

Instructor: Dr. Anthony Várilly-Alvarado **Time:** MWF 9:00-9:50AM
Office: 412 Herman Brown **Classroom:** Space Science (SS) 106
Email: varilly@rice.edu **Office Hours:** W 1-2PM, Th 1:30-3:30PM
Phone: x4597
Class Webpage: Look for Math 112 001 Sp10 on Owlspace

Recitations: The Teaching Assistance for this course is Natalie Durgin.
Time: 7-9PM **Classroom:** HB 427

Text: James Stewart: *Calculus Early Transcendentals 6E*.
We will cover (roughly speaking) Chapters 5, 6, 7 and parts of 8.

Homework: Homework will be assigned through the WebAssign website and the due date will be clearly stated. Each student needs to sign up for a WebAssign account and get familiar with WebAssign as soon as possible. Homework problems are completed online, and are quite similar to textbook exercises. It is strongly recommended that you keep a notebook where you write down complete solutions to the assigned exercises; you can use this notebook to study for exams.

The homework is not pledged and you can collaborate with other students in the class. Make sure you understand the solution to a problem before typing in your answer on WebAssign.

**Late homework assignments will not be accepted for ANY reason –
instead, your lowest score will be dropped.**

Exams: There will be two midterm tests during the semester. They will take place in class on **Wednesday, February 17th** and on **Wednesday, March 31st**.

Final exam: The date for the final exam is not available at this time. It is the policy of the Mathematics Department that no final may be given early to accommodate student travel plans. If you make travel plans that later turn out to conflict with the scheduled exam, then it is your responsibility to either reschedule your travel plans or take a zero in the final.

Books, notes, and calculators will **not** be allowed on exams. Make-up exams will be allowed only in the case of a documented medical emergency. If an exam conflicts with a holiday you observe, please let me know before the end of the first week of classes.

Grades: Homework will count for 15% of your final grade. Your three lowest homework scores will be dropped. The first midterm will count for 20% of your grade and the second midterm will count for 25%. The final exam will count for 40% of your grade.

I am most concerned with your understanding of the material at the *end* of the course. If you do poorly on a midterm, but you do very well in the final exam, I will take that into account when I assign your final grade.

Expectations: I expect you to attend every class and to arrive on time. It is your responsibility to keep informed of any announcements, syllabus adjustments, or policy changes made during scheduled classes. Not all announcements will be posted on the website.

In my experience as a student, most people do not follow all the details of a lecture in real time. When you go to a Math lecture you should expect to witness the big picture of what's going on. You should pay attention to the lecturer's advice on what is important and what isn't. A lecturer spends a long time thinking on how to deliver a presentation of an immense amount of material; they do not expect you to follow every step, but they do expect you to go home and fill in the gaps in your understanding. Not attending lecture really hurts your chances at a deep understanding of the material.

Success: The most successful students tend to:

- Attend every class,
- Read the book and review their notes daily,
- Work on all the homework as it is assigned,
- Seek help as soon as they encounter trouble.

I encourage you to utilize your classmates, recitation sessions and office hours whenever you are having trouble understanding the course material. Get your questions answered as they arise – waiting until you have many questions (or until an exam is looming!) will make help in any form less effective.

Disability Support: Any student with a documented disability seeking academic adjustments or accommodations is requested to speak with me during the first two weeks of class. All such discussions will remain as confidential as possible. Students with disabilities will need to also contact Disability Support Services in the Allen Center

Tentative Schedule:

Week 1:

Monday, 01/11 Section 5.1: Areas and Distances
Wednesday, 01/13 Section 5.1: Areas and Distances II
Friday, 01/15 Section 5.2: The Definite Integral

Week 2:

Monday, 01/18 No class, Martin Luther King, Jr. Day
Wednesday, 01/20 Section 5.2: The Definite Integral II
Friday, 01/22 Section 5.2: The Definite Integral III

Week 3:

Monday, 01/25 Section 4.9: Antiderivatives
Wednesday, 01/27 Section 5.3: The Fundamental Theorem of Calculus I
Friday, 01/29 Section 5.3: The Fundamental Theorem of Calculus II

Week 4:

Monday, 02/01 Section 5.4: Indefinite Integrals

Wednesday, 02/03 Section 5.5: The Substitution Rule I

Friday, 02/05 Section 5.5: The Substitution Rule II

Week 5:

Monday, 02/08 Review of Chapter 5

Wednesday, 02/10 Section 6.1: Areas Between Curves I

Friday, 02/12 Section 6.1: Areas Between Curves II

Week 6:

Monday, 02/15 Review:

Wednesday, 02/17 Midterm I

Friday, 02/19 Section 6.2: Volume I

Week 7:

Monday, 02/22 Section 6.2: Volume II

Wednesday, 02/24 Section 6.2: Volume III

Friday, 02/26 Section 6.2: Volume IV

SPRING BREAK: February 27th — March 7th

Week 8:

Monday, 03/08 Section 6.3: Cylindrical Shells I

Wednesday, 03/10 Section 6.3: Cylindrical Shells II

Friday, 03/12 Section 6.3: Cylindrical Shells III

Week 9:

Monday, 03/15 Section 6.5: Average Value of a Function

Wednesday, 03/17 Section 7.1: Integration by Parts I

Friday, 03/19 Section 7.1: Integration by Parts II

Week 10:

Monday, 03/22 Section 7.2: Trigonometric Integrals I

Wednesday, 03/24 Section 7.3: Trigonometric Substitution I

Friday, 03/26 Section 7.3: Trigonometric Substitution II

Week 11:

Monday, 03/29 Review

Wednesday, 03/31 Midterm II

Friday, 04/02 No class, Midterm Recess

Week 12:

Monday, 04/05 Section 7.4: Partial Fractions I

Wednesday, 04/07 Section 7.4: Partial Fractions II

Friday, 04/09 Section 7.4: Partial Fractions III

Week 13:

Monday, 04/12 Section 7.7: Approximate Integration I

Wednesday, 04/14 Section 7.7: Approximate Integration II

Friday, 04/16 Section Section 7.7: Approximate Integration III

Week 14:

Monday, 04/19 Section 8.1: Arc length

Wednesday, 04/21 Section 8.2: Surface Area of Revolution

Friday, 04/23 Review