Syllabus Fall 2011

Calculus with Analytic Geometry 1 (MAC 2311) 4 credits
Calculus for Engineers 1 (MAC 2281) 4 credits

Prerequisite: MAC 1140 and MAC 1114 with a minimum grade of C, or MAC 11147 with a minimum grade of C, or a minimum score of 65 on ALEKS. Knowledge of College Algebra, Trigonometry, and Geometry is essential to succeed in calculus.

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: Topics include continuity, differentiability, differential approximation, optimization, curve sketching, transcendental and inverse functions, mean value theorem, L'Hopital's Rule, introduction to integration and development of problem-solving skills.
http://www.fau.edu/deanugstudies/NewGeneralEdCurriculum.php.

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 1:

- Limits
- Continuity
- Differentiation
- Curve sketching
- Transcendental and inverse functions
- The Mean Value theorem
- L'Hôpital's rule
- Related rates and related rates problems
- Optimization problems
- Introduction to integration, including the Fundamental Theorem of Calculus.
- The application of mathematical modeling to other disciplines and real-world problems using a variety of functions.

IFP General Education Outcomes:

1. Knowledge in several different disciplines;
2. The ability to think critically;
3. The ability to communicate effectively;
4. An appreciation for how knowledge is discovered, challenged, and transformed as it advances; and
5. An understanding of ethics and ethical behavior.

Information available at http://www.fau.edu/deanugstudies/NewGeneralEdCurriculum.php

General Education: This course satisfies, in part, the general education requirements for Foundations of Mathematics and Quantitative Reasoning.
http://www.science.fau.edu/student_services/student_info_gen_edu.php

Software: Students must purchase access to a web-based learning and assessment system called *MyMathLab Plus* either at the bookstore or directly through the website. All homework, quizzes and exams will be completed online. Students not registered online by the third week of the semester may be dropped from the course.

Materials:

- MAC 2281 - Briggs & Cochran, Calculus: Early Transcendentals (2011 Copyright) has been selected as the text book.
- Topics to be covered are attached.
- List of homework assignments is attached.

You may purchase a package including a print textbook and an access code for on-line access. Your access code will grant you access to the **on-line homework** system as well as provide you with an **electronic version of the textbook**. **It is not necessary to purchase a hard copy of the textbook unless you wish.**

Website: Blackboard (BB) http://blackboard.fau.edu with link to MyMathLab Plus.

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: For tutoring resources, visit http://www.math.fau.edu/MLC/

Course Grade: The course grade will be calculated using the following table. Grades will be posted on Blackboard. Check your grades regularly to make sure they correctly reflect your scores in the course. *Save all of your worksheets and exams or else a change in grade will not be honored*.

ALEKS	5%
Attendance and Participation	5%
Homework	10%
Four Exams 12.5% Each	50%
Final	30%
Total	100%

Students are required to take ALEKS and score above 80%. ALEKS scores are due within two weeks of the beginning of class. The QUICK QUIZ at the end of each section may provide good clicker questions for the instructor.

Exam reviews will be given on 9/19, 10/10, 10/31, 11/21 and 11/29 from 6-8pm. Room TBD.

Attendance is part of the students' grade and will be assessed. At the instructor's discretion, i-clicker may be used in this assessment.

In addition to the above, students may receive up to 5 percentage points added to their final grade for attendance at the MLC, and up to 10 percentage points added to their final grade for a class project. The standard grading plus the bonus points means a student can achieve a final average of 115%. Instructors will provide specifics on class projects. Class projects should use Maple, Mathematica, or GeoGebra. Projects to be selected and approved by instructors no later than 11/12, which is when we have completed and tested on related rates. Project presentations will be on Monday, 11/28 at time and place TBD. Overview of GeoGebra, Mathmatica, and Maple on 10/10 will be between 5-8 in room TBD and depend on the availability of professors Gibson, Locke, and Escuder on 10/10. It may be in SE 271 which is the only place we can have Maple, in which case it will be standing room.

Grading Scale:

Percentage Score:	90%–100%	85%-89%	80%–84%	76%–79%	70%–74%	60%–69%	0%–59%
Grade:	A	B+	B	C+	C	D	F

Exams: Four unit exams will be given on the days and times stated in the course calendar, in rooms to be assigned. *Every exam will count towards your final 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!

Final Exam: Duration - 150 minutes. Date, location and time will be announced in class. *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

Classroom Etiquette : Please refer to the FAU Code of Conduct available at
http://www.fau.edu/regulations/chapter4/4.007_Student_Code_of_Conduct.pdf.

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.

Included course topics are subject to reasonable changes at the discretion of the instructor.

Homework Assignments

Ch.	Assignment Name	Due
O-A	ALEKS (Offline)	
O-A	Attendance Class and Participation (Offline)	
O-A	Attendance MLC (Offline)	
O-A	Project--Including presentation (Offline)	
2	HW 2.1 2.2 2.3 2.4 (MA)	09/10/11 11:00pm
2	HW 2.5 2.6 2.7 (MA)	09/17/11 11:00pm
2	PQ E1	09/18/11 11:00pm
2	PA PQ E1	09/20/11 11:00pm
2	E1	09/21/11 10:00am
3	HW 3.1 3.2 3.3 3.4 (MA)	09/24/11 11:00pm
3	HW 3.5 3.6 3.7 (MA)	10/01/11 11:00pm
3	HW 3.8 3.9 3.10 (MA)	10/07/11 11:00pm
3	PQ E2	10/09/11 11:00pm
3	PA PQ E2	10/11/11 11:00pm
3	E2	10/12/11 10:00am
4	HW 4.1 4.2 (MA)	10/15/11 11:00pm
4	HW 4.3 4.4 (MA)	10/15/11 11:00pm
4	HW 4.5 4.6 (MA)	10/22/11 11:00pm
4	HW 4.7 4.8 (MA)	10/29/11 11:00pm
4	PQ E3	10/30/11 11:00pm
4	PA PQ E3	11/01/11 11:00pm
4	E3	11/02/11 10:00am
5	HW 5.1 (MA)	11/05/11 11:00pm
5	HW 5.2 5.3 5.4 (MA)	11/12/11 11:00pm
5, 6	HW 5.5 6.1 6.2 (MA)	11/19/11 11:00pm
5, 6	PQ E4	11/20/11 11:00pm
5, 6	PA PQ E4	11/22/11 11:00pm
5, 6	E4	11/23/11 10:00am
2-6	PQ F	11/29/11 11:00pm
2-6	PA PQ F	11/30/11 11:00pm
2-5	Final	12/04/11 6:30pm