

**Syllabus**  
**Calculus II**  
**Math 122, Section 2, CRN 28593**  
**Spring 2008**

<b>Instructor:</b>	Eric Gottlieb	<b>Meeting Place:</b>	225 Ohlendorf
<b>Office:</b>	317 Ohlendorf	<b>Meeting Time:</b>	MWF 9:00 – 9:50
<b>Office Phone:</b>	843-3723		T 9:30 – 10:20
<b>Office Hours:</b>	M – F, 10:30 – 11:30	<b>Text:</b>	<i>Calculus, 4<sup>th</sup> ed.</i>
<b>Email:</b>	gottlieb@rhodes.edu	<b>Author:</b>	Larson, Hostetler, & Edwards

**Material to be covered:** We will cover the following material from the text.

- Chapter 5, Sections 4 – 8: Review of the fundamental theorem of calculus and integration by substitution. Numerical integration. The natural logarithm as an integral. Integrals involving inverse trigonometric functions.
- Chapter 6, Sections 1 – 4: Differential equations. Graphical and numerical methods, such as slope fields and Euler’s method. Application to growth and decay, including the logistic equation.
- Chapter 7, Sections 1 – 7: Areas, lengths, and volumes. Moments, centers of mass, and centroids. Applications to work and fluid statics.
- Chapter 8, Sections 1 – 5, 7, and 8: Techniques for integration, including integration by parts, trigonometric integrals and substitution, and partial fractions. L’Hopital’s rule. Improper integrals.
- Chapter 9, Sections 1 – 10: Sequences. Series. Tests for convergence, including the integral,  $p$ -, comparison, alternating series, ratio, and root tests. Taylor polynomials. Power series and their role in describing functions. Taylor and Maclaurin series.

**Exams:** There will be three midterm exams and a final. The exams are scheduled to be given on the dates indicated below. The dates of the exams are fixed but the material to be covered is tentative and depends on our pace.

Exam	Date	Material to be covered
MT 1	Wednesday 6 February	Sections
MT 2	Friday 29 February	Sections
MT 3	Monday 7 April	Sections
Final	Tuesday 29 April at 5:30 PM in 225 Ohlendorf	Comprehensive, with extra emphasis on material not covered on earlier exams

If you know you will miss an exam, notify me in advance. I am more sympathetic to requests to take an exam early than I am to requests to take it late. In either case, you must provide a compelling reason for missing the exam with supporting documentation.

**Quizzes:** There will be approximately one quiz per week. The quizzes will normally consist of two problems worth 5 points each. The lowest quiz grade will be dropped. There will be no makeup quizzes, but students with valid excuses may be exempted from taking a quiz. It is the student's responsibility to seek exemption from a quiz. The quizzes are scheduled to be given on 14, 22, and 28 January; 4, 11, 18, and 25 February; 17, 24, and 31 March; and 14 and 21 April.

**Homework:** I will assign homework for each section but I will not collect it. It is definitely to your advantage to do the homework, however, as questions on quizzes and exams will be similar (in some cases, identical) to questions from the homework. I will answer questions about the homework at the start of each class, time permitting.

**Attendance** is not a formal part of your grade, but I am hopeful that there will be considerable two-way dialogue in class. I want you to attend class so that you can share what you know (or, perhaps more importantly, what you don't) and learn from what others have to say. Additionally, poor attendance is often an indicator for poor performance. For these reasons, I will take attendance each day. If you miss more than five classes without a valid reason, I may ask the Provost to drop you from the class.

**Projects:** There will be two written projects given over the course of the semester. Their purpose is to encourage you to learn and work independently and to practice communicating technical information in written form. The first of these will be assigned on 22 January and collected on 4 February. The second will be assigned on 11 February and collected on 25 February.

**Your Final Grade** is determined as follows:

Midterm Exams:	17% each
Project Average:	10%
Quiz Average:	17%
Final Exam:	22%

The letter equivalent of your number grade is determined as follows. These represent minimum grades in order to allow me some discretion. It is possible, for example, to receive a B while earning a total score of less than 83%. However, if you earn a score between 83% and 86%, you are guaranteed to receive a grade of B or better.

93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	<59
A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

**The Honor Code:** Violations of the honor code will be prosecuted. I reserve the right to assign a grade of 0 on any assignment for which the Honor Council finds that a violation has occurred. Please help me to keep the focus on learning and to avoid the unpleasantness invariably associated with honor council violations by adhering to the Honor Code.