MATH 1210 Sec. 2 MTWHF 12:00 - 1:30 PM, Room: WEB 2250

Instructor: Derrick Wigglesworth
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Website: `http://math.utah.edu/~dwiggles/`

Office Hours: Mondays & Wednesdays immediately following class *OR* by appointment.

Course Website: The course website can be accessed through my homepage. Homework assignments and all course materials will be posted to the website weekly. Additional resources can also be found on the course website.

Course Information: MATH1210 Calculus I is a 4-credit semester course.

Textbook: *Calculus with Differential Equations (Ninth Edition)*, by Varberg, Purcell, & Rigdon. ISBN: 0-13-230633-6.

Prerequisites: An Accuplacer CLM score of 95 or better *OR* AP Calculus AB score of at least 3 *OR* a grade of C or better in MATH1080 *OR* a grade of C or better in MATH1050 and MATH1060.

Course Description: Functions and their graphs, differentiation of polynomial, rational, and trigonometric functions. Velocity and acceleration. Geometric applications of the derivative, minimization and maximization problems, the indefinite integral, and an introduction to differential equations. The definite integral and the Fundamental Theorem of Calculus.

Expected Learning Outcomes: Upon successful completion of this course, a student should be able to:

- Take limits of algebraic and trigonometric expressions of the form 0/0 (that simplify), non-zero number over 0, including limits that go to (positive or negative) infinity, limits that don't exist and limits that are finite.
- Use the limit definitions of derivative and definite integral for polynomial, rational and definition of continuity.
- Differentiate all polynomial, rational, radical, and trigonometric functions and compositions of those functions; perform implicit differentiation and compute higher order derivatives.
- Use differentiation to find stationary, singular and inflection points, as well as domain and limit information to determine vertical and horizontal asymptotes, and then use all of that information to sketch the graph of a curve, $y = f(x)$.
- Apply differentiation to optimization and related rates problems.
- Compute indefinite and definite integrals, using the power rule and basic u-substitution and the Fundamental Theorems of Calculus.
- Apply the definite integral to compute area between two curves, volumes of solids of revolutions, arc length, surface area for surfaces of revolution and center of mass.

Grade Policy: The grades will be calculated as follows:

WeBWork Homework	15%
Group Quizzes	15%
Midterm	20%
Midterm	15%
Midterm	10%
Final Exam	25%

Note that the midterms have different weights. Your highest midterm score is worth 20% of your grade, your second highest is worth 15%, and your worst midterm is worth 10%. You should keep track of your scores on assignments and check that my records agree.

Calculators: I will NOT allow calculators on exams.

Homework: There will be one or two homework assignments due each week. Homework assignments will be completed using WeBWork. There is a link to WeBWork on the course webpage. This class moves very quickly and the first assignment is due at the end of the first week of class. It is your responsibility to learn to use WeBWork *before* the first assignment is due. I will not accept late homework.

Group Quizzes: There will be one or two group quizzes each week. I will discuss the format of the group quizzes on the first day of class. See the schedule on the course website for the exact dates of the quizzes.

Academic (Dis)Honesty: Academic dishonesty will not be tolerated. If you cheat on a homework, quiz, exam or other assignment, I will give you a zero for that grade. Depending on the severity, I may decide to fail you from the class. In all cases, I will report the incident to the Dean of Students.

Extra Help: Don't hesitate to come to my office during office hours or by appointment to discuss a homework problem or any aspect of the course. You also may want to consider the Math Department Tutoring Center located in LCB 155. Information is available at: `http://www.math.utah.edu/ugrad/tutoring.html`. If you want to hire a private tutor, you can contact University Tutoring Services in 330 SSB. There is also a list of tutors in the Math Department Office (JWB 233).

University Attendance Policy: Students are expected to attend classes regularly. An excessive number of absences may result in failing my course.

Important Dates:

Last Day to Add	June 17
Last Day to Drop	June 17
First Midterm	June 24
Last Day to Withdraw	July 8
Midterm	July 8
Third Midterm	July 22
Final Exam	August 4 10:00-12:00

Students with Disabilities: The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.

All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

Important Note: This is a condensed summer course. We will cover the same amount of material as a 14-15 week full semester course in only 8 weeks. As a result, the course will move very quickly. To succeed in this class, you will need to devote a significant amount of time to learning the material every day. You will need to grasp concepts and internalize them very quickly.

Other Policies:

1. I do not allow the use of computers in my classroom.
2. There will be no retakes of exams. Ever.
3. You may take an alternate exam if you talk to me about it first and explain the extenuating circumstances. It is your responsibility to communicate with me as soon as possible, *before* the exam occurs. I reserve the right to make the alternate exam more difficult than the scheduled exam.
4. If you have circumstances which require flexibility, it is *your* responsibility to communicate with me as soon as possible. The longer you wait, the less willing I am to be accommodating.
5. If you have questions about or problems with an exam grade, you must bring them to my attention within one week of receiving your exam.
6. I will not offer any extra credit at the end of the semester or any other means for you to improve your grade at that time.
7. I reserve the right to alter these policies at any time as I see fit. If such changes are made, I will notify the class via email and post the updated syllabus to the course webpage.