work the student produces. Each student's point total will correspond to a letter grade decided at semester's end, and it will be the same for all sections. Very little subjectivity is involved in the grading process. The following is a typical letter grade distribution given for past semesters. This distribution could change due to exam scores.

Your Percentage	Grade
92% - 100%	A
89% - 91%	A-
86% - 88%	B+
81% - 85%	B
78% - 80%	B-
73% - 77%	C+
69% - 72%	C
63% - 68%	C-
60% - 62%	D
< 60%	F

Attendance

Students are expected to attend all scheduled classes. It is important to attend class in order to learn the material and successfully complete the course. University policy states that if a student misses more than 25 percent of the total class sessions, then the instructor has the option to fail that student and not allow them to take the final exam. So, **if a student has more than 5 unexcused absences for our half semester course and they fail the midterm exam, then they will not be permitted to take the final exam and will receive a course grade of "F" if they do not withdraw from the course.**

Homework and in-class work

Before most class meetings, you'll be assigned one or more short videos to watch, as well as "warmup exercises" that are intended to check that you have watched and understood the videos. This is required homework, due before class starts. The videos will cover aspects of the material that you just need to listen to and understand. Covering these aspects on video allows you to re-watch or pause as needed; it also frees up class time for more interactive work.

You will spend some of the class time doing guided work, with your instructor coaching, answering questions, and leading discussions on examples as you complete them. *If you do not view the videos in advance, you will most likely not be adequately prepared for class.* Class activities will **expand** on the video material, not **review** it.

If you need to miss class for a serious reason, contact your instructor as soon as possible (in advance if possible).

The videos and in-class work will replace a lot of traditional homework. (The stuff you would be doing for homework in a more lecture-based class is now partially moved to class work.) Your instructor may assign some traditional homework.

We will be using the **WebAssign** system for class warmups and homework. The problems you do in class will prepare you to do the homework. WebAssign is an online question answering program that comes with an e-book. The first assignment, "Getting Started with WebAssign", will give you practice on how to use WebAssign and will not be graded.

Make-ups

Make-up exams for the in-class tests will only be given for serious, documented reasons, and all make-ups must be approved by your instructor **before** the test date.

Academic honesty

You are reminded of Binghamton University's Student Academic Honesty Code. Cheating on tests or quizzes will be dealt with severely and can result in suspension from the University for multiple semesters. Don't even think about it. Cheating on homework has a less severe penalty, but it will be dealt with, nonetheless. Getting a solution from Wolfram Alpha and putting that solution in your WebAssign homework is considered cheating.

Students are asked to practice extra care and attention regarding academic honesty, with the understanding that all cases of plagiarism, cheating, multiple submission, and unauthorized collaboration are subject to penalty. Students may not collaborate on exams or quizzes, directly or through virtual consultation. Posting an exam, assignment, or answers to them on an online forum (before, during, or after the due date), in addition to consulting posted materials, constitutes a violation of the university's Honesty policy. Likewise, unauthorized use of live assistance websites, including seeking "expert" help for specific questions during an exam, can be construed as a violation of the honesty policy.

Any cases of cheating will be subject to investigation by the Academic Honesty Committee of Harpur College.

General Comments

The structure of this class may be different from what you are used to. In contrast to many courses, where the material is introduced in class, then analyzed in depth out of class in the homework, **in this class you need to cover the basics before class (by watching the videos), then do the in-depth work actively in the classroom.** We have found that most students come to greatly prefer this format to traditional lecture format (and they learn more too.) But it is essential that you come to every class prepared and participate actively.

Even if you've taken a previous Calculus course, this course is likely to be taught from a more sophisticated perspective, and if you think this class will be review you're probably mistaken.

You should expect to average about 8 hours per week studying outside of class.

In contrast to most high school math classes, if you don't understand the material being covered, you should NOT assume that your instructor will repeat the material until you get it. Ideally, you should ask questions at the time in class. Of course, you'll also probably need to spend time thinking things through on your own, but if you've tried that and are still confused, make use of the Help Room and office hours. Don't wait! The material in this course is cumulative, so anything you don't understand now is likely to keep giving you trouble as the semester goes on.

The Director of Calculus is Dr. L. William Kazmierczak (kaz@math.binghamton.edu). Barring exceptional circumstances, queries about the course should be directed to your instructor.

Students in M courses will demonstrate competence in an area such as calculus, symbolic logic, the logic of computers, the logic of deductive and inductive reasoning, or probability and statistical inference.

Student with Disabilities

Binghamton University is committed to the creation of an inclusive and safe learning environment for all students, including students with disabilities. Services for Students with Disabilities (SSD) is responsible for the determination of appropriate accommodations for students who encounter barriers due to disability. Request your academic accommodation letter(s) early in the semester, or as soon as you have completed the SSD process (self-disclosure form, submitted documentation and initial appointment), so that your instructor has adequate time to arrange your approved academic accommodations. Remember that accommodations are not retroactive, and a discussion with your instructor must occur regarding their implementation. If you experience any disability-related access barriers in this course, such as with printed content, graphics, online materials, classroom seating or location, or any communication barriers; reach out to your instructor or SSD. You can contact SSD at 607-777-2686 or via email at ssd@binghamton.edu.