Syllabus Fall 2011

Calculus with Analytic Geometry 3 (MAC 2313) 4 credits

Prerequisite: Calculus I & II, with a minimum grade of C.

Instructor:	CRN:
Office: E-mail Address:	Office Hours: Phone number:
Lecture Time:	Lecture Room:
Scheduled Lab SE350 Time:	MyMathLab Plus Course ID:
Teaching Asst:	Office Hours:
Office:	Email Address:

Description: The course provides an introduction to standard techniques from multivariable calculus. The main focus is on 2- and 3-dimensional real space. In particular, after completion of the course, you should be acquainted with the basic concepts of 3-dimensional analytic geometry. You should know how to compute derivatives and integrals of vector-valued functions, and you should be able to apply basic concepts of multivariable calculus. After completion of the course, you should be acquainted with multiple integrals and vector fields, and you should be able to explain the similarities between the Fundamental Theorem for line integrals, Green's Theorem, Stoke's Theorem and the Divergence Theorem.

Objectives, Learning Outcome Goals: Upon successful completion of the course the student will be able to solve problems in the following areas and achieve the quantitative skills required for courses requiring calculus 3:

1. Vectors and the geometry of space
2. Vector-valued functions and motion in space
3. Partial derivatives
4. Multiple integrals
5. Integration in vector fields

Software: No software is required.

Materials: The required text for this course is Thomas' Calculus, Weir, Hass, and Giordano, 11th Ed., Pearson/Addison-Wesley. Calculators may be used for difficult numerical calculations on homework but will not be permitted on tests and quizzes.

Website: There is no website for this course.

Attendance Policy: Regular attendance is expected, including active involvement in all class sessions, and professional conduct in class. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations, or participation in university-approved activities. It is the student's responsibility to notify the instructor prior to any anticipated absence, and within a reasonable amount of time after an unanticipated absence.

Tutoring: Tutoring is available in PS 111, http://www.math.fau.edu/MLC.

Course Grade: There will be three homework projects $\{H_1, H_2, H_3\}$, a midterm exam X_1, a comprehensive final exam X_2 and a discussion grade D_1. The maximum number of points for each of these items is given in the following table:

Item	Max. Points
H_1	15
H_2	15
X_1	20
H_3	15
X_2	40
D_1	10

Exams will be given in class or as a take-home exam. Homework projects and take-home exams will be assigned in class and late assignments will not be accepted and graded with 0 points. The discussion score D_1 reflects your participation in class: To achieve the maximal score for D_1, regular active participation in the discussions in class is expected. Your overall grade in the course is derived from your cumulative performance as follows:

1. The lowest number of points achieved in the items $\{H_1, H_2, H_3\}$ is dropped. The points from the remaining two homework projects and from the three items $\{X_1, X_2, D_1\}$ are added, yielding a final number of points $0 \le P \le 100$.
2. Your grade is derived from P according to the following table:

Value of *P*	Grade
> 94	A
(90 – 94]	A-
(87 – 90]	B+
(83 – 87]	B
(80 – 83]	B-
(75 – 80]	C+
(65 – 75]	C
(60 – 65]	C-
(57 – 60]	D+
(53 – 57]	D
(50 – 53]	D-
< 50	F

Exams: Any grading errors or problems have to be discussed with the instructor within a week of receiving your exam grade. Students are only allowed a number 2 pencil, eraser, scientific calculator without graphic capability and a cleared memory, and a valid picture ID during a testing session. DO NOT BRING CELL PHONES, BOOKS, BOOK BAGS, NOTES, OR ANY OTHER ITEMS TO THE EXAM ROOM! *Entrance to the exam requires a valid picture identification card:* Only FAU Owl Cards, U.S. Passports, or Florida Driver's Licenses will be accepted!

Comprehensive Final Exam: Final exam time and location TBA. *You must take the final exam to receive a passing grade!*

Makeup Exams: Makeup exams will be given only under circumstances which coincide with university policy (see link below under attendance). *If you miss an exam, you must provide a written, verifiable excuse, if possible in advance of the scheduled exam*. Approval for a makeup exam must be obtained from your instructor.
http://www.fau.edu/academic/registrar/catalog/academics.php#policiesall

Academic Honesty: Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001 at
http://www.fau.edu/regulations/chapter4/4.001_Code_of_Academic_Integrity.pdf

Students With Disabilities: In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register with the Office for Students with Disabilities (OSD) and follow all OSD procedures. In Boca Raton, SU 133 (561-297-3880); in Davie, MOD 1 (954-236-1222); in Jupiter, SR 117 (561-799-8585); or at the Treasure Coast, CO 128 (772-873-3305). OSD website at http://www.osd.fau.edu.

This syllabus is subject to reasonable changes at the discretion of the instructor.