MAC 2311: Calculus I (4 credits)  
CRN 11225 - Spring 2012

- **Class Location:** SRHM 240  
- **Meeting Times:** TR 9:00-10:45  
- **Text:** *Calculus: Early Transcendental*, James Stewart, 7th edition.  
- **Class Homepage:** http://ruby.fgcu.edu/courses/dkern/calc1(also see class page on ANGEL)

- **Instructor:** Dr. Daniel Kern, Dept of Chemistry and Mathematics  
- **Office:** AB7 224  
- **Phone:** (239) 590-1261  
- **email:** dkern@fgcu.edu  
- **Office Hours:** TR 11:00-12:00, T 2:00-3:15, or by appointment

**Prerequisite:** C or better in MAC 1147 or MAC 2157; or 87+ on Accuplacer College Level Mathematics (CLM)

**Course Description:** Introduction to the primary concepts and techniques of differential and integral calculus. Topics include limits and continuity, the derivative, differentiation and integration of algebraic and trigonometric functions, linearization of functions and differentials, Mean Value Theorem, antidifferentiation, extrema and curve sketching, area and the definite integral, and Fundamental Theorem of Calculus.

**Learning Outcomes:** Students learn calculus concepts and techniques used to analyze and investigate functions and how they change, and begin to connect these concepts with solving real world problems. In particular the concepts and skills to be mastered by the students include: limits of functions, continuity of functions, derivatives of algebraic and transcendental functions (including chain rule), using derivatives to solve applied problems, integrals of some algebraic and transcendental functions, and using integrals to solve applied problems.

**Topics:** Sections 1.1-1.3, 1.5-1.6, 2.1-2.8, 3.1-3.6, 3.8-3.11, 4.1-4.5, 4.7, 4.9, and 5.1-5.5 of the textbook. As time allows, sections 3.7 and 4.8 will also be discussed.

**Grading - Points Distribution:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
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<tbody>
<tr>
<td>Quizzes, Problem Sets</td>
<td>120</td>
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<tr>
<td>Tests (3 total)</td>
<td>300</td>
</tr>
<tr>
<td>Final Exam</td>
<td>180</td>
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<td><strong>Total</strong></td>
<td>600</td>
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Letter grades will be based on the total percentage of points earned during the semester: A(92-100%), A-(89-91%), B+(87-89%), B(80-86%), B-(77-79%), C+(74-76%), C(65-73%), D+(62-64%), D(53-61%), and F(0-52%).

**Tutoring/Extra Help:** Supplemental Instruction (SI) sessions, and free tutoring are available through the Center for Academic Achievement (CAA). Their website is http://www.fgcu.edu/CAA. Additional free tutoring is available through the Department of Chemistry and Mathematics.
Quizzes/Homework: There will be quizzes weekly. Problems are based on the homework, especially problems from the textbook. **There will be no make-up quizzes. No exceptions.** However, the lowest quiz score will be dropped. The homework sets from the textbook will be available through the class website. You are expected to be able to solve these and similar problems. Textbook homework itself will usually not be collected. You are encouraged to discuss the homework with your classmates.

Problem Sets and Groupwork: Occasionally, problem sets will be assigned; late work will not be accepted.

Tests: There will be three tests during the semester. The tentatively scheduled dates are February 7, March 1 and April 11. Graphing calculators will not be allowed on examinations. Missing the day of an exam will result in a score of zero for that exam. If you contract a major illness or have any other sudden catastrophe, please contact me ASAP; appropriate written documentation must be provided for consideration.

In order to pass the class, a score of 70% or better must be earned on the second test, which includes derivative formulas. Students who do not pass on their first attempt will have another opportunity to earn the minimum mark before the withdrawal deadline. Notes:

- Knowing and understanding the basics of derivatives is critical not only for this course, but also in subsequent courses.
- When calculating final grades of those who take the re-test, the highest score will be used.
- Passing this derivatives test does not guarantee that the student will pass the course, though it is more likely.

Final Exam: The date of the comprehensive examination will be announced in the near future.

General Policies: Attendance is expected. If you miss a class, you are responsible to obtain the missed information (such as lecture notes and handouts) from classmates. Office hours will not be used to teach a missed class. If an absence is known in advance, such as with a varsity sport or official university representation (with documentation), please contact me as far in advance as possible.

Email communication will be sent to your official FGCU issued email account (.@eagle.fgcu.edu). It is your responsibility to check your accounts often.

Cell phones, laptops, and similar devices must be turned off during class. Texting, phone calls, etc. are not permitted in class. Note-taking on tablet-style laptops is fine with instructor permission, but other uses of laptops are not. Unauthorized use of any of the above devices may result in the removal of a student from the classroom for the day.

Academic Behavior Standards and Academic Dishonesty: All students are expected to demonstrate honesty in their academic pursuits. The university policies regarding issues of
honesty can be found in the FGCU Student Guidebook under the Student Code of Conduct and Policies and Procedures sections. All students are expected to study this document, which outlines their responsibilities and consequences for violations of the policy. The FGCU Student Guidebook is available online at http://studentservices.fgcu.edu/judicialaffairs/new.html

**Disabilities Accommodations Services:** Florida Gulf Coast University, in accordance with the Americans with Disabilities Act and the university's guiding principles, will provide classroom and academic accommodations to students with documented disabilities. If you need to request an accommodation in this class due to a disability, or you suspect that your academic performance is affected by a disability, please contact the Office of Adaptive Services. The Office of Adaptive Services is located in Howard Hall 137. The phone number is 239-590-7956 or TTY 239-590-7930. No accommodations will be made without the student going through the Office of Adaptive Services.

**Student Observance of Religious Holidays:** All students at Florida Gulf Coast University have a right to expect that the University will reasonably accommodate their religious observances, practices, and beliefs. Students, upon prior notification to their instructors, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances. Where practicable, major examinations, major assignments, and University ceremonies will not be scheduled on a major religious holy day. A student who is to be excused from class for a religious observance is not required to provide a second party certification of the reason for the absence.