MAC 1147 - Precalculus (4 credits)  
CRN 80837 - Fall 2010

- **Instructor:** Dr. Daniel Kern, Dept of Chemistry and Mathematics  
- **Office:** AB7 224  
- **Phone:** (239) 590-1261  
- **email:** dkern@fgcu.edu  
- **Office Hours:** T 10:00-11:30, W 2:00-3:30, or by appointment (open door policy)  
- **Text:** *Precalculus*, Robert Blitzer, Prentice Hall/Pearson, 4th edition  
- **Class Location:** AB3 107  
- **Meeting Times:** TR 8:00am - 9:45am  
- **Class Homepage:** [http://ruby.fgcu.edu/courses/dkern/precalc](http://ruby.fgcu.edu/courses/dkern/precalc)

**Prerequisite:** C or better in MAC 1105; or 600+ on SAT Math; or 26+ on ACT Math; or 66+ on Accuplacer College Level Math (CLM)

**Course Description:** Survey of the basic properties of classes of functions commonly used in applications. Topics include trigonometry, analytical trigonometry, analytical geometry, conic sections, sequences, mathematical induction, and polar coordinates.

**Topics:** Topics are taken from sections 4.1-4.8, 5.1-5.5, 6.1-6.6, 7.3, 9.1-9.5 and 10.1-10.5 in the text. As time allows, sections 6.7 and 11.1 will be discussed.

**Learning Outcomes:** In particular among the concepts and skills to be mastered, students are expected to:

- Understand trigonometric functions in terms of right triangles and the unit circle;
- Know and use basic properties, identities and graphs of trigonometric functions;
- Solve a variety of trigonometric and inverse trigonometric equations;
- Convert points and equations between rectangular and polar form, and graph polar equations;
- Represent vectors in rectangular and polar forms, and perform basic vector operations;
- Graph complex numbers and perform basic operations, and use DeMoivre’s Theorem;
- Identify and express conics in standard rectangular form, and graph the conics; and
- Represent sequences by both the general term and recursively, including arithmetic and geometric sequences.

**Grading - Points Distribution:**

<table>
<thead>
<tr>
<th>Group &amp; Type</th>
<th>Points</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Groupwork</td>
<td>50</td>
<td>6.7%</td>
</tr>
<tr>
<td>Homework</td>
<td>100</td>
<td>13.3%</td>
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<tr>
<td>Quizzes</td>
<td>200</td>
<td>26.7%</td>
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<tr>
<td>Midterm Exam</td>
<td>200</td>
<td>26.7%</td>
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<tr>
<td>Final Exam</td>
<td>200</td>
<td>26.7%</td>
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<tr>
<td><strong>Total</strong></td>
<td>750</td>
<td></td>
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Any curve for letter grades will be based on the total points earned during the semester. If there is no curve, letter grades will be assigned based on percentage: A(92-100%), A-(90-91), B+(88-89), B(82-87), B-(80-81), C+(78-79), C(70-77), D(60-69), and F(0-59).

**Homework:** Online homework problems will be assessed weekly through MyMathLab. A course ID specific to this section will be given out in class, and will also be available on the Angel website for this class. Additionally, you will need the student access code that is packaged with the hard copy of the textbook available from the bookstore (recommended), OR you can buy access directly from the website, which is [http://www.coursecompass.com](http://www.coursecompass.com). Homework assignments will become available on the site throughout the semester. You are responsible to register online and to check for due dates; online homework is usually due on Sunday night. Additional homework will be assigned from the textbook.

*Assignments will not be accepted after the due date.* Each homework assignment has equal weight. The lowest two homework scores will be dropped. Doing the assignments is vital to being successful in the class. You are encouraged to discuss the homework with your classmates (and even your instructor). However, you are to do your own work.

**Groupwork/Worksheets:** At various time in the semester, you will given time in class to work on problem sets in groups.

**Quizzes:** Quizzes will be given at the end of each chapter (five total). There will be no make-up quizzes, but the lowest quiz score will be dropped. Problems will be based on the homework (both online and from the textbook), worksheets, class discussion and lecture.

**Midterm Exam:** The midterm exam is scheduled for October 12. Missing the day of an exam will result in a score of zero for that exam. Make-ups are very rarely granted (see General Policies).

**Final Exam:** The final exam will be held on Wednesday, December 8 at 7:30am - 10:15am in AB3 103.

**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. If an absence is known in advance, such as with a varsity sport or official university event (with official documentation), please contact me as far in advance as possible. If you contract a major illness or have any other sudden catastrophe, please contact me ASAP; appropriate written documentation must be provided for consideration, including your name and the dates missed.

Cell phones and similar devices should be set on vibrate or turned off. They must be completely turned off during exams. Texting, phone calls, etc. are not permitted in class. Note-taking on tablet-style laptops is fine, but other uses of laptops are not. Unauthorized use of such devices may result in the student being asked to leave.
**Tutoring:** Free tutoring is available through the Center for Academic Achievement (CAA), through Supplemental Instruction (SI) sessions and the Walk-In Lab. Their website is http://www.fgcu.edu/CAA, and will include a schedule shortly. Additional tutoring (and help with MyMathLab/CourseCompass) is available from the Department of Mathematics and Chemistry in the department computer lab, AB7 127.

**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.