University of Connecticut – Avery Point

MATH 1131Q (Calculus I)
Summer Session 2 2021

Course Outline

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Office Hours: I will be available to meet via Zoom Monday-Friday 9AM-5PM by appointment. To schedule an appointment use the "Nexus Scheduling" link on HuskyCT or go to https://nexus.uconn.edu.

Excluding materials for purchase, syllabus information may be subject to change. The most up-to-date syllabus is located within the course in HuskyCT.

Course Description
This course is an introduction to differential and integral calculus, which is the mathematical language used in any science concerned with dynamically changing quantities. The main topics it covers are limits, derivatives, integrals, the Fundamental Theorem of Calculus, and some basic applications of these ideas.

Course Structure
- The format for this course is completely *asynchronous* in the sense that lecture videos and homework assignments will be available for you to watch at any time in a given module. Lecture videos and notes will be posted under the "Course Content" folder on HuskyCT. **Inside the Course Content folder will be individual folders for each module of the course that become available at 12:00AM EST on the dates listed in the course outline below.**
- I will be available to meet via Zoom by appointment to answer questions about the lectures, worksheets, online homework, or any other questions you may have about the course material. You can schedule an appointment using Nexus: https://nexus.uconn.edu/.

Prerequisites: A qualifying score of 22 on the mathematics placement exam (MPE). Students who fail to achieve this minimum score are required to spend time on the preparatory and learning modules before re-taking the MPE, or to register for a lower level Mathematics course. Not open for credit to students who have passed MATH 1132Q or 1152Q.

Textbook Information: EITHER *Calculus: Early Transcendentals* (this includes Multivariable Calculus), 8th Edition, by James Stewart with WebAssign Access Code OR *Single Variable Calculus: Early Transcendentals*, 8th Edition, by James Stewart with WebAssign Access Code.

Important: We recommend that you get the text and WebAssign access code bundled together at the UConn Co-op. You should be able to get either the single variable version for 90 dollars, or the full version (which includes multivariable) for 100 dollars. The option to buy the text and WebAssign access code bundled together lets you use that access code for the life of the edition of the textbook. So if you have already bought a WebAssign access code for this book for a previous semester, you can use it again. If you are planning on taking Math 2110 but NOT Math 2410, we suggest that you buy the full version of the text. If you are planning on taking both Math 2110 and Math 2410, then we suggest that you buy the Calculus + Differential Equations version of the text.

Software/Technical Requirements: HuskyCT/Blackboard, Piazza, Adobe Acrobat Reader, Piazza, Zoom, WebEx, **WebCam**, Dedicated access to high-speed internet.
- **NOTE**: This course has NOT been designed for use with mobile devices.
- This course uses the learning management platform, HuskyCT. If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the Help Center. You also have 24x7 Course Support including access to live chat, phone, and support documents.
- Student technology training is now available in a new HuskyCT short course created by students for students. It will prepare you to use the IT systems and services that you will use throughout your time at UConn, whether learning online or on-campus. It is available at https://lms.uconn.edu/ultra/courses/_80016_1/cl/outline.

Policies & Resources:

1. **Make-Up/Late Policy:** Course due dates are identified in this syllabus, on HuskyCT, and on WebAssign. **Deadlines are based on Eastern Time unless otherwise specified.** In fairness to everyone, there are generally **no** make-ups and **no** extensions for written assignments and exams. Only extreme situations with an officially documented excuse will allow you to make up an evaluation/assessment. Whenever possible, these excuses must be presented before the evaluation/assessment is due or is supposed to take place in class.
2. **Zero Tolerance Policy:** If a student is caught cheating on any of the assessment components whether it is a single homework, worksheet, piazza, video assignment or exams regardless of the weight of the assessment towards the final grade, the student shall receive a **F** for the entire course and will be reported to the community standards office. **No exceptions.**
3. **Academic Integrity:** Academic dishonesty is considered a serious offense at UConn. Students caught cheating shall be subject to the sanctions and other remedies described in The Student Code (http://community.uconn.edu/the-student-code-appendix-a/). Proactive strategies for students to minimize academic misconduct can be found at http://community.uconn.edu/proactive- strategies-for-students-to-minimize-academic-misconduct/. It is in your best interest to maintain your academic integrity.
4. **Student Authentication:** The University of Connecticut is required to verify the identity of students who participate in distance learning or online courses and to establish that students who register in these courses are the same students who participate in and complete the course activities and assessments and receive academic credit. Verification and authentication of student identity in this course will include (1) students accessing the course content via HuskyCT with their NetID and password and (2) instructor proctored exams for which instructors can ask for identification and/or confirm student identity via the official UConn photo in StudentAdmin. Approved photo identifications are: UConn student id, passports, government issued identification, driver's licenses, military ID from DoD. For more information see https://kb.ecampus.uconn.edu/2020/12/02/authentication-of-students/.
5. **Student Responsibilities and resources:** As member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important standards, policies and resources.
6. **Student Authentication and Verification:** The University of Connecticut is required to verify the identity of students who participate in online courses and to establish that students who register in an online course are the same students who participate in and complete the course activates and assessments and receive academic credit. Verification and authentication of student identity in this course will include some or all of the following methods:
    a. Secure access to the learning management system using your unique UConn NetID and password.
    b. Online proctoring, video conference with ID check, and submitting a scanned image of ID alongside exams.
7. **Resources for Students Experiencing Distress:** The Uuniversity of Connecticut is committed to supporting students in their mental health, their psychological and social well-being, and their connection to their academic experience and overall wellness. The university believes that academic, personal, and professional development can flourish only when each member of our community is assured equitable access to mental health services. The university aims to make access to mental health attainable while fostering a community reflecting equity and diversity and understands that good mental health may lead to personal and professional growth, greater self-awareness, increased social engagement, enhanced academic success, and campus and community involvement
    a. Students who feel they may benefit from speaking with a mental health professional can find support and resources through the **Student Health and Wellness-Mental Health** (SHaW-MH) office. Through SHaW-MH, students can make an appointment with a mental health professional and engage in confidential conversations or seek recommendations or referrals for any mental health or psychological concern.
    b. Mental health services are included as part of the university's student health insurance plan and also partially funded through university fees. If you do not have UConn's student health insurance plan, most major insurance plans are also accepted. Students can visit the **Student Health and Wellness-Mental Health located in Storrs on the main campus in the Arjona Building, 4th Floor,** or contact the office at **(860) 486-4705, or https://studenthealth.uconn.edu/** for services or questions**.**
8. **Accommodations for Extended Absences:** If life circumstances are affecting your ability to focus on courses and your UConn experience, students can email the Dean of Students at dos@uconn.edu to request support. Regional campus students should email the Student Services staff at their home campus to request support and faculty notification.
9. **Accommodations for Students with Disabilities:** The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or http://csd.uconn.edu/.
    a. Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government." (Retrieved March 24, 2013 from Blackboard's website.

Grading

WebAssign Homework (online)	18%
Worksheets	18%
Exam 1	16%
Exam 2	16%
Exam 3	16%
Exam 4	16%

Grade	Percentage	Grade	Percentage
A	93-100	C	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	59 & below

- **WebAssign Homework:** Online homework is assigned and completed using WebAssign. To access the homework you will have to go through Husky CT single sign-on. In your account you will find a link to do your homework using WebAssign. There will be homework assignments for each section of the text. All assignments for a given module will be available at the start of the module. Due dates are given in the table below. **You will get five attempts for each question that is not multiple choice and fewer than five attempts for each multiple choice question; the exact number of attempts will depend on the number of choices.** After each attempt, you will be told whether your answer is correct or not.

- **WebAssign Quizzes (optional):** On WebAssign you will also fine a WebAssign quiz for each section of the text. These quizzes are **optional and do not count towards your grade in this course.** The quizzes are set up as extra practice only.

- **Worksheets:** Each module of this course is accompanied by a worksheet that you must complete and submit. Worksheets will be posted on Blackboard at the start of each module. Due dates are given below. **Worksheets will be submitted via HuskyCT as a single PDF file only (uploading as any other file format or as multiple files for each page will result in a 0)**. Unless otherwise stated, worksheets will be graded on 50% completion and 50% correctness (problems to be corrected will be randomly chosen).

- **Participation:** For this course we will be using an online discussion board system called Piazza. **Please create a Piazza account using your UConn email by using the "Piazza" link on HuskyCT**. Piazza allows students to ask questions about any of the course material and/or homework. You can post on Piazza by typing, uploading a screenshot, or uploading a picture of your hand-written work. You are encouraged to participate often to engage fully with the material and other students in the course.
    - **Make sure to post in the correct folder.** Questions about material or homework assigned In Week 1 should be posted in the "Week 1" folder; questions about Exam 1 should be posted in the "Exam 1" folder; etc.
    - **Please post any questions regarding course material or homework on Piazza before emailing me directly.** This gives students the opportunity to answer each others questions. It also allows helps students that may also have the same question. I will also be checking Piazza frequently to answer any pending questions
    - **Please use a descriptive title when posting questions.** For example, "WebAssign 2.5 #5" or "Worksheet 2 #4" or "Lecture 7.1 Example 2". This will help other students find questions easily. Also, try to make it as clear as possible what part of the problem you are confused with or where you are stuck. It often helps to accompany your question with a screenshot of the problem and/or your work.

- **Exams:** There will be a total of **four multiple-choice exams** for this course (one exam per module). Exams for the first three modules will only cover material from the respective modules (for example, Exam 1 covers Sections 2.1-3.2 and Exam 2 covers Sections 3.3-3.10). The **fourth and final exam will be cumulative**. All exams will be taken online using Respondus lockdown browser and monitor in HuskyCT. The dates of the exams are given in the table and course outline below.
    - **You will be allowed to use the lecture notes on the exams. You will be required to upload all of your work used to answer the exam.**
    - **On the day of the exam, you will be able to access the exam between 8:00AM EST to 8:00PM EST. You will have 80 minutes for the first three exams and 100 minutes for the fourth cumulative exam.**
    - There will not be any makeup exams given. If there is an emergency and you must miss an exam, you will be responsible for notifying your instructor **ahead of time** or you will not get credit for that exam.
    - **Academic integrity warning: You may not post exams on Chegg or any other website. Exams are considered as intellectual property of UCONN and it is therefore a copyright infringement to post or copy exams in any form.**

Due Dates

Module	Worksheets	WebAssign Assignment (Quizzes optional and not graded)	Exams
1	7/18/21 11:59PM EST	7/19/21 11:59PM EST	7/20/21 (available from 8:00AM EST to 8:00PM EST)
2	7/26/21 11:59PM EST	7/27/21 11:59PM EST	7/28/21 (available from 8:00AM EST to 8:00PM EST)
3	8/3/21 11:59PM EST	8/4/21 11:59PM EST	8/5/21 (available from 8:00AM EST to 8:00PM EST)
4	8/11/21 11:59PM EST	8/12/21 11:59PM EST	8/13/21 (available from 8:00AM EST to 8:00PM EST)

Tentative Outline		
Module	**Section**	**Topic**
1 **Available: 7/12/21**		Course Intro
	2.1	The Tangent and Velocity Problems
	2.2	The Limit of a Function
	2.3	Calculating Limits Using the Limit Laws
	2.5	Continuity
	2.6	Limits at Infinity: Horizontal Asymptotes
	2.7	Derivatives and Rates of Change
	2.8	The Derivative as a Function
	3.1	Derivatives Of polynomials and Exponential Functions
	3.2	The Product and Quotient Rules
	7/19/21	**Module 1 WebAssign & Worksheet Due**
	7/20/21	**Exam 1**
2 **Available: 7/20/21**	3.3	Derivatives of Trigonometric Functions
	3.4	The Chain Rule
	3.5	Implicit Differentiation
	3.6	Derivatives of Logarithmic Functions
	3.8	Exponential Growth and Decay
	3.9	Related Rates
	3.10	Linear Approximations
	7/26/21	**Module 2 Worksheet Due**
	7/27/21	**Module 2 WebAssign Due**
	7/28/21	**Exam 2**
3 **Available: 7/28/21**	4.1	Maximum and Minimum Values
	4.2	Mean Value Theorem
	4.3	How Derivatives Affect the Shape of a Graph
	4.4	Indeterminate Forms and L'Hospital's Rule
	4.7	Optimization Problems
	4.9	Antiderivatives
	8/3/21	**Module 3 Worksheet Due**
	8/4/21	**Module 3 WebAssign Due**
	8/5/21	**Exam 3**
4 **Available: 8/5/21**	5.1	Areas and Distances
	5.2	The Definite Integral
	5.3	The Fundamental Theorem of Calculus
	5.4	Indefinite Integrals and the Net Change Theorem
	5.5	The Substitution Rule
	6.1	Areas Between Curves

	6.2	Volumes
	8/11/21	**Module 4 Worksheet Due**
	8/12/21	**Module 4 WebAssign Due**
	8/13/21	**Exam 4 (Cumulative)**