MATH 2443: Calculus and Analytic Geometry IV Course Syllabus Summer I 2014

Section 170 MTWRF: 1:00 - 2:15 pm PHSC 116

Instructor: Dr. Matt McBride Office: PHSC 810 Office Phone: 325-5074 Offic Hours: TRF: 12:00 - 1:00 pm or by appointment Email Address: mmcbride@math.ou.edu Website: www.math.ou.edu/~mmcbride

Textbook: James Stewart, Calculus, 7th Edition

Prerequisites: MATH 2433

Objective: Students will expand on their understanding of the concepts of calculus to several variables. We learn how to take partial derivatives and see common applications used with them. We will see how these "new" derivatives relate to the derivative in calculus of one variable. We learn how evaluate mutiple integrals and see some geometric applications to them such as surface area. Finally we will study what is known as vector calculus and generalize the Fundamental Theorem of Calculus to tie everything together from single variable calculus and multivariable calculus.

Withdrawl Date: Through June 6th, you may drop the course and receive a W grade. Dropping the course after June 6th requires a petition to the Dean, and will result in a grade of either W or F.

Academic Honesty: The University of Oklahoma takes great pride in academic honesty, thus cheating of any kind will not be tolerated. If cheating is suspected, bad actions will be taken.

Students with disabilities: The University of Oklahoma is committed to providing reasonable accomodation for all students with disabilities. If you require special accomodation in this course you are requested to speak with the instructor as early in the

semester as possible. Students with disabilities must be registered with the Office of Disability Services prior to receiving accomodations in this course. For further information please see http://drc.ou.edu.

Homework: As with any math course, homework is a vital component. One must practice newly learned facts, theorems, etc. through the assigned homework. Homework will be assigned daily, however it will not be collected. See the quizzes section below for more details on this. Even though the homework will not be collected it is expected to be completed, as this is necessary to excel in this course.

Quizzes: There will be weekly in-class quizzes with the exception during the weeks the exams will be administered. As mentioned above, homework will be assigned daily, but not collected. Instead the quizzes will come directly from the previous week's homework. Students who have completed the homework will be able to use it on the quiz, however no in-class notes or books will be allowed. This is an incentive to do the assigned homework, plus in order to master mathematics one needs to practice it, hence homework. This can never be stressed enough.

Exams: There will be three closed book, closed notes, and closed homework in-class exams. Students will have the whole class period to take the exams. All three exams will cover roughly eight lessons, though this may be modified due to time and is left up to the discretion of the instructor.

Make-up Policy: Make-up exams and quizzes will be given **only** for reasons deemed acceptable by the instructor, and **only** with written documentation. Make-up exams and quizzes must be taken within one week of the original date, and no make-ups may be taken after the third exam. Make-up exams and quizzes are never easier than the original.

Calculator Policy: You may use a calculator when working on the homework assignments. In class and when taking exams, a calculator is not really needed, but you may, if you wish, use a simple calculator that does not have graphics capability while taking exams, just to check your arithmetic. The reason for the exclusion of graphics capability to make sure that you have the graphs of the fundamental functions like such as trigonometric, lograrithm, and exponential in your head.

Grading Distribution:

Quizzes	40%
Exams	
Total	100%

Grading Scale:

A:	100% - 90%	
B:	89% - 80%	
C:	79% - 70%	
D:	69% - 60%	
F:	$\dots 59\%$ and below	

Summer I 2014 Tentative Schedule

Note: this may be modified and is left to the discretion of the instructor.

Date	Sections Covered	Homework
Mon, May 12	Vector Review, 14.1	14.1: 9-21 odd, 45,47
Tue, May 13	14.2	14.2: 5-19 odd, 29, 37
Wed, May 14	14.3	14.3: 15-21 odd, 25-35 odd, 49,57,61,78,79
Thu, May 15	14.4	14.4: 1-5 odd, 11-15 odd
Fri, May 16	14.5	14.5: 1-11 odd, 18,21,23,27,33
Mon, May 19	14.6, Quiz 1	14.6: 5-17 odd, 21-25 odd
Tue, May 20	14.7	14.7: 5,7,13,15,31,43
Wed, May 21	14.8	14.8: 3-11 odd
Thu, May 22	15.1	15.1: 11,14,17,18
Fri, May 23	Review for Exam 1	none
Mon, May 26	no class	none
Tue, May 27	Exam 1	Covering 14.1-14.8
Wed, May 28	15.2	15.2: 3-21 odd, 27
Thu, May 29	15.3	15.3: 7,9,17,19,21,29,31,49-54 odd
Fri, May 30	15.4	15.4: 7-13 odd,25,29,40
Mon, June 2	15.7, Quiz 2	15.7: 3-17 odd
Tue, June 3	15.8	15.8: 1-11 odd, 17-23 odd
Wed, June 4	15.9	15.9: 1-13 odd, 21-27 odd, 46
Thu, June 5	15.10	15.10 1-9 odd, 15-19 odd
Fri, June 6	Review for Exam 2	none
Mon, June 9	Exam 2	Covering: 15.1-15.4, 15.7-15.10
Tue, June 10	16.1	16.1: 3,5,11,13,15,21,23,25
Wed, June 11	16.2	none
Thu, June 12	16.2	16.2: 1-15 odd, 19,21
Fri, June 13	16.3	none
Mon, June 16	16.3, Quiz 3	16.3: 3,5,7,13-19 odd
Tue, June 17	16.4	16.4: 5-13 odd
Wed, June 18	16.5	16.5: 5,7,12,13,15,17,25,28,33,34
Thu, June 19	16.6	none
Fri, June 20	16.6	16.6: 3,5,13,15,21,23,33,35,39-47 odd
Mon, June 23	16.7	16.7: 5-15 odd, 21-31 odd
Tue, June 24	16.8	16.8: 3,5,7,9,13,15
Wed, June 25	16.9	16.9: 1-15 odd
Thu, June 26	Review for Exam 3	none
Fri, June 27	Exam 3	Covering: 16.1-16.9