

CALCULUS 2 2:00-2:50PM SPRING 2003 HICKOK 307

- Instructor: Jonathan White
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- 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, Early Transcendentals*, 4th 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 *Maple*, 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.

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, February 5 th 5.5 u-Substitution	Friday, February 7 th 6.1 Area between Curves
Monday, February 10 th 6.2 Volumes by Washers	Tuesday, February 11 th 6.3 Volumes by Shells	Wednesday, February 12 th 6.4 Work	Friday, February 14 th 6.4 Work
Monday, February 17 th 6.5 Average Value	Tuesday, February 18 th 7.1 Integration by Parts	Wednesday, February 19 th 7.2 Trig Integrals	Friday, February 21 st 7.3 Trig Substitution
Monday, February 24 th 7.3 Trig Substitution	Tuesday, February 25 th Review	Wednesday, February 26 th Exam 1	Friday, February 28 th 7.4 Partial Fractions
Monday, March 3 rd 7.5 Integration Strategy	Tuesday, March 4 th 7.6 Tables and Computers	Wednesday, March 5 th 7.7 Approximations	Friday, March 7 th 7.8 Improper Integrals
Monday, March 10 th 7.8 Improper Integrals	Tuesday, March 11 th 8.1 Arc Length	Wednesday, March 12 th 8.2 Surface Area	Friday, March 14 th 8.3 Physics Applications
Monday, March 17 th 8.4 Econ & Bio Apps	Tuesday, March 18 th 8.5 Probability	Wednesday, March 19 th Review	Friday, March 21 st Exam 2
March 24 th - 28 th Spring Break -- No Class			
Monday, March 31 st 9.1 Differential Equations	Tuesday, April 1 st 9.2 Euler's Method	Wednesday, April 2 nd 9.3 Separable Equations	Friday, April 4 th 10.1 Parametric Equations
Monday, April 7 th 10.2 Tangents & Areas	Tuesday, April 8 th 10.3 Length & Area	Wednesday, April 9 th Registration -- No Class	Friday, April 11 th 10.4 Polar Coordinates
Monday, April 14 th 10.5 Polar Area & Length	Tuesday, April 15 th 10.6 Conic Sections	Wednesday, April 16 th Review	Friday, April 18 th Exam 3
Monday, April 21 st 11.1 Sequences	Tuesday, April 22 nd 11.2 Series	Wednesday, April 23 rd 11.3 The Integral Test	Friday, April 25 th 11.4 The Comparison Tests
Monday, April 28 th 11.5 Alternating Series	Tuesday, April 29 th 11.6 Ratio & Root Tests	Wednesday, April 30 th 11.7 Strategies	Friday, May 2 nd 11.8 Power Series
Monday, May 5 th 11.9 Series for Functions	Tuesday, May 6 th 11.10 Taylor Series	Wednesday, May 7 th Review	Friday, May 9 th Exam 4
Monday, May 12 th 9.4 Exponential Growth	Tuesday, May 13 th 9.5 The Logistic Equation	Wednesday, May 14 th Review	Friday, May 16 th Review
		Wednesday, May 21 st Final Exam, 2pm	