## Calculus 1 MTWF 2:00-2:50pm Fall 2003 Нickok 207

Instructor: Jonathan White
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Office Phone: 399-8280
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Text: Calculus, Single and Multivariable, $3{ }^{\text {rd }}$ Ed., Hughes-Hallett et al., Wiley

Problem Sets and Quizzes:

Assorted Problem Sets will be given throughout the term to supplement class work. Many of these will benefit from the use of the software package Maple, which is available on the computers in the labs throughout campus. Quizzes will also be given frequently. Combined these will be worth 200 points $(29 \%$ of the final grade).

Exams: There will be three exams during the course of the semester, administered during class time. The dates of these are indicated in the schedule on the back side of this sheet. These exams will be worth 100 points ( $14 \%$ of the final grade) each.

The final exam will be given at the time listed on the back side of this sheet, and will be worth 200 points ( $29 \%$ of the final grade).

Grading: Grading will approximately follow a $90 \% \mathrm{~A}, 80 \% \mathrm{~B}, 70 \% \mathrm{C}, 60 \% \mathrm{D}$ scale.
Makeups: Makeups for quizzes and exams will be allowed only under extenuating circumstances, with documentation and advance notice when possible.

This course is being taught using a text that relies heavily on the use of technology, i.e. computers and graphing calculators. It is not absolutely required that you own a graphing calculator, but it will be very helpful. Some of the assignments may require use of a graphing calculator or computer, but the computers in the lab in HH 207 will be available and more than sufficient if you don't have your own. I reserve the right to restrict what calculators are used on quizzes and exams (specifically TI 89's will not be allowed on some occasions).

Calculus is a demanding course, but the text being used heavily emphasizes understanding rather than the more traditional algebraic manipulations. Students who have in the past felt they weren't good at math might find this class more suited to them, and students who have previously found math classes easy because of an aptitude for moving symbols around might find there's more to this class than they expect. In either case, this class isn't likely to be quite what you're used to, and it might be unsettling at first. Give it some time, and feel free to take advantage of my office hours to help past the rough spots.

Tentative Sch edule

| Monday, August $25^{\text {hh }}$ Introduction | Tuesday, August $26^{\text {th }}$ <br> §1.1 Functions and Change | Wednesday, August 27 ${ }^{\text {h }}$ §1.2 Exponential Functions | Friday, August $29^{\text {th }}$ §1.3 Combining Functions |
| :---: | :---: | :---: | :---: |
| Monday, September $1^{\text {st }}$ <br> Labor Day - No Class | Tuesday, September 2 ${ }^{\text {nd }}$ §1.4 Logarithmic Functions | Wednesday, September $3^{\text {rd }}$ §1.5 Trig Functions | Friday, September $5^{\text {th }}$ §1.6 Polynomials |
| Monday, September $8^{\text {th }}$ §1.6 Rational Functions | Tuesday, September $9^{\text {th }}$ § 1.7 Continuity | Wednesday, September $10^{\text {th }}$ §2.1 Speed? | Friday, September $12^{\text {th }}$ §2.2 Limits |
| Monday, September $15^{\text {th }}$ §2.3 Derivatives at a Point | Tuesday, September $16^{\text {th }}$ §2.4 Derivative Functions | Wednesday, September $17^{\text {h }}$ §2.4 Derivative Functions | Friday, September 19 ${ }^{\text {th }}$ §2.5 Interpretations of Der. |
| Monday, September 22 ${ }^{\text {nd }}$ §2.6 Second Derivatives | Tuesday, September $23^{\text {rd }}$ §2.7 Continuity \& Diff. | Wednesday, September $24^{\text {th }}$ Review | Friday, September $26^{\text {h }}$ Exam 1 |
| Monday, September 29 ${ }^{\text {th }}$ §3.1 Powers \& Poly. | Tuesday, September $30^{\text {th }}$ §3.2 Exponential Functions | Wednesday, October $1^{\text {st }}$ §3.3 Product Rule | Friday, October $3^{\text {rd }}$ §3.4 Quotient Rule |
| Monday, October $6^{\text {th }}$ §3.5 Trig Derivatives | Tuesday, October $7^{\text {h }}$ §3.6 Chain Rule | Wednesday, October $8^{\text {th }}$ §3.7 Implicit Functions | Friday, October $10^{\text {th }}$ §3.8 Parametric Equations |
| Monday, October $13^{\text {th }}$ <br> Fall Break - No Class | Tuesday, October $14^{\text {th }}$ Fall Break - No Class | Wednesday, October $15^{\text {th }}$ §3.9 Linear Approximation | Friday, October $17^{\text {th }}$ §3.10 Local Linearity |
| Monday, October $20^{\text {th }}$ §4.1 Using Derivatives | Tuesday, October $21^{\text {st }}$ §4.2 Families of Curves | Wednesday, October $22^{\text {nd }}$ $\S 4.2$ Families of Curves | Friday, October $24^{\text {th }}$ §4.3 Optimization |
| Monday, October $27^{\text {th }}$ §4.4 Marginality | Tuesday, October $28^{\text {th }}$ §4.5 Opt. \& Modeling | Wednesday, October 29 ${ }^{\text {th }}$ §4.5 Opt. \& Modeling | Friday, October $31^{\text {st }}$ §4.6 Hyperbolic Functions |
| Monday, November $3^{\text {rd }}$ §4.7 Dif. Theorems | Tuesday, November $4^{\text {th }}$ §4.7 Dif. Theorems | Wednesday, November $5^{\text {th }}$ Review | Friday, November $7^{\text {h }}$ Exam 2 |
| Monday, November $10^{\text {th }}$ §5.1 Totals? | Tuesday, November $11^{\text {th }}$ §5.2 Definite Integrals | Wednesday, November $12^{\text {h }}$ Registration - No Class | Friday, November $14^{\text {th }}$ §5.2 Definite Integrals |
| Monday, November 17 ${ }^{\text {th }}$ §5.3 Interp. Def. Int. | Tuesday, November $18^{\text {th }}$ §5.4 Int. Theorems | Wednesday, November 19 ${ }^{\text {h }}$ §5.4 Int. Theorems | Friday, November $21^{\text {st }}$ §6.1 Antiderivatives |
| Monday, November 24 ${ }^{\text {th }}$ §6.2 More Antiderivatives | Tuesday, November $25^{\text {th }}$ §6.3 Differential Equations | Wednesday, November $26^{\text {h }}$ Thanksgiving - No Class | Friday, November $28^{\text {th }}$ Thanksgiving - No Class |
| Monday, December $1^{\text {st }}$ §6.4 Fun. Theorem of Calc. | Tuesday, December $2^{\text {nd }}$ §6.5 Equations of Motion | Wednesday, December $3^{\text {rd }}$ Review | Friday, December $5^{\text {th }}$ Exam 3 |
| Monday, December $8^{\text {th }}$ §7.1 Integration by Sub. | Tuesday, December $9^{\text {th }}$ §7.1 Integration by Sub. | Wednesday, December $10^{\text {th }}$ Review |  |

The Final Exam will be held at 11 am on Friday, December $12^{\text {th }}$.
Any students with disabilities which might affect their performance in this class should contact me as soon as possible to arrange accommodations.

The faculty has adopted a policy on academic integrity. It is your responsibility to understand and follow it.

