Division of Arts and Sciences  
Department of Mathematics  
Course Syllabus

**Course Title**  
Precalculus Algebra and Trigonometry

**Course Number**  
MAC1147 CRN 11146

**Prerequisites**  
Credit level MAC 1105 Minimum Grade of C

**Credit Hours**  
4

**Contact Hours**  
60

**Class Meeting Times**  
2:00-3:40 T-Th C236

**Class Method**  
Traditional classroom course (class meets in person)

**Instructor**  
Robert(Bob) Lenich  
robert.lenich@fkcc.edu  
Office # C 212  
Office # 305-809-3528

**Office Hours**  
See attached

**Course Description**  
This course covers polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric functions and their graphs; Trigonometric identities and conditional equations; Solving right and oblique triangles; conic sections; sequence and series; Mathematical induction and the binomial theorem.

**Course Objectives**  
Upon completion of the course, the student will be able to:

1. Knowledge of polynomial, rational, exponential, and logarithmic functions and their graphs;
2. Knowledge of analytical and graphical descriptions of composite and inverse functions;
3. The ability to solve applications of the preceding (e.g. max/min problems, exponential growth and decay problems, etc.);
4. The ability to solve systems of equations by elimination or by substitution;
5. The ability to solve systems of linear equations using matrices;
6. The ability to do a partial fraction decomposition of a rational function;
7. The ability to determine the properties of simple arithmetic or geometric sequences and series;
8. Knowledge of basic trigonometric functions, relations, and their graphs;
9. The ability to manipulate, and simplify trigonometric functions and identities;
10. Knowledge of analytical and graphical descriptions of trigonometric function and their inverses;
11. The ability to use trigonometric functions and identities to find solutions of triangles;
12. The ability to solve conditional trigonometric equations;
13. Knowledge of DeMoivre's theorem and its application;
14. The ability to manipulate two dimensional vectors, their sums, differences, and dot products to solve simple applications.
STUDENT EVALUATION AND COURSE POLICIES

<table>
<thead>
<tr>
<th>STUDENT GRADE DETERMINATION</th>
<th>FKCC GRADING SCALE</th>
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<tbody>
<tr>
<td>60% 4 Tests @ 15% each</td>
<td>90-100% A</td>
</tr>
<tr>
<td>30% Highest 30 Homework Assignments @ 1% each (104 pts total)</td>
<td>80-89% B</td>
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<tr>
<td>10% Comprehensive Final Exam</td>
<td>70-79% C</td>
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<tr>
<td>100% Final Grade</td>
<td>60-69% D</td>
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<td></td>
<td>Below 60% F</td>
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REQUIRED TEXTBOOK

Precalculus Algebra & Trigonometry 9th edition

PUBLISHER

Pearson

AUTHOR

Michael Sullivan

ISBN

978-0-321-97907-0

Textbook Note

If you have a MyMathLab account with Pearson, simply engage the function that enrolls you in a new course using the CourseID lenich53022. If you have never used MyMathLab before, simply follow the directions in the following text box. Regardless of whether or not you have an access code, temporary access is free for 14 days!

Directions for Creating Your Pearson MyMathLab Account

(1) Click here: [www.pearsonmylabandmastering.com](http://www.pearsonmylabandmastering.com).

(2) Next click on “Student” under the “Register” heading at the right side of the screen.

(3) You will be redirected to a page and asked to “Enter Your Course ID”. In the field marked “Course ID” enter lenich53022. You will be redirected to a new page.

(4) If you already have an account with Pearson, enter your “Username” and “Password”. Otherwise, you will need to follow the steps after clicking on “Create”.

(5) After you complete step 4, you should be redirected to a screen that asks you to either use an access code, use a credit card or paypal, or register with temporary access. It is thus possible for each student to register for access on the first day of class. Once you have completed this step, you should be asked if you wish to go to the course and the registration should be complete!
Test/Final Exam Policies

- The use of all mobile devices is strictly prohibited during tests and the final exam. Prior to each test and the final exam, you will be notified whether or not you may use a calculator.
- Makeups for the Final Exam may be offered to students with emergencies, but only if they can provide acceptable documentation of the emergency.
- There will be no makeups for the other three tests.

Homework Policies

- To help you succeed in this course, you should do all of the MyMathLab homework assignments by the due date specified in MyMathLab.
- Homework is usually due on Sunday at midnight for the material covered during the week.
- Assignments can be completed after the due date with a 10% penalty.

Classroom Policies

- It is expected that you will attend and be present from the beginning to the end of all class meetings. Attendance will be taken at all class meetings and reported to the college as required.
- Mobile devices need to be silenced during all class meetings.
- Academic dishonesty will not be tolerated and will result in no credit for the assignment/test/exam in which it occurs, and possible notification to the Dean of Student Affairs and Accreditation.

E-mail Communication: All class e-mail communications should be conducted using your FKCC student email address. The prime responsibility for timely communications rests with you - the student.

Important Note: If I have not responded to your email or voicemail message by the end of the day after you left the message, you should assume that I did not receive it and leave another message. Email is the best means of communication with me.

Reading Assignments and Homework

1. To succeed in this course, you should do all assigned textbook readings and review class notes frequently.

Attendance Policy

1. I will monitor student attendance and participation in educational activities on a weekly basis.
2. Students who do not regularly participate in class by submitting the assignments that are due each week, or are considered absent for more than two weeks during the semester, are subject to administrative withdrawal at any time without notice.
3. An instructor may withdraw a student from courses for excessive absences and/or non-attendance up to the 70% point in the semester.

Special Needs

If you have special needs as addressed by the Americans with Disabilities Act (ADA) and need assistance, please notify the Office for Students with Disabilities at 305-809-3269 via email at: Suzy.park@fkcc.edu or the course instructor immediately. Reasonable efforts will be made to accommodate your special needs.

Community Decorum

A positive learning experience depends upon respect among all members of this classroom community. Disregard or disrespect for the process, the group or toward any individual will result in removal from the class and may result in you being dropped from the course.
**Sexual Predators**

Federal and State law requires a person designated as a “sexual predator or offender” to register with the Florida Department of Law Enforcement (FDLE). The FDLE then is required to notify the local law enforcement agency where the registrant resides, attends or is employed by an institution of higher learning. Information regarding sexual predators or offenders attending or employed by an institution of higher learning may be obtained from the local law enforcement agency with jurisdiction for the particular campus, by calling the FDLE hotline (1-888-FL-PREDATOR) or (1-888-357-7332), or by visiting the FDLE website at

www.fdle.state.fl.us/sexual_predators.

If there are questions or concerns regarding personal safety, please contact the Campus Security Officer on your campus.

**Copyright Notice**

The materials and content provided in this course are intended only for registered Florida Keys Community College students who have paid their tuition and fees to attend this course. Materials that are affected include, but are not limited to, text, still images, audio recordings, video recordings, simulations, animations, diagrams, charts, and graphs. Every effort has been made to insure these materials are not disseminated to anyone beyond those who have legally registered for this course. Download, revision, or distribution of course material with anyone other than registered classmates and the instructor is strictly prohibited.

Policies in this syllabus are subject to change if the instructor deems necessary and appropriate.

| Students are expected to familiarize themselves with FKCC Policies, which can be found in the current Student Handbook. |