## Calculus 1 MTWF 2:00-2:50PM Fall 2003 Hickok 207

Instructor:	Jonathan White		
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Office:	Hickok 206A		
Office Hours:	MTWF 9:00-9:50am and by appointment		
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Home Phone:	841-5111 (between 7am and 10pm)		
Text:	Calculus, Single and Multivariable, 3rd 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% A, 80% B, 70% C, 60% 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 Schedule**

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

The Final Exam will be held at 11am on Friday, December 12<sup>th</sup>.

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.