MATH 106 **SYLLABUS** **SPRING SEMESTER 2004**

Text: *Calculus*, 2nd Edition, by Smith and Minton
Calculator: You are required to have a graphing calculator for this course. The TI-85 and TI-86 are recommended.
Scheduling: The reverse side of this syllabus includes a tentative schedule of assignments and exams. These details are presented as a guide. Your instructor may change the dates for each assignment and/or exam, modify the exercise list, and/or add assignments. It is your responsibility to keep track of the course details and schedule for your section.
Reading: You are expected to do the reading from the appropriate sections BEFORE coming to the class meeting in which the topic is scheduled.
Exercises: You are expected to work the assigned exercises after the corresponding material is presented in class, and BEFORE the next class meeting (lecture or recitation).
Projects and Other Assignments: This course will include a group project. Your instructor will decide on the specific requirements for your project report. There may also be other graded assignments, at the discretion of your instructor.

TAKING THE Math Placement Exam VIA COMPUTER: A picture ID will be required and calculators are allowed at the exam. Other students who need to take the math placement exam may do so through our new computerized setup. NOTE: The student must already have been admitted to UNL and entered into the course registration computer database (SIS+) to be able to take the online version of the Math Placement Exam.
Please review all policies via http://www.math.unl.edu/pi/studentResources/mathPlacementExam

NEED HELP? The Mathematics Resource Center in Burnett 106 offers free tutorial assistance.
Hours are: 12:30—8:30 p.m. Monday—Thursday;
12:30—2:30 p.m. on Friday; and
1:00—5:00P on Sunday

GATEWAY EXAM: This exam consists of 10 questions where you are asked to carry out calculations without using calculators, notes, or tables. If you need to take the Gateway again, you must go to the **Arts and Sciences College Testing Center** (Burnett 127) or other authorized testing center for a retake (picture ID required). **The final deadline for passing the Gateway is March 26, 2004.**

Special Dates:

January 23, 2004 (Friday) is the last day to withdraw from this course and not have it appear on your transcript.

March 5, 2004 (Friday) is the last day to change your grade option to or from Pass/No Pass.

April 9, 2004 (Friday) is the last day to drop this course and receive a grade of W. (No permission is required.) After this date you cannot drop this course.

The FINAL EXAM is on Wednesday, May 5, 2004
6:00 — 8:00 pm.
Exam rooms will be announced during the last week of classes.

Students are expected to arrange their personal and work schedule to allow them to take the exam at the scheduled time. Students who have conflicting exam schedules may be allowed to take an alternate final, which is always given after the regularly scheduled final. No student will be allowed to take the final exam early.

Departmental grading appeals policy: Students who believe their academic evaluation has been prejudiced or capricious have recourse for appeals to (in order) the instructor, the departmental chair, the departmental appeals committee, and the college appeals committee.

TENTATIVE SCHEDULE (note that some dates have two assignments)

Date			Section	Exercises
Jan	12	M	0.8 Preview of Calculus	p76: 4,5,10,12,16,17,25,31,37,38,44; p20: 54,55,87,89
	14	W	0.5 Trigonometric Functions	p48: 9,11,13,17,27,35,43,48,49,52,53,57,58,61,63,70,76,82
	16	F	0.6 Exponential & Logarithmic Functions	p61: 5,9,13,15,16,21,37,41,43,44,47,50,53,56,68,71,87,88
	19	M	**MARTIN LUTHER KING DAY HOLIDAY**	**NO CLASS**
	21	W	0.7 Transformations of Functions	p70: 5,8,11,16,17,18,21,27,29,31,33,43,53,55,58,59,63,66
	23	F	1.1 The Concept of Limit	p89: 6,7,11,13,18,21,22,27,32,33,35,36,42
	26	M	1.2 Computation of Limits	p100: 7,11,12,14,17,24,25,31,33,37,41,51,59,63,66
	28	W	1.3 Continuity and Its Consequences	p111: 5,8,11,14,17,23,28,29,35,38,42,53,56
	30	F	1.4 Limits Involving Infinity	p122: 8,9,10,13,16,17,18,21,24,27,36,37,41,45,51,55,58,64
Feb	2	M	Catch-up	
	4	W	2.1 Tangent Lines and Velocity	p160: 5,6, 9,1214,15,18,21,31,32,36,39,43,46,57
	6	F	2.2 The Derivative	p173: 6,7,9,12,14,15,35,38,43,46,53,54,56
	9	M	2.2 The Derivative	p173: 21-26,27,28,32,47,50
	9	M	2.3 The Power Rule	p183: 5,15,17,21,23,26,30,32,39,43,44,47,52,55,59,61
	11	W	review for exam	
	12	R	**EXAM 1**	
	13	F	2.4 The Product and Quotient Rules	p194: 6,7,9,10,13,15,17,19,43,47,48,49,
	16	M	2.5 Derivatives of Trig Functions	p203: 9,12,13,14,17,19,23,24,29,32,37,41,46,49
	18	W	2.7 The Chain Rule	p218: 5,8,10,11,12,15,18,27,29,33,34,50; Handout Sheet
	20	F	2.6 Exp and Log Functions	p211:8,10,17,18,19,26; p218:23,26,32,43,57
	23	M	2.8 Implicit Differentiation	p227: 8,9,12,13,19,20,23,24,37,53,56,57
	25	W	2.9 Mean Value Theorem / catch-up	p236: 7,9,10,25,28,31; p227: 46,47,51
	26	R	**GATEWAY EXAM**	
	27	F	3.1 Linear Approximations	p249: 7,10,13,14,19,22,27
Mar	1	M	3.1 / 7.6 L'Hôpital's Rule	p249: 33,36,39,47,50,53; p603: 7, 12, 13, 16, 23, 29
	3	W	3.3 Maximum and Minimum Values	p267: 5,8,16,33,36,41,42,44
	5	F	3.3 Maximum and Minimum Values	p267: 18,19,23,29,30,54,55,56,62
	8	M	3.4 Increasing and Decreasing Funct's	p276: 5,13,14,16,20,23,25,27,30,35,39,43,52,55,59
	10	W	review for exam	
	11	R	**EXAM 2**	
	12	F	3.5 Concavity	p284: 5,7,9,12,13,17,19,24,25,41,46,48,50,51,57,58
March 15-19			**SPRING BREAK—NO CLASS**	
	22	M	3.6 Overview of Curve Sketching	p296: 5,8,9,16,20,23,27,31,34,35,44,49,50,56
	24	W	3.7 Optimization	p306: 5,6,7,12,16,19,32
	26	F	3.7 Optimization	p306: 21,22,27,29,41
	29	M	review and catch-up	
	31	W	4.2 Sums and Sigma Notation	p340: 7,8,14,15,22,23,27,33,41
April	2	F	4.3 Area	p348: 4,5,15,16,21,22,29,31,34,37,38,41,42,47,49
	5	M	4.4 The Definite Integral	p361: 5,10,17,21,24,27,31,38,39,49-52,57,62,65
	7	W	4.7 Numerical Integration (No Simpson)	p395: 10,11,14,18,22,23,31,38,39,41ab,42ab,43ab,44ab
	9	F	review and catch-up	
	12	M	4.1 Antiderivatives	p331: 7,10,13,16,17,21,25,26,30,32,35,36,37
	14	W	4.1 Antiderivatives	p331: 41-52,55,56,60,69,71-73
	16	F	5.5 Projectile Motion	p449: 9,10,13,24,25,26,29,35,37,51,56
	19	M	review for exam	
	21	W	review for exam	
	22	R	**EXAM 3**	
	23	F	4.5 Fundamental Theorem of Calculus	p371: 7,11,15,20,25,31-40,51,52,53
	26	M	Catch-up/Review	p371: 41,44,55,56,58,62,77,80,81,83,84,85
	28	W	Catch-up/Review	
	30	F	Catch-up/Review	