CALCULUS 2   2:00-2:50PM   FALL 2005   HICKOK 307

Instructor:	Jonathan White
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Office:	Hickok 206A
Office Hours:	MWF 9:00-9:50am, MW 3:00-3:50pm and by appointment
Office Phone:	399-8280
Home Phone:	841-5111 (between 7am and 11pm)
Text:	*Calculus, Early Transcendentals*, 5th Edition, Stewart
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 (about 12.5% of the final grade) each.
	The final exam will be held during the finals week at the date and time indicated on the back side of this sheet. The final will be worth 200 points (about 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 *Maathematica*, will be an important component of the course. Ability to compute with pencil and paper will also be important, as will conceptual understanding of the topics treated.

To enter this class, each student must pass (with a score of 80% or more) a computer-administered multiple-choice "gateway" exam. You may attempt this exam as often as desired, provided that you demonstrate understanding of previous mistakes before a retake. After the third week (September 16th) grades will be lowered by 10% for each week or portion of a week without passing this exam.

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

Monday August 29th §4.10 Antiderivatives	Tuesday August 30th §5.3 The Fun. Theorem	Wednesday August 31st §5.5 u-Substitution	Friday September 2nd §6.1 Area between Curves
Monday September 5th No Class – Labor Day	Tuesday September 6th §6.2 Volumes by Washers	Wednesday September 7th §6.3 Volumes by Shells	Friday September 9th §6.4 Work
Monday September 12th §6.4 Work	Tuesday September 13th §6.5 Average Value	Wednesday September 14th Review	Friday September 16th **Exam 1**
Monday September 19th §7.1 Integration by Parts	Tuesday September 20th §7.2 Trig Integrals	Wednesday September 21st §7.3 Trig Substitution	Friday September 23rd §7.3 Trig Substitution
Monday September 26th §7.4 Partial Fractions	Tuesday September 27th §7.5 Integration Strategy	Wednesday September 28th §7.6 Tables and Computers	Friday September 30th §7.7 Approximations
Monday October 3rd §7.8 Improper Integrals	Tuesday October 4th §8.1 Arc Length	Wednesday October 5th §8.2 Surface Area	Friday October 7th §8.3 Physics Applications
Monday October 10th §8.4 Econ & Bio Apps	Tuesday October 11th §8.5 Probability	Wednesday October 12th Review	Friday October 14th **Exam 2**
Monday October 17th No class – Fall Break	Tuesday October 18th No class – Fall Break	Wednesday October 19th §9.1 Differential Equations	Friday October 21st §9.2 Euler's Method
Monday October 24th §9.3 Separable Equations	Tuesday October 25th §10.1 Parametric Equations	Wednesday October 26th §10.2 Parametric Calculus	Friday October 28th §10.3 Polar Coordinates
Monday October 31st §10.4 Polar Calculus	Tuesday November 1st §10.5 Conic Sections	Wednesday November 2nd Review	Friday November 4th **Exam 3**
Monday November 7th §11.1 Sequences	Tuesday November 8th §11.2 Series	Wednesday November 9th §11.3 The Integral Test	Friday November 11th §11.4 Comparison Tests
Monday November 14th §11.5 Alternating Series	Tuesday November 15th §11.6 Absolute Conv.	Wednesday November 16th §11.6 The Ratio Test	Friday November 18th §11.7 Strategies
Monday November 21st §11.8 Power Series	Tuesday November 22nd §11.9 Series for Functions	Wednesday November 23rd No class – Thanksgiving	Friday November 25th No class – Thanksgiving
Monday Nove mber 28th §11.10 Taylor Series	Tuesday November 29th §11.12 Applications	Wednesday November 30th Review	Friday December 2nd **Exam 4**
Monday Nov ember 5th §9.4 Exponential Growth	Tuesday November 6th §9.5 The Logistic Equation	Wednesday December 7th Review	Friday December 9th Review
Thursday December 15th – 11am – Final Exam			

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.

Diversity, in all its forms, is valuable.