Math 2205 Calculus II Section 01
Syllabus – Spring 2016

Instructor: Andrew W. Herring
Office: Ross Hall 207
Email: aherrin5@uwyo.edu

Office Hours: T 2:00-3:00pm in Ross 207
R 1:00-3:00pm in MAC (Ross 29)
or by appointment
Class: MWRF 8:00 – 8:50 am in CR 142
Course Website: `www.uwyo.edu/calculus/2205`

Prerequisites: Grade of C or better in MATH 2200 or equivalent.

Textbook and Software: For this course you will need:

- An access code for MyMathLab. This and the textbook can be purchased bundled in the University Store. Alternatively you can buy just the access code the first time you access MyMathLab.
- A scientific non-graphing calculator such as a TI-30X.
- (Recommended) A physical copy of the textbook, *Calculus, Early Transcendentals*, by Briggs, et. al., 2th Edition, ISBN 9780321965172. You will have access to an electronic version through MyMathLab whether you purchase the physical book or not.

Exams: All four exams are common to all coordinated sections of Math 2205 and will be administered outside of the regularly scheduled class time (see below). Attendance is required and a make-up exam will only be administered 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, you must fill out the Calculus Exam Conflict Form found at `www.uwyo.edu/calculus/2205` at least one week before the exam will be administered. Common reasons students will need to fill out the form include an exam in another class or a University Excused Absence. If you have any questions about the exam time, please email the course coordinator at `calculus@uwyo.edu`.

On Exams, you may use a scientific non-graphing calculator. Graphing calculators and notes may not be used used on exams under any circumstances. The final exam will be comprehensive.

Your exams will be taken in BU 129 on the days listed below.

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

Quizzes	15%	
Exam 1	15%	Thurs Feb 18, 5:15 pm – 7:00 pm
Exam 2	15%	Thurs Mar 10, 5:15 pm – 7:00 pm
Exam 3	15%	Thurs Apr 14, 5:15 pm – 7:00 pm
Final Exam	17%	Wed May 11, 1:15pm – 3:15pm
Written Homework	13%	
MyMathLab	10%	

Grades will be assigned according to the scale: $\geq 90\%$ is an A, $80\% - 89\%$ is a B, $70\% - 79\%$ is a C, $60\% - 69\%$ is a D, and $<60\%$ is an F. Plus/Minus Grades will not be awarded. You must achieve a C or higher to use this course as a prerequisite for other math courses.

Academic Dishonesty and Classroom Conduct: The University of Wyoming is built upon a strong foundation of integrity, respect and trust. All members of the university community have a responsibility to be honest and the right to expect honesty from others. Any form of academic dishonesty (see UW Regulation 6-802) is unacceptable to our community and will not be tolerated.

You are expected to avoid any behaviors that would be disruptive in class. I reserve the right to ask you to leave or to put away any devices that are not helpful should I deem it necessary. Persistence in such behavior may get you dropped from the course. Please see the document entitled *Students and Teachers – Working Together* produced by the UW College of Arts and Sciences for more information.

Disability Statement: If you have a physical, learning, or psychological disability and require accommodations, please let me know as soon as possible. You must register with, and provide documentation of your disability to University Disability Support Services (UDSS) in SEO, room 330 Knight Hall. 766-6189, TTY: 766-3073.

How to be Successful in Calculus:

Time Management: This class will be challenging. In order to give yourself the best possible chance to succeed, it is crucial that you stay on top of the material as it is presented. This means actively working to learn the material on a week by week basis. Many students have the tendency to put off studying until exams. Anecdotally, this strategy is highly ineffective. The few days before the exam are a time for you to revisit the material and review what you have already learned, not the time to learn the material for the first time. Fortunately, if you can stay on top of the material according to the lecture schedule, when it comes time to study for exams most of the work is already done. All you need to do is refresh those ideas that you have already mastered. Please do not hesitate to ask me if you're not sure how one should stay on top of material.

MyMathLab: MyMathLab homework is provided to give you instant feedback on your work and help you determine deficiencies in your understanding. These will usually be due Tuesdays and Fridays, unless circumstances merit a change to the due date. Each homework set has two parts to it. The first portion gives you as many tries on each problem as you need with all software aides available (such as videos and examples). The second portion you only have two tries to get it right and the software aides are turned off.

It is the student's responsibility (and not the instructor's) to know when MyMathLab assignments are due. You will not receive notifications as to the due dates for MyMathLab assignments; it's not my job. One way to ensure you don't miss any MyMathLab deadlines is to login to the system daily.

Written Homework: Every week a few problems will be assigned to be handed in. The primary purpose of written homework is to provide feedback on your mathematical writing skills. When you submit your work, make sure that your work is organized, properly spaced out and easy to read. You will be graded on the quality of your mathematical exposition (the proficiency with which you explain your mathematical thought process). One of the principle learning goals of Calculus II and beyond is to develop your writing skills so that you can explain what you've done toward solving a problem; mathematics, and more generally science, is not done in a vacuum.

Quizzes: Most weeks you will be given a short quiz. Each problem on a quiz will be of the type that you should expect to see on exams. The purpose of the quizzes is to tell you if you are prepared for the exams. If you are doing poorly on the quiz, this is a sign that you need to seek help in your studies. See "Getting Help" below. Quizzes will normally be administered Wednesdays or Thursdays, but this may change depending on the week.

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: My office hours are MWF 25:00 – 26:00. This is probably your best opportunity to receive help. It will rarely be the case that I will have time to help with homework problems in class; I'm happy to help with any such problems in office hours.

The Math Assistance Center(MAC): The MAC 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-Thursday 10am - 5pm and Friday 10am-1pm. 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 two study rooms.

Supplemental Instruction(SI): SI is a series of out-of-class study sessions. The SI leader for this course is Marissa Hegy. Weekly sessions and office hour are both held in the MAC. It's a great way to practice the material and work with other students to master content. For the SI schedule and access to other materials join the SI WyoGroup for this course by going to `http://tinyurl.com/uwmath2205`.

STEP Tutoring: The STEP Tutoring Program offers free walk-in one-on-one tutoring for Calculus students in Coe Library. Hours are Sunday-Thursday 6:00pm to 10:00pm. Check in at the Research Help Desk on the main level. For more information visit `http://www.uwyo.edu/studentaff/step/tutoring/`.

eTutoring: The University of Wyoming offers online tutoring. Please see `http://www.uwyo.edu/studentaff/step/tutoring/resources/` for more information.

Tau Beta Pi: The Engineering Honor Society provides tutoring for a variety of math and engineering classes. See `http://www.uwyo.edu/ceas/current-students/Tutoring.pdf` for more information.

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.

Student Learning Center in Washakie: The Student Learning Center (SLC), 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/reslife-dining/slc/` for more information.

One of the most important skills to develop as an undergraduate mathematics student is the ability to identify and use outside resources for help. It is the rare student who perfectly understands the material from just attending class. Get help early; there are a plethora of resources at your disposal.

Course Supervisor: Come to me if you are unhappy about some aspect of the course. In the event that a problem remains unresolved after our discussions, talk to Dr. N. Clements, the Math 2205 Supervisor, (RH 316, 307-314-9360, calculus@uwyo.edu).

Goals of Math 2205: This course fulfills the Quantitative Reasoning (Q) requirement of the 2015 University Studies Program. Students will learn to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. The elements of the Quantitative Reasoning (Q) experience may include numerical, logical, geometric, and algorithmic thinking as well as the integration of these modes of analysis with students' verbal, creative, and critical-thinking skills. Students should demonstrate mathematical and logical skills 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 integral 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 concepts of integral calculus.
- Apply integral calculus concepts to a variety of applications, such as computing volumes of a solid, lengths of a curve, or work.
- Use algebraic, graphical, numerical skills, and critical thinking to solve problems that involve the convergence of sequences or series.
- Use parametric or polar representations of functions to analyze problems.
- 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 III, Applied Differential Equations I, and/or Elementary Linear Algebra.

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