CALCULUS 2 8:00-8:50AM/2:00-2:50PM SPRING 2003 HICKOK 307

Instructor:	Jonathan White
E-Mail:	JWhite@Coe.Edu
Web Page:	http://www.coe.edu/~jwhite/
Office:	Hickok 206A
Office Hours:	MWF 9:00-9:50am, MWF 1:00-1:50pm and by appointment
Office Phone:	399-8280
Home Phone:	841-5111 (between 7am and 11pm)
Text:	*Calculus, Single and Multivariable*, 3rd Edition, Hughes-Hallett et al.
Problem Sets & Quizzes:	There will be several problem sets and quizzes during the semester. Together these will be worth 200 points (25% of the final grade)
Exams:	There will be four in-class exams 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 (12.5% of the final grade) each. The final exam will be held during finals week at the date and time indicated on the back side of this sheet. The final will be worth 200 points (25% of the final grade).
Grading:	Grading will approximately follow a 90% A, 80% B, 70% C, 60% D scale.
Makeups:	Makeups for exams will generally be allowed only under extenuating circumstances, with documentation and advance notice when humanly possible. Late problem sets and quizzes will generally not be accepted, and if accepted due to extenuating circumstances will generally be subject to a penalty of 20% of the possible points for each day past due.

Calculus 2 is a continuation of topics introduced in Calculus 1, but with a greater depth and sophistication. The problems get bigger, and the ideas get bigger as well. Some truly interesting questions become answerable, and more aspects of the world come within reach, but the techniques involved become substantially more difficult.

The use of technology, particularly the software package *Maple*, will be an important component of the course, and most Tuesday meetings will be "Lab" sessions spent on the computers. Ability to compute with pencil and paper will also be important, as will conceptual understanding of the topics treated.

This combination of approaches and topics is likely to prove challenging, partly because few people will find that all of these aspects play to personal strengths. Don't let that be overwhelming, though, and remember that I'm around to help.

Tentative Schedule

		Wednesday January 14th §6.1 & 2 Antiderivatives	Friday January 16th §6.4 & §6.5 Motion
Monday January 19th §7.1 *u*-Substitution	Tuesday January 20th Lab: Integration	Wednesday January 21st §7.2 Integration by Parts	Friday January 23rd §7.3 Tables of Integrals
Monday January 26th §7.4 Trig Substitution	Tuesday January 27th Lab: Approximations	Wednesday January 28th Review	Friday January 30th **Exam 1**
Monday February 2nd §7.7 Improper Integrals	Tuesday February 3rd Lab: §7.8 Comparison	Wednesday February 4th §8.1 Area and Volume	Friday February 6th §8.2 Volume and Length
Monday February 9th §8.3 Center of Mass	Tuesday February 10th Lab: Slicing	Wednesday February 11th §8.4 App. To Physics	Friday February 13th §8.5 App. To Econ.
Monday February 16th §8.6 Probability	Tuesday February 17th Lab: Probability	Wednesday February 18th Review	Friday February 20th **Exam 2**
Monday February 23rd §9.1 Geometric Series	Tuesday February 24th Lab: Sequences & Series	Wednesday February 25th §9.2 Convergence	Friday February 27th §9.3 Convergence Tests
Monday March 1st §9.3 Convergence Tests	Tuesday March 2nd Lab: Convergence Graphically	Wednesday March 3rd §9.4 Power Series	Friday March 5th §10.1 Taylor Polynomials
March 8th – 12th **Spring Break, No Classes**			
Monday March 15th §10.2 Taylor Series	Tuesday March 16th Lab: Polynomial Approx.	Wednesday March 17th §10.3 Finding Taylor Ser.	Friday January 19th §10.3 Using Taylor Series
Monday March 22nd §10.5 Fourier Series	Tuesday March 23rd Lab: Fourier Series	Wednesday March 24th Review	Friday March 26th **Exam 3**
Monday March 29th §11.1 Diff. Eq.	Tuesday March 30th Lab: Slope Fields	Wednesday March 31st §11.3 Euler's Method	Friday April 2nd §11.4 Sep. of Variables
Monday April 5th §11.5 Growth and Decay	Tuesday April 6th Lab: Modeling	Wednesday April 7th **No Class** – Registration	Friday April 9th §11.7 Population Growth
Monday April 12th §11.8 Systems	Tuesday April 13th Lab: Phase Plane	Wednesday April 14th §11.9 Phase Plane	Friday April 16th §11.10 2nd Order Diff. Eq.
Monday April 19th §11.11 Linear 2nd Order	Tuesday April 20th Lab: Logistic Growth	Wednesday April 21st Review	Friday April 23rd **Exam 4**
Monday April 26th Review	Tuesday April 27th Review	Wednesday April 28th Review	

Final Exam: 2pm Wednesday 5/5/2004 (for 8am section)
2pm Tuesday 5/4/2004 (for 2pm section)

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.