Course Syllabus

NOTE: This syllabus is subject to change during the semester. Please check this syllabus on a regular basis for any updates.

Department : Mathematics **Course Title** : Calculus I

Section Name: MATH 2413 WBA

 Start Date
 : 01/18/2011

 End Date
 : 05/13/2011

 Modality
 : HYBRID

Instructor Information

Name : Margaret Street

OC Email : mstreet@odessa.edu **OC Phone** # : (432) 335-6863

Course Description

MATH 2413 Calculus I (27.0101.5919) (4-0) 4 hours

Presents a study of rate of change of functions, limits, derivatives of algebraic and trigonometric functions, integration and applications. The student will learn to select appropriate mathematical techniques and technologies and use skills in information organizing, processing, planning and problem solving. The student should be able to probe for mathematical meaning and, perhaps, describe these meanings to others.

Prerequisites/Corequisites

Prerequisite: MATH 2412 passed with a C or better.

Scans

SCANS 3, 8, 9, 11

Course Objectives

After completing this course, the student should be able to demonstrate competency in:

- 1.0 Limits and continuity
- 2.0 The derivative
- 3.0 Applications of the derivative
- 4.0 Integrals
- 5.0 Logarithmic, Exponential, and Other Transcendental Functions

SUBJECT MATTER

Chapters 1-10 in the text will be covered. Topics include applications of vectors, vector-valued function, partial differentiation, multiple integrals, and vector calculus.

HOMEWORK: Homework assignments from the textbook will be posted at <u>Homework Assignments</u>. I will assign odd problems so that you may check them in the back of the book. You should not expect to do well in the class if you do not do all of the homework problems. Homework will count 10% of your course grade.

TESTS: There will be 4 or 5 tests. You will take your tests in class and I will grade them. I will post a review and the solutions before each test. Pay careful attention to the form I use when solving problems on the review. You will be expected to use proper form on tests. Your test average will count 70% of your course grade. I will replace your lowest test grade with the grade you make on the final exam if it is higher.

FINAL EXAM: The final exam will be comprehensive and will count 20% of your course grade. The final will be taken in class just like the other tests. You must take the final exam in order to receive credit for this course.

Required Readings/Materials

a) You must purchase the following *required* readings/materials:

TEXTBOOKS: Calculus with Analytic Geometry, by R. Larson, R. P. Hostetler, and B.H. Edwards, Ninth Ed., Boston, MA, Houghton Miffin Company, 2002. ISBN: 0-618-50298-X

Course Requirements (Lectures, Assignments and Assessments)

The course will consist of homework and tests.

Summary of Assignments & Activities

Date	Section	ASSIGNMENT
TBA	1.1	Read Section
	1.2	Pg. 54: 1-17 odd, 27-39 odd
TBA	1.3	Pg. 67: 5-35 eoo, 41-55 odd, 67-77 odd
TBA	1.4	Pg. 78: 3-19 eoo, 25, 27, 33-49 odd
TBA	1.5	Pg. 88: 1-27 eoo, 33-47 eoo
TBA	2.1	Pg. 104: 5-29 eoo, 81-85 odd
TBA		Review 1

		Review 1 Solutions		
TBA		Test 1		
TBA	2.2	Pg. 115: 3-29 odd, 39-51 odd, 53a, 57, 61, 93, 95		
TBA	2.3	Pg. 126: 1-53 eoo, 67a, 83, 87, 93, 97, 99, 115		
TBA	2.4	Pg. 137: 7-31 eoo, 41-57 eoo, 69a, 73a, 103		
TBA	2.5	Pg. 146: 1-15 odd, 21, 25, 29, 45, 49		
TBA	2.6	Pg. 154: 1, 7, 13, 15, 19, 21, 23, 27, 33, 43		
TBA		Review 2 Proving 2 Solutions		
TBA		Review 2 Solutions Test 2		
TBA	3.1	Pg. 169: 1-7 odd, 21, 23, 25, 29, 27, 33		
TBA	3.2	Pg. 176: 1, 5, 11, 17, 33, 35, 39		
TBA	3.3	Pg. 186: 5, 17, 23, 29, 35, 39, 79		
TBA	3.4	Pg. 195: 11, 15, 19, 25, 27, 31, 53, 55		
TBA	3.5	Pg. 205: 3, 5, 7, 15-33 odd		
TBA	3.6	Pg 215: 1-7 all, 11, 17, 23, 25, 39		
TBA	3.7	Pg. 223: 5, 9, 11, 13, 19, 23, 29, 33		
TBA		Review 3 Solutions		
TBA		Test 3		
TBA	4.1	Pg. 255: 9-41 odd, 57, 59, 63		
TBA	4.2	Pg. 267: 1-17 eoo		
TBA	4.3	Pg. 278: 17-41 eoo		
TBA	4.4	Pg. 291: 5-25 eoo, 27-33 odd, 39, 41		
TBA	4.5	Pg. 304: 7-33 odd, 43-55 odd, 71-81 odd, 101, 103		
TBA	5.1	Pg. 329: 21, 23, 29, 45-65 eoo, 75, 77, 79, 95		
TBA	5.2	Pg. 338: 1-35 eoo, 35, 49, 53		
TBA	5.4	Pg. 357: 35-51 eoo, 57, 87-101 eoo		
TBA	5.5	Pg. 366: 37, 57, 61, 67		
TBA	5.6	Pg. 377: 5, 9, 17, 21-27 odd, 31, 41-57 eoo, 91		
TBA	5.7	Pg. 385: 1-19 odd, 23-31 eoo, 37		
TBA	J.1	Review 4		
IDA		Review 4 Solutions		
		Formulas I need to know		
TBA		Test 4		
TBA		Final Exam		

Grading Policy

Homework: 10% Tests: 70%

Final Exam: 20%

Percentage %	Grade
90+	A
80 - 89.9	В
70 - 79.9	С
60 - 69.9	D
< 60	F

Special Needs

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Learning Resource Center (Library)

The Library, known as the <u>Learning Resources Center</u>, provides research assistance via the <u>LRC's catalog (print books, videos, e-books)</u> and <u>databases (journal and magazine articles)</u>. <u>Research guides</u> covering specific subject areas, <u>tutorials</u>, and the <u>"Ask a Librarian"</u> service provide additional help.

Student E-mail

Please access your <u>Odessa College Student E-mail</u>, by following the link to either set up or update your account: http://www.odessa.edu/gmail/. **All assignments or correspondence will be submitted using your Odessa College email.**

Student Portal

Please access your <u>Odessa College Student E-mail</u>, by following the link to either set up or update your account: http://www.odessa.edu/gmail/. **All assignments or correspondence will be submitted using your Odessa College email.**

Technical Support

For Blackboard username and password help and for help accessing your online course availability and student email account contact the Student Success Center at 432-335-6878 or online at https://www.odessa.edu/dept/ssc/helpdesk_form.htm.

Important School Policies

For information regarding student support services, academic dishonesty, disciplinary actions, special accommodations, or student's and instructors' right to academic freedom can be found in the <u>Odessa College Student Handbook</u>.