UCONN
UNIVERSITY OF CONNECTICUT

Math 1132Q-
10/H11
Calculus II

Syllabus - Summer Session I 2022

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 and Instructor Information

Course Title: Calculus II
Credits: 4
Format: *Asynchronous Online* There are no scheduled meeting times or days for this course. You will have access to the course materials (videos, notes, assessments) through HuskyCT. Course materials will be divided into modules which students are expected to complete according to the course schedule. Optional drop-in online office hours will be held throughout the course, during which students can interact with an instructor and ask questions. We will also moderate a HuskyCT board, where students can ask math questions and get answers asynchronously.

Prerequisites: MATH 1131 or advanced placement credit for calculus (a score of 4 or 5 on the Calculus AB exam or a score of 3 on the Calculus BC exam). Recommended preparation: A grade of C- or better in MATH 1131.

Professor: Maree Jaramillo, Ph.D.
Email: maree.jaramillo@uconn.edu
Office Hours/Availability: Friday, June 3: TBD, all other Fridays of summer session 9:30-11:30 am
Prof. Jaramillo's WebEx Room: https://uconn-cmr.webex.com/meet/jaj14007

Teaching Assistants:

- **Dylan Costa**
  Email: dylan.costa@uconn.edu
  Office Hours/Availability: Thursdays 2-3:30 pm
  Dylan's WebEx Room: https://uconn-cmr.webex.com/meet/dyc21002

- **Cole Durham**
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  Office Hours/Availability: Wednesdays 9-10:30 am
  Cole's WebEx Room: https://uconn-cmr.webex.com/meet/cod21003

- **Peter Graziano**
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  Office Hours/Availability: Mondays 2-3:30 pm
  Peter's WebEx Room: https://uconn-cmr.webex.com/meet/pmg20002

- **Alireza Sohrabi**
  Email: alireza.sohrabi_esmroud@uconn.edu
  Office Hours/Availability: Tuesdays 3-4:30 pm
  Alireza's WebEx Room: https://uconn-cmr.webex.com/meet/aes15006

Course Materials

Required course materials should be obtained before the first day of class.

Required materials are available for purchase through the UConn Bookstore (or use the Purchase Textbooks tool in HuskyCT). Textbooks can be shipped (fees apply). Alternatively, you may purchase access to the required materials through Cengage.

Required Materials:
The textbook for the course is ***Calculus: Early Transcendentals* by James Stewart (8th Edition)**, which is bundled with a WebAssign access code for online homework.

You can buy the **bundled version** of Calculus Early Transcendentals, by James Stewart (8th Edition) at the UConn Barnes and Nobles store. Both the text and the WebAssign code are **required** for this course. 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.*

You have the choice of buying one of the following versions of the text, depending on how much calculus you plan to take in the future:

IMPORTANT!

- **If you do NOT plan to take Math 2110** (Multivariable Calculus), then you have the option to purchase ***Single-Variable Calculus: Early Transcendentals*** by Stewart (8th Edition)

- **If you plan to take Math 1132, *and* 2110** (Multivariable Calculus) then you should purchase ***Calculus: Early Transcendentals*** by Stewart (8th Edition) that has chapters on multivariable calculus in the table of content

- **If you plan to take Math 1132, 2110 and Math 2410** (Elementary Differential Equations), then you have the option to purchase ***Calculus: Early Transcendentals*** by Stewart (8th Edition) bundled with the one-semester Differential Equation book, ***A First Course in Differential Equations with Modeling Applications*** by Dennis G Zill (11th Edition)

- **If you don't mind ebooks or are taking other courses using Cengage material,** a *Cengage Unlimited* subscription can be purchased online. It will give you access to an online textbook and WebAssign code.

Additional course readings and media are available within HuskyCT, through either an Internet link or Library Resources

Technology:

Because this is an online class, you will need a computer and internet in order to access the course. In addition, we will be using Respondus Lockdown Browser to proctor exams, with the exception of students who may be using Chromebooks, in which case we will make alternative arrangements. All proctoring will require use of a webcam. Finally, some of our course assessments will require you to upload a pdf of your work. For this, you will need access to a device that will allow you to scan and save your work as a pdf document, such as a scanner or scanner app on a smartphone.

The University has set minimum device requirements for all students.

A Student Technology Training Course is available through HuskyCT. This course is not mandatory but may be helpful for some, especially students who may be new to UConn.

Calculator Policy: The use of calculators is NOT allowed on exams. You may use calculators on other assessments, such as worksheets and WebAssign.

Cell Phone Policy: Cell phones cannot be used as calculators. All cell phones must be turned off and kept out of sight at all times during the exams. Once you finish an exam, you may use your cell phone or other electronic device to scan your exam solutions in order to submit to HuskyCT.

Course Description

Transcendental functions, formal integration, polar coordinates, infinite sequences and series, parametric equations, with applications to the physical sciences and engineering.

Course Objectives

By the end of the term, students should be able to:

1. Select and use applicable techniques to help solve integration problems.
2. Create mathematical models using integrals and differential equations.
3. Understand what infinite sequences and series are, and how they are related.
4. Determine whether an infinite series converges or diverges.
5. Graph and find the slopes of lines tangent to parametric and polar curves.
6. Use integration to find the area bounded by polar curves.

Course Outline

The modules for this course are split up by dates, according to the order and date in which you should complete the module. There will be one test per module. The numbers next to the topics below correspond to the sections in which they can be found in our textbook.

Week 1 and 2 Module: Techniques and applications of Integration

- 7.1 Integration by Parts
- 7.2 Trig Integrals
- 7.3 Trigonometric Substitution
- 7.4 Integration by Partial Fractions
- 7.7 Numerical Integration
- 7.8 Improper Integrals
- 6.4 Work
- 8.1 Arc Length

Week 2 Module: Differential Equations and Calculus with Parametric and Polar Curves

- 9.1 Modeling with Differential Equations
- 9.3 Separable Equations
- 10.1 Curves Defined by Parametric Equations
- 10.2 Calculus with Parametric Equations

- 10.3 Polar Coordinates
- 10.4 Calculus with Polar Coordinates

Week 3 Module: Sequences, Series, and Series Testing

- 11.1 Sequences
- 11.2 Series
- 11.3 The Integral Test and Estimates of Sums
- 11.4 The Comparison Tests
- 11.5 Alternating Series

Week 4 Module: Power, Taylor, and Maclaurin Series

- 11.6 Absolute Convergence and Ratio Test
- 11.8 Power Series
- 11.9 Representations of Functions
- 11.10 Taylor and Maclaurin Series
- 11.11 Applications of Taylor Polynomials

Course Requirements and Grading

Summary of Course Grading:

Course Components	Weight
3 Best Exams	60%
Lowest Exam	10%
WebAssign Homework	15%
Worksheets	15%
TOTAL	100%

Exams:

There will be *4 exams* given during the summer session. The 3 best exams will each be weighted (20%) while your lowest exam score will be weighted 10%.

Exam 1 – Week 1 and 2 Module - **Opens Friday, June 10, 2022**
Exam 2 – Week 3 Module - **Opens Friday, June 17, 2022**
Exam 3 – Week 4 Module - **Opens Friday, June 24, 2022**
Exam 4 – Week 5 Module - **Opens Thursday, June 30, 2022**

Missing an exam is a serious issue. Reasons for excused absences include illness, deaths in the immediate family and other documented crises, call to active military duty, court-imposed legal obligations (e.g., jury duty and subpoenas), religious days, special requirements of other courses and university sponsored events (e.g., performances, games/meets, judging trips, field trips), and severe weather conditions. Employment schedules, family reunions, vacations and athletic training/practice schedules of students do not comprise a valid excuse for absences.

In case of a missed exam due to an excused absence as outlined above, please contact your instructor as soon as you know you will miss it, and no later than 24 hours after the exam.

WebAssign Homework:

Homework assignments are accessed through the online homework system called WebAssign. On WebAssign, you also have an electronic copy of the textbook, together with other resources such as lecture videos & examples. There is an online homework assignment for each section we cover. **To access homework assignments**, go to the **Husky CT**, and then **click on the WebAssign Homework link**. 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. If you are not able to get the correct answer after your first two attempts, please talk to someone about it – this could be your professor, a fellow classmate, a tutor, or someone at the **Q Center Online:** https://qcenter.uconn.edu/.

No extensions will be given. The 4 lowest homework grades will be dropped. **The homework will be due on Fridays at 12:00 PM.**

*Warning: When accessing your online homework, use **Chrome or Firefox as your browser**; there are problems that can occur if you use Internet Explorer or Safari. Useful tips on using WebAssign can be found here.*

Worksheets:

There will be short worksheets accompanying each of the sections covered in this class. There will be *no make-up worksheets* for any reason. The 3-lowest worksheet grades will be dropped. **The worksheets will be due on Fridays at 12:00 PM.**

Grading Scale: The plus/minus grading system will be used. If your overall percentage of total points falls into the following range, you will receive the corresponding grade:

Grading Scale			
93-100 %	A	73-76%	C
90-92 %	A-	70-72%	C-
87-89 %	B+	67-69%	D+
83-86%	B	63-66%	D
80-82%	B-	60-62%	D-
77-79%	C+	0-59%	F

Due Dates and Late Policy

All course due dates are identified in our course calendar. Deadlines are based on Eastern Time; if you are in a different time zone, please adjust your submittal times accordingly. *The instructor reserves the right to change dates accordingly as the semester progresses. All changes will be communicated in an appropriate manner.*

No late assessments will be accepted. If you do not submit a worksheet or WebAssign homework on time, you will receive a grade of 0 for that assignment. However, please note that the lowest 3 worksheet grades and the lowest 4 WebAssign grades will be dropped.

Feedback and Grades

We will make every effort to provide feedback and grades in three days of the due date. To keep track of your performance in the course, refer to My Grades in HuskyCT.

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 activities and assessments and receive academic credit. Verification and authentication of student identity in this course will include secure access to the learning management system using your unique UConn NetID and password.

Assessment/Exam Proctoring

LockDown Browser and Monitor will be used to proctor each of the four exams for the class.

LockDown Browser

We will be giving the exam through HuskyCT's testing tool and will be requiring the LockDown Browser for taking the exam. The LockDown Browser is a browser that must be downloaded and installed on the computer with which you will be taking your exam. When you are ready to take your exam, you will have to open your exam through the LockDown Browser. During that time you will be unable to access other applications. For information about downloading, installing, and using the LockDown Browser, please visit

https://confluence.uconn.edu/ikb/teaching-and-learning/huskyct/student-support/lockdown-browser-student

Lockdown Browser and Chromebooks

Please note that the LockDown browser does not work with Chromebooks. If you will be using a Chromebook for this class, please notify the instructors immediately so we can provide you with an alternative method of proctoring.

Authentication and Monitor

We will also be using the Monitor feature on the LockDown Browser. The Monitor feature will record you as you take your exam. Because of this, you will need a webcam for the purpose of taking your exam. Without a working webcam, you will not be able to proceed with the exam. Before beginning the exam you will need to do two things:

Environment check

Use your webcam to scan the entire room so we can be sure that no unauthorized materials are being used.

Authentication

Hold up your ID (UConn or other university or government issued ID that allows us to clearly see your name and picture together) to the camera. Only your name and picture need to be visible. You may cover up any other identifying information (e.g. address, ID number, etc…) with your hand or a piece of paper. For more information about why we are requiring authentication, please visit:

https://kb.ecampus.uconn.edu/2020/03/11/authentication-of-students-in-disruption/

Student Responsibilities and Resources

As a 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, which include:

- The Student Code
  - Academic Integrity
  - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Credit Hours and Workload
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

Academic Integrity and Disruption of Academic Process:

We expect the highest standard of academic integrity from our students. Any cheating will result in a failing grade for the assignment or the test, and possibly for the course. This course expects all students to act in accordance with the Guidelines for Academic Integrity at the University of Connecticut. Because questions of intellectual property are important to the field of this course, we will discuss academic honesty as a topic and not just a policy. If you have questions about academic integrity or intellectual property, you should consult with your instructor. Additionally, consult UConn's guidelines for academic integrity.

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. 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/.

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)

Software/Technical Requirements (with Accessibility and Privacy Information)

The software/technical requirements for this course include:

- HuskyCT/Blackboard (HuskyCT/ Blackboard Accessibility Statement, HuskyCT/ Blackboard

Privacy Policy)
- Adobe Acrobat Reader (Adobe Reader Accessibility Statement, Adobe Reader Privacy Policy)
- Google Apps (Google Apps Accessibility, Google for Education Privacy Policy)
- Microsoft Office (free to UConn students through uconn.onthehub.com) (Microsoft Accessibility Statement, Microsoft Privacy Statement)
- Dedicated access to high-speed internet with a minimum speed of 1.5 Mbps (4 Mbps or higher is recommended).
- WebCam

For information on managing your privacy at the University of Connecticut, visit the University's Privacy page.

NOTE: This course has NOT been designed for use with mobile devices.

Help

This course is facilitated online using the learning management platform, HuskyCT. The IT Knowledge Base provides students with support, troubleshooting, and how-to information about HuskyCT. The IT Knowledge Base includes a video tour of HuskyCT.

For technical help with HuskyCT, you have access to the in-person/live person support options available during regular business hours through the Technology Support Center. You also have 24x7 Course Support outside of business hours, including access to live chat, phone, and support documents.

Technical and Academic Help provides a guide to frequently asked questions for online students.

Q Center

You are encouraged to visit the Quantitative Learning (Q) Center for additional support. Summer tutoring starts on Wednesday, June 1, and is online only. More information can be found on their Website.

Study Groups

Are you interested in forming a study group with other students in the class? There is a study group application in Nexus that can help you get started. View this video for more information.

Minimum Technical Skills

To be successful in this course, you will need the following technical skills:

- Use electronic mail with attachments.
- Open and access PDF files from HuskyCT.
- Scan and save and/or create PDF files to upload as assignments on HuskyCT.
- Work within two or more browser windows simultaneously.

Evaluation of the Course

Students will be provided an opportunity to evaluate instruction in this course using the University's standard procedures, which are administered by the Office of Institutional Research and Effectiveness (OIRE).

Additional informal formative surveys may also be administered within the course as an optional evaluation tool.

Copyright

The web-based video delivery of each class in this course is for sole use of the students enrolled in this course. Any other use of these class videos or any pictures or derivatives of the class videos without the written consent of the course's professor is prohibited.

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