# Math 1132Q – Calculus II (Fall 2021)

Home

Outline

Homework

Instructors

*Instructors (Storrs): David T. McArdle*

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

**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.

**Textbook Information:** You can choose from (3) options at the UConn bookstore (based on how many math courses you intend to take at UConn).

1. **Option 1** (Choose if you are only taking 1132). *Single Variable Calculus: Early Transcendentals*, 8th Edition, by James Stewart with WebAssign Access Code.
2. **Option 2** (Choose if you will also take 2110). *Calculus: Early Transcendentals* (this includes Multivariable Calculus), 8th Edition, by James Stewart with WebAssign Access Code
3. **Option 3** (Choose if you will also take 2110 and 2410) *Calculus: Early Transcendentals+ Diff Eq*, 8th Edition, by James Stewart with WebAssign Access Code

**Calculators & Resources:** No calculators, websites, books/notes are allowed on course exams. Use of prohibited materials will result in a zero on the assessment.

**IMPORTANT!**
We recommend that you get the text and WebAssign access code bundled together at the UConn Co-op. 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 have multiple other courses using Cengage textbooks, then you should consider a “Cengage Unlimited” subscription through the Cengage website. This will give you access to the Ebook and HW.

# Grading:

| **Assignment Type** | How to Access | Due Date | Percentage |
|---|---|---|---|
| **Checkpoints** | HuskyCT | Ongoing | 10% |
| **WDA’s (Wednesday Discussion Activities)** | In-Person Discussion | Due Wednesday at conclusion of discussion | 10% |
| **Quizzes** | HuskyCT | Due Tuesday at 11:59PM | 10% |
| **WebAssign HW** | HuskyCT | Due Tuesday at 11:59PM | 10% |
| **Exam 1:** | HuskyCT & Discussion | Wednesday 10/6 | 20% |
| **Exam 2:** | HuskyCT & Discussion | Wednesday 11/10 | 20% |
| **Final Exam:** | | Date/ Time TBA | 20% |

**Exam Replacement Policy:** Your score on the final exam will replace your lowest exam score if you score higher on the final exam. Note that your final exam grade is always counted in your course grade and cannot be replaced.

**Participation:** You are required to be an active participant in the course *every week.* In particular, you must be present and active in your discussion section on Wednesday to complete the weekly "WDA"

**NOTE:** The honors sections will have slightly different grading schemes which are detailed in the respective syllabi.

# WebAssign HW:

**Homework:** 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. Each assignment will be made available on WebAssign several days before the section is covered in class. The due date for each assignment will be set by your instructor and will generally be two or three days after the material is covered in class. **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 initial attempts, we recommend that you seek help from your instructor, the Q-Center, a tutor, or another student. If you miss the due date on homework you can get an extension for up to two days after the due date, but you will only be able to receive 50% credit for the homework. **Warning:** When accessing your online homework, **use Firefox or Chrome as your browser**; there are problems that can occur if you use Internet Explorer or Safari.Here .pdf is a document with tips on using WebAssign.

**WebAssign Registration:** The homework for Math 1132 is assigned online using the WebAssign online homework system. To access your homework online you must go to Husky CT.

# Exams

**Exams:** There will be two unit exams and a Final Exam in this course. The Final Exam for the course will be cumulative. The dates and times for all exams are shown below.

- **Exam 1:** Week 6 (Wednesday 10/6)
- **Exam 2:** Week 11 (Wednesday 11/10)
- **Final Exam:** TBA

Exams will consist of two parts (1) a MC & TF (multiple choice and true/false) online exam , and (2) a short answer in person exam.

(1) PART 1: [MC/TF]. The first portion of the exam will be proctored using lockdown browser/ respondus. The exam will consist of MC and TF type questions and will be timed. You can take the exam at home during pre-set time windows

(2) PART 2: [Short Answer] The second portion of the exam will be proctored in person during your discussion section. The exam will consist of several short answer format questions where you will need to show all of your work. Partial credit will be awarded for partially correct responses.

**Note:** No external resources are permitted during exams. You are prohibited from using a calculator, websites, notes, textbook, etc.

# Quizzes:

For each section covered throughout the semester, there will be an associated quiz administered through HuskyCT. These quizzes are accessed through HuskyCT and submitted in HuskyCT. Quizzes are timed with one attempt. Quizzes are due on Tuesday evenings at 11:59PM for the previous week. Quizzes are formatted as either MC/TF timed quizzes or short-answer quizzes for which you need to upload your work.

# WDA's (Wednesday Discussion Activities):

Every Wednesday during your set discussion time, you will complete a "WDA" (Wednesday Discussion Activity) with your classmates. The WDA's will be facilitated by your TA and you will have an opportunity to engage with your classmates to complete the assignment. The assignment is conducted in-person and must be submitted at the conclusion of discussion. Assignments are graded on a combination of completeness and correctness.

# Checkpoints:

MATH 1132Q is divided into 3 units; Unit 1 (Integration), Unit 2 (Sequences and Series), and Unit 3 (Miscellaneous Topics).

As part of your course grade, you will need to demonstrate proficiency in Unit 1 and Unit 2 through assignments that will be called Checkpoint 1 and Checkpoint 2, respectively. Each of these checkpoints will be worth 5% of your course grade and will be graded as "all or nothing" (i.e. you will either pass the checkpoint and receive the entire 5% or you will not pass the checkpoint and will receive 0%). However, there are many ways to pass a checkpoint and they can always be revised and resubmitted throughout the entire semester. The final day to pass both checkpoints will be the date of the final exam (TBA).

****Note:** Details related to the Checkpoint assignments will be revealed later in the semester; however, if you receive an 80% or better on Exam

1 then you will automatically pass Checkpoint 1 and if you receive an 80% or greater on Exam 2 then you automatically pass Checkpoint 2.

# Discussion Sections:

As part of MATH 1132Q, you have been placed in a discussion section with an experience graduate TA. Discussion sections will meet twice per week on Mondays and Wednesdays in-person at a set time that will appear on your schedule. Below are details about what to expect on Monday and Wednesday

- **Monday Discussion:** On Monday, your TA will hold an in-person Q&A session during which they will answer any questions that you may have related to the previous week's course material, HW, and quizzes. Once all questions are answered, your TA will also work on additional practice problems with the group.
- **Wednesday Discussion:** On Wednesday, your TA will facilitate a WDA (Wednesday Discussion Activity). See above description for more details. These activities will be collected and graded at the end of the session and your attendance is *required*.

# Content Delivery & Resources:

For each section of the course (see course outline tab) there will be several resources offered to you on your lecture HuskyCT page including lecture videos and lecture notes. You can engage with these resources throughout the week.

Once you engage with the material provided on HuskyCT, there are several additional resources available to you

- Live Worksessions: Dave will hold live work/problem sessions on Thursday evenings related to the week's material. These sessions are virtual, synchronous sessions that will be recorded and posted in case you are unable to attend. See your main HuskyCT page for more details.
- Monday Discussion Section: On Monday, your TA will hold a Q&A session in-person that you can attend for extra help. Here they will also work through problems related to the sections from the previous week.
- Office Hours: Dave will offer office hour appointments and your TA will offer additional office hours
- Discussion Board: A discussion board has been set up for your lecture. You can access this through HuskyCT. Here you can post questions and answer your peers questions.
- Q-Center Tutoring: There are many skilled tutors ready and willing to help you at UConn's Q-center (provided fully virtuall). Follow this link for more information: https://qcenter.uconn.edu/

# Additional Information:

**Make-up Policy:** If there is an approved reason for you to not take an exam at its designated times, you must notify the instructor in advance to make arrangements. Students who are unable to attend an exam due to an emergency situation should notify their instructor via e-mail as soon as possible and within 36 hours. Arrangements for a make-up test will be considered on a case by case basis. Make-up exams will be administered only at the discretion of the instructor. If a student is allowed to make
up a missed exam, (s)he must take it at a mutually arranged time.

**Academic Integrity:** It is in your best interest to maintain your academic integrity. Any form of academic dishonesty undermines the goals of our course and devalues the learning process. Academic dishonesty is a serious offense at UConn and can result in a zero grade on an assessment and/or failure in the course.

**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/.

**Change to Syllabus:** The information contained in the course syllabus, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.

**Online Learning:** UConn has several resources available to help you navigate online learning. You can check out the following links: https://achieve.uconn.edu/online-course/ https://onlinestudent.uconn.edu/keeplearning/

| Week | Date | Section | Topic |
|---|---|---|---|
| 1 | 8/30 | 5.5 | Intro/ Integration by Substitution |
| | | 7.1 | Integration by Parts |
| 2 | 9/6 | 7.2 | Trig Integrals |
| | | 7.3 | Trigonometric Substitution |
| 3 | 9/13 | 7.4 | Integration by Partial Fractions |
| | | 7.7 | Numerical Integration |
| 4 | 9/20 | 7.8 | Improper Integrals |
| | | 6.4 | Work |
| 5 | 9/27 | 8.1 | Arc Length |
| | | 11.1 | Sequences |
| 6 | 10/4 | **EXAM 1** | Exam 1 (Wednesday 10/6) |
| | | 11.2 | Series |
| 7 | 10/11 | 11.3 | The Integral Test and Estimates of Sums |
| | | 11.4 | The Comparison Tests |
| 8 | 10/18 | 11.5 | Alternating Series |
| | | 11.6 | Absolute Convergence and Ratio Test |
| 9 | 10/25 | 11.8 | Power Series |
| | | 11.9 | Representations of Functions as Power Series |
| 10 | 11/1 | 11.10 | Taylor and Maclaurin Series |
| | | 11.11 | Applications of Taylor Polynomials |
| 11 | 11/8 | **EXAM 2** | Exam 2 (Wednesday 11/10) |
| | | 9.1 | Modeling with Differential Equations |
| 12 | 11/15 | 9.3 | Separable Equations |
| | | 10.1 | Curves Defined by Parametric Equations |
| 13 | 11/22 | OFF | Spring Recess |
| | | OFF | |
| 14 | 11/29 | 10.2 | Calculus with Parametric Curves |
| | | 10.3 | Polar Coordinates |
| 15 | 10/6 | 10.4 | Calculus with Polar Coordinates |
| | | | |
| 16 | | **FINAL EXAM (TBA)** | Final Exam (TBA) |