

MATH 101-001, FALL 2008, SYLLABUS

1. GENERAL INFORMATION

- Instructor: Keiko Kawamuro
- Office: Herman Brown 424, x4921
- Office Hours: Monday and Wednesday 5-6PM (tentative)
- E-mail: keiko.kawamuro@rice.edu
- Text: Edwards and Penney, Single Variable Calculus: Early Transcendentals, 7e

Note: Any student with a disability requiring accommodation in this class is encouraged to contact me after class or during office hours. Additionally, students should contact the Disabled Student Services office in the Ley Student Center.

Homework: Homework will be assigned in class every day, due at the end of class (10AM). Homework is not pledged. You may get help from any source. However 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. **Late homeworks will not be accepted for credit.** Selected problems will be graded.

Tests: There will be two midterm exams and a final exam. The tests will be closed book-closed notes tests. Calculators will not be allowed. The dates for the two midterms will be: Thursday, October 2nd and Tuesday November 11th. The exams will be held during the 8:00-9:00 AM time period. The rooms for the exams will be announced in class.

Grades: Grades will be computed as follows: Homework: 25 % (the lowest 5 homework scores will be dropped), Midterms 20% each, Final 35%.

Help Sessions: Tuesday, Thursday 7-9pm at HZ212.

Teaching Assistants:

- Zhiyuan Li. Zhiyuan.Li @ rice.edu x4598
- Taylor McNeill. rmcneill@rice.edu
- Dan Tanner. djt1@rice.edu
- Zhi Zhang Zhi.Zhang @ rice.edu x2840

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.

2. SCHEDULE

Very rough course schedule, subject to later adjustments:

- Mon, Aug 25th sect. 1.1 Introduction
- Wed, Aug 27th sect. 1.2 Lines, quadratics, completing the square
- Fri, Aug 29th sect. 1.3 and 1.4 Review of functions
- Wed, Sep 3rd sect. 2.2 and 2.4 Limits and Continuity
- Fri, Sep 5th sect. 2.2 and 2.3 Limits and Continuity, continued
- Mon, Sep 8th sect. 2.3 More limits
- Wed, Sep 10th sect. 3.1 The derivative
- Fri Sep 12th
- Mon, Sep 15th
- Wed, Sep 17th sect. 3.2 Differentiation rules
- Fri Sep 19th sect. 3.4 Chain rule
- Mon Sep 22nd sect. 3.5 Maxima and minima
- Wed Sep 24th sect. 3.7 Review of trig functions, derivatives of trig functions
- Fri Sep 26th sect. 3.8 exp/log functions, derivative of ex/log
- Mon Sep 29th sect. 3.9 Implicit differentiation and related rates
- Wed Oct 1st Review
- Thurs Oct 2nd First Midterm
- Fri Oct 3rd sect. 4.3 Increasing and decreasing functions
- Mon Oct 6th sect. 4.4 First derivative test
- Wed Oct 8th sect. 4.6 Higher derivatives and second derivative test
- Fri Oct 10th sect. 4.7 Curve sketching
- Wed Oct 15th sect. 4.7 Curve sketching, continued
- Fri Oct 17th sect. 4.8 L'Hopital's rule
- Mon Oct 20th sect. 4.9 More L'Hopital
- Wed Oct 22nd sect. 5.2 Antiderivatives
- Fri Oct 24th sect. 5.2 and 5.3 Summation notation, areas
- Mon Oct 27th sect. 5.3 and 5.4 Riemann sums, definite integral
- Wed Oct 29th sect. 5.5 Properties of the integral
- Fri Oct 31st sect. 5.6 Fundamental Theorem of Calculus
- Mon Nov 3rd sect. 5.7 Substitution
- Wed Nov 5th sect. 5.7 More substitution
- Fri Nov 7th sect. 5.8 Areas of regions in the plane
- Mon Nov 10th Review
- Tue Nov 11th Second Midterm
- Wed Nov 12th sect. 6.2 Volumes, method of cross-sections
- Fri Nov 14th sect. 6.3 Volumes, method of shells
- Mon Nov 17th sect. 6.4 Arc Length
- Wed Nov 19th sect. 6.4 Surface Area
- Mon Nov 21st sect. 6.5 Force and Work
- Wed Nov 24th sect. 6.6 Centroids of plane regions and curves
- Fri Nov 26th sect. 6.7 The natural logarithm II
- Mon Dec 1st sect. 6.8 Inverse trig functions
- Wed Dec 3rd sect. 6.9 hyperbolic functions
- Fri Dec 5th Review
- Wed Dec 17th Final Exam