

SINGLE VARIABLE CALCULUS II

1. GENERAL INFORMATION

- Course: Math 102-002, Fall 2008
- Instructor: Fei Xu
- Office: Herman Brown (HB) 42, x8304
- Office Hours: Thursday 10am-12pm in HB 42
- Help Sessions: Wednesday, Thursday 7-9pm in ME 128
- E-mail: fx4533@rice.edu
- Website: includes syllabus, course schedule and homework assignments
<http://www.math.rice.edu/~fx4533/Fall102/>
- Text: Edwards & Penney: Single Variable Calculus 7th edition.

Homework: Homework will be assigned every week on Friday and due the following Friday at the end of class. The assignment will be available on the course homepage. Homework is not pledged so feel free to work together. The main purpose of the homework is for you to learn so you are strongly encouraged to attempt the problems yourself before seeking assistance. Any written work submitted must be your own. Your submitted work **must be stapled** together and should have your name on every page. I will accept homeworks dropped off at my office (you can slide it under my door) before 1PM on the day it is due, after that homework will be late. Late homeworks will not be accepted for credit.

Tests: There will be two midterm exams and a final exam. The tests will be pledged and closed book. Calculators will not be allowed. The (very) preliminary dates for the two midterms are October 1 and November 18. The midterms will be held in class.

Grades: Grades will be computed as follows: Homework: 25 % (the lowest homework score will be dropped), Midterms 20% each, Final Exam 35%.

Teaching Assistants:

- Christian Bruun cbruun@rice.edu
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- Robert Vance robert.vance@rice.edu
- Letao Zhang letao.zhang@rice.edu

Final Exam Policy: It is the policy of the mathematics department that no final may be given early to accommodate student travel plans. We will not know when the final in this course will be scheduled for some time. Therefore, if you should make plans to travel before the end of final exam period, and it turns out that the final for this course is after your scheduled departure date, you will have to choose between keeping your plans and receiving zero for the final, or incurring the costs for changing your plans and taking the final at its scheduled time. Thanks for your understanding.

Note: 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 discussions will remain as confidential as possible. Students with disabilities will need to also contact Disability Support Services in the Ley Student Center.

2. SCHEDULE

Very rough course schedule, subject to later adjustments:

- Mon, Aug 25th Introduction to Course, review and sect. 7.1
- Wed, Aug 27th sect. 7.2 Integral tables and simple substitutions
- Fri, Aug 29th sect. 7.3 Integration by parts
- Mon, Sep 1st Labor Day (no class)
- Wed, Sep 3rd sect. 7.4 Trigonometric Integrals
- Fri, Sep 5th sect. 7.5 Rational functions and partial functions
- Mon, Sep 8th sect. 7.5 Rational functions and partial functions
- Wed, Sep 10th sect. 7.6 Trigonometric substitutions
- Fri Sep 12th sect. 7.6 Trigonometric substitutions
- Mon, Sep 15th sect. 7.7 Integrals containing quadratic polynomials
- Wed, Sep 17th sect. 7.8 Improper integrals
- Fri, Sep 19th sect. 7.8 Improper integrals
- Mon Sep 22nd Review of chapter 7
- Wed Sep 24th sect. 10.2 Infinite Sequences
- Fri Sep 26th sect. 10.2 Infinite Sequences
- Mon Sep 29th sect. 10.3 Infinite series and convergence
- Wed Oct 1st Midterm 1 (covers Chapter 7): very preliminary
- Fri Oct 3rd sect. 10.3 Infinite series and convergence
- Mon Oct 6th sect. 10.3 Infinite series and convergence
- Wed Oct 8th sect. 10.4 Taylor series and Taylor polynomials
- Fri Oct 10th sect. 10.4 Taylor series and Taylor polynomials
- Mon Oct 13th Midterm Recess (no class)
- Wed Oct 15th sect. 10.4 Taylor series and Taylor polynomials
- Fri Oct 17th sect. 10.5 The integral test
- Mon Oct 20th sect. 10.5 The integral test
- Wed Oct 21st sect. 10.6 Comparison tests for positive-term series
- Fri Oct 23rd sect. 10.6 Comparison tests for positive-term series
- Mon Oct 26th sect. 10.7 Alternating series and absolute convergence
- Wed Oct 28th sect. 10.7 Alternating series and absolute convergence
- Fri Oct 30th sect. 10.8 Power series
- Mon Nov 3rd sect. 10.8 Power series
- Wed Nov 5th Review of chapter 10
- Fri Nov 7th Review of chapter 10
- Mon Nov 10th sect. 9.2 Polar Coordinates
- Wed Nov 12th sect. 9.2 Polar Coordinates
- Fri Nov 14th sect. 9.3 Area computations in polar coordinates
- Mon Nov 16th sect. 9.3 Area computations in polar coordinates
- Wed Nov 18th Midterm 2 (covers Chapter 10): very preliminary
- Fri Nov 20th sect 9.4 Parametric curves
- Mon Nov 23rd sect 9.5 Integral computations in polar coordinates
- Wed Nov 25th TBA (probably extra review/fun lecture)
- Fri Nov 27th Thanksgiving recess (no class)
- Mon Dec 1st Review of Chapter 9
- Wed Dec 3rd Review for final exam
- Fri Dec 5th TBA