

Calculus I

Math 2200-01 — Calculus I Syllabus—Spring 2020

Instructor: Professor Eric Moorhouse

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During the first two weeks of semester, I will be in RH 243 without a phone.

Office Hours: M 2:30–4pm; TW 9-9:50am; R 9:30–10:50am. Subject to change. See ericmoorhouse.org/schedule.html for current information and exceptions

Class: MTWF 8–8:50am in EN 2110

Class Website: ericmoorhouse.org/courses/2200

Course Supervisor: Regarding any difficulties regarding either the content or the administration of this course, you should first consult your instructor. If the instructor is not available or unable to help, you should next contact the Math 2200 Course Supervisor: Dr. Eric Moorhouse, Ross Hall 216, 766-4394, calculus@uwyo.edu.

Prerequisites: The prerequisite for Math 2200 is either a C or better in MATH 1405 or MATH 1450, a Mathematics Placement Exam score of 5 within one year prior to the start of the course, or ACT math score of 27. You must earn a C or better in this course to be admitted in Calculus II.

Textbook and Software: For this course you will need:

- Access to Pearson/MyLab Math. By default, you will register for this access through the WyoCourses site for your section of Math 2200 and you will be billed automatically. In the exceptional event that you have alternative access to MyLab Math, you will have the opportunity to opt out of this direct billing agreement during the first two weeks of classes but after a couple of weeks; afterwards, opting out will no longer be possible.
- A scientific non-graphing calculator such as a TI-30X.
- (Recommended) A physical copy of the textbook, *Calculus, Early Transcendentals* by Briggs et. al., 3rd Edition, is *highly recommended*. You will have access to an electronic version through MyLab Math whether you purchase the physical book or not. *You are required to read all relevant sections of the textbook preferably before coming to class.*

Exams: All four exams are common to all coordinated sections of Math 2200 and will be administered outside the regularly scheduled class time (see below). Attendance is required and a make-up exam will only be administered only if there is documentation from a proper authority, such as a note from a physician in the case of illness. If you know that you will be missing an exam, please talk to your instructor or the course coordinator at least one week before the exam will be administered. If you have any questions about the exam time, please discuss this with your instructor or the course coordinator (calculus@uwyo.edu).

On Exams, you may use a scientific non-graphing calculator. Graphing calculators and notes may not be used on exams under any circumstances. The final exam will be comprehensive. Midterm Exams I, II and III, and the Final Exam are scheduled at the dates/times listed below; and locations will be announced later during the semester.

Homework:

Quizzes (or Written Homework): Quizzes will be administered on Fridays, usually during the last 12 minutes of class. (Written homework may also be assigned, if the need arises.) You will be graded on your presentation skills, so write clearly and precisely, always using correct spelling, punctuation, vocabulary and grammar; also correct use of mathematical notation.

MyLab/Math Homework: Online homework will be administered through your account with Pearson MyLab/Math. It is your responsibility to login to the site regularly and mind the due dates for these assignments, typically one assignment for every 1-2 sections covered in the textbook (every couple of

days). On these assignments you will be permitted an unlimited number of tries on each question, using any aids available. Please take advantage of this opportunity to honestly learn the material (i.e. don't randomly guess at answers, or accept answers directly from other students).

Optional Quizzes/Review in MyLab/Math: In addition to online homework, a set of optional practice tests are available through the Pearson MyLab/Math software. These are provided to help you in your personal review, and will not count towards your grade in the class. Again, please take them seriously as a means to preparing for the exams.

Grading Policy: Your percentage grade is determined by the following:

| | | |
|---------------------|---------|---------------------------------|
| Exam 1 | 100 pts | Thurs February 20, 5:15–7:00 pm |
| Exam 2 | 100 pts | Thurs March 26, 5:15–7:00 pm |
| Exam 3 | 100 pts | Thurs April 23, 5:15–7:00 pm |
| Final Exam | 100 pts | Thurs May 14, 3:30–5:30 pm |
| MyLab Math Homework | 75 pts | |
| Quizzes/Homework | 100 pts | |
| Total | 575 pts | |

You can estimate your letter grade by using the following scale: 90–100% is an A, 80–89% is a B, 70–79% is a C, 60–69% is a D, and 0–59% is an F. You must achieve a C or higher to use this course as a prerequisite for other math courses.

How to be Successful in Calculus:

Time Management: Calculus is a Four Credit class. This means you should be spending 8 to 12 hours a week on this course outside of the time in class. Most weeks you will be spending this time on reading the textbook and your lecture notes, doing your MyLab/Math homework, and practicing problems in preparation for quizzes and tests.

MyLab/Math: Students are sometimes tempted to use online calculators and computational engines to compute their online homework for them. Those that use such resources are not using MyLab/Math in a way that will help them to learn. Getting a few problems wrong on MyLab/Math and then asking for help on that problem will help you to master the material to do well on the exams.

Getting Help: One of the most important skills a student can learn is recognizing early that they are confused with some concept or skill in the class. Once you recognize you need help, first check through your materials, such as class notes, to see if the answer is there. If you cannot solve it yourself, *please seek help*. There are lots of resources available to you to help you succeed.

Study Groups: Meet with some of your classmates and help each other with questions. Learning from your peers is one of the best ways to learn.

Office Hours: See details at the top of this syllabus. Please seek me outside of class if at all possible; and if these times are not convenient, we should be able to arrange an alternative time. I am here to help you.

The Center for Assistance with Statistics and Mathematics (CASM): The CASM is a free drop-in tutoring center for students enrolled in 1000 and 2000 level math courses. It is located in Ross Hall 29 (northwest corner, on bottom floor). They are open Monday-Friday 10am–5pm during the semester. It's also a great place to study, work on homework, or meet with study groups. They have copies of current textbooks for students to borrow while there as well as several desktop computers, a printer, and one group study room.

Supplemental Instruction(SI): SI is a series of out-of-class study sessions led by a student who has successfully completed the calculus sequence. Ian Fletcher (ifletche@uwo.edu) is our SI leader this semester. Meeting times and location will be announced by email early during the semester.

STEP Tutoring: The STEP Tutoring Program (<http://www.uwo.edu/step>) offers drop-in one-on-one tutoring (no appointments) for Calculus students in Coe Library. Hours are Sunday-Thursday 5–9pm. Check in at the Research Help Desk on the main level. **Online tutoring** is also offered at <http://www.uwo.edu/onlinetutoring/>

Walk-In Academic Coaching The Center for Advising and Career Services in 222 Knight Hall offers walk-in coaching to any student. They can help on a variety of topics, such as Note Taking, Time Management, Exam Preparation, Textbook Reading, Staying Motivated, Managing Finals, etc.

STEP Satellite in Washakie: The STEP Satellite, located in the lower level of the Washakie Center, offers free academic support services to students on a drop-in basis Sunday through Thursday. Please see <http://www.uwyo.edu/step> for more information.

It is important that you try a variety of different services. If you do not receive the help you need at that time, please try it again or try a different service. Don't be shy. Make sure you get the help you need!

Course Supervisor: Come to me if you are unhappy about some aspect of the course. Since I am already serving as course supervisor, students in this section may approach the department head, Professor Jason Williford, regarding issues you prefer to discuss with someone else.

Goals of Math 2200: This course fulfills the Quantitative Reasoning 2 (QB) or Qualitative (Q) requirement of the University Studies Program. QB and Q courses develop a student's numerical, logical, geometric, algorithmic and critical thinking skills as well as their ability to integrate these ways of thinking with verbal, written and creative thinking skills. Students will demonstrate mathematical and logical skill needed to formulate, analyze and interpret quantitative arguments in a variety of settings.

Calculus, one of the classical topics in mathematics, is the study of change. It is useful both in scientific fields and in applied studies from engineering to the life sciences. The primary goals of this course are to master the fundamental concepts and techniques of differential calculus in one variable, and to develop problem solving and critical thinking skills. By the end of this course, students should be able to

- Use algebraic, graphical and numerical skills and thinking to solve problems that involve limits and derivatives.
- Apply differential calculus concepts to a variety of applications.
- Manipulate and compare graphical, numerical and algebraic representations of mathematical relationships involving limits and derivatives.
- Calculate integrals using both the definition of the integral, and the Fundamental Theorem of Calculus.
- Manipulate and compare graphical, numerical and algebraic representations of mathematical relationships.
- Read and understand mathematics, think critically, and express mathematical concepts precisely in writing.
- Apply the knowledge gained in this course to other situations and disciplines.
- Be prepared to take Calculus II.

Academic Dishonesty, Classroom Conduct, Disability Student Services, etc.: Please refer to links provided through the WyoCourses site.

Changes to Syllabus: The policies listed in this syllabus are subject to change. Minor changes will be announced in class and substantive changes shall be communicated in writing.