INSTRUCTOR:  Professor Emeritus Donald R. Coscia

COURSE:  MAT 124 – Fundamentals of PreCalculus I

SECTION & CRN:  154 – CRN# 21032

PREREQUISITE:  Grade of C or better in MAT 111 or successful completion of three years of college preparatory mathematics or equivalent

TELEPHONES:  (631) 451-4740 Prof. Coscia’s personnel extension *5381  OFFICE: Online
             (631) 451-4263 (FAX)
             (631) 451-4270 (Mathematics Department Day Secretary)
             (631) 696-4910 (college information)

HOMEPAGE:  http://www2.sunysuffolk.edu/cosciad/

OFFICE HOURS:  Using Desire2Learn Course Messages

Copies of the departmental syllabi for all mathematics courses are available in the Mathematics Office (R352). The following items are specific requirements for this course.

COURSE OBJECTIVES:
Upon successful completion of this course, students should be able to

1. demonstrate an understanding of a mathematical function including such ideas as the range and domain of functions, symmetric functions, composite functions, and inverses of functions;
2. sketch graphs of quadratic functions and understand the zeros of such functions;
3. comprehend the significance of the fundamental theorem of algebra and be able to solve polynomial equations completely by finding the roots;
4. sketch the graph of polynomial functions;
5. sketch the graph of rational functions;
6. sketch the graph of exponential and logarithmic functions;
7. solve exponential and logarithmic equations, including compound interest;
8. understand and graph the trigonometric functions and solve applications using right triangle relationships.
STUDENT REQUIREMENTS:
The method of instruction will include reading textbooks, viewing lecture videos, daily student journal reports, weekly on-line discussions, Study Plan exercises, and topic/chapter examinations. The minimum requirements for successful completion of this course are:

1. Take all topic/chapter examinations;
2. Take comprehensive Final Examination;
3. Do all Study Plan assignments on time;
4. Complete Journal Semi-Weekly Reports 28 times for the semester;
5. Participate in weekly discussions, 5 post per week;
6. Achieve an average grade of 60% (70%, if you need to transfer the grade) or higher;
7. In addition to the course text, and supplemental materials, the TI-83/84 graphing calculator is a required part of this course; the preferred specific model is the TI-84 PLUS – Silver Edition. We will make significant use of this calculator in many of the course topics. Students who do not purchase the TI-83/84, or who decide to use a different brand or model, are still responsible for all course requirements.
8. Students are expected to use Microsoft Word and an equation editor to submit discussion posts;
9. Students will be required to install plug-ins and software for CourseCompass (Access Code packaged free with new Text package or may be purchased on-line).

COLLEGE-WIDE ATTENDANCE POLICY:
All students are expected to attend every session of each course for which they are registered. Students are responsible for all that transpires in class whether or not they are in attendance. The College defines excessive absence or lateness as more than the equivalent of one week of class meetings during the semester. Excessive absence or lateness may lead to failure in a course or removal from the class roster.

INSTRUCTOR'S ATTENDANCE POLICY:
Attending class means that a student logs into the course websites and participate in class activities (contribute to class discussions with posts addressing course content, make Journal posts, complete Study Plan exercises, take practice examinations, and take scheduled examinations are all considered class activities) at least five (5) times a week during the semester. Failure to attend class will NOT be considered withdrawn from the class under any circumstances and a student will receive a Final Course Grade as described below.

WITHDRAW POLICY:
If a student wishes to withdraw from the class, it is the student's responsibility to submit the necessary paperwork to the Registrar's Office on or before the semester's Midterm (as posted on the Suffolk Community College Academic Calendar). No W will be assigned by the instructor as it is not an academic grade, but rather an attendance status determined by the student. Lack of participation (contribute to class discussions with posts addressing course content, make Journal posts, complete Study Plan exercises, take practice examinations, and take scheduled examinations are all considered class activities) does NOT constitute withdrawing from the class. Failure to withdraw in a timely fashion will result in the student's final course grade.
grade being calculated as if the student had participated in all class activities (missing class activities receive a grade of 0 or F).

**GRADING PRACTICE:**
Each student is required to submit all topic/chapter examinations (there will be 6 topic/chapter examinations), comprehensive Final Examination, and Study Plan exercises given during the semester. There will be no make-up examinations or Study Plan exercises. Submissions of topic/chapter examinations and chapter Study Plan exercises are due by 11:59 P. M. ET on the end of the chapter due date. A grade of zero (0) will be given to any submission that is late.

The student's final average will be determined as follows:

1. Participation: 20% [NOTE: This consists of twenty-eight (28) Journal Semi-Weekly Reports for the semester and seventy (70) Discussion Board posts for the semester]
2. Six (6) Topic/Chapter Examination Average: 30%
3. One comprehensive Final Examination: 15%
4. Seven-hundred thirty-six (736) Study Plan Exercises: 35%

A student’s final course grade will be based on the student’s final average as follows:

<table>
<thead>
<tr>
<th>Final Course Grade</th>
<th>Final Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 – 100%</td>
</tr>
<tr>
<td>B+</td>
<td>89 – 85%</td>
</tr>
<tr>
<td>B</td>
<td>80 – 84%</td>
</tr>
<tr>
<td>C+</td>
<td>75 – 79%</td>
</tr>
<tr>
<td>C</td>
<td>70 – 74%</td>
</tr>
<tr>
<td>D+</td>
<td>65 – 69%</td>
</tr>
<tr>
<td>D</td>
<td>60 – 64%</td>
</tr>
<tr>
<td>F</td>
<td>Less than 60%</td>
</tr>
</tbody>
</table>

**TEXTBOOK/e-Book:**


*CourseCompass/My Math Lab Access to SCC-MAT124-Spring2011 Course ID: coscia50043*

Package - ISBN-13: 9780558706548 (Volume 1, for students only taking MAT124),

or

Package - ISBN-13: 9780321627803 (Full textbook binder ready, for students taking MAT124 & 125),

or

Package - ISBN-13: 9780321568779 (Full textbook bound, for students taking MAT124 & 125)
This textbook (new) package should come with a student access code to the website Course Compass/MyMathLab ([http://www.coursecompass.com/](http://www.coursecompass.com/)). It can be purchased at the Suffolk CCC Ammerman Campus bookstore ([http://www3.sunysuffolk.edu/Academics/bookstores.asp](http://www3.sunysuffolk.edu/Academics/bookstores.asp)). If you do not have that student access code (you purchased a used textbook), you can purchase CourseCompass access at the above website - [http://www.coursecompass.com/](http://www.coursecompass.com/).

The on-line chapter Study Plan exercises, videos, power point slides, solution guides and topic/chapter examinations are all located on the CourseCompass website. Hence, you MUST have access to CourseCompass’ SCC-MAT124-Spring2011 Course ID: coscia50043.

*Alternately*, you do not have to purchase the printed textbook and can purchase only the CourseCompass/My Math Lab access to its website, which contains an e-Book version of the textbook - [http://www.coursecompass.com/](http://www.coursecompass.com/).

**WEEKLY OUTLINE OF TOPICS:**

Please note that the Topic/Chapter Examinations you have a two (2) to three (3) day time frame to take the examination! Each one is due BEFORE 11:59 PM ET of the date due.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Approximate time (including examinations)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Introduction – Download Plug-ins, CourseCompass Tools for Success, &amp; Terminology</strong></td>
<td>2 days</td>
</tr>
<tr>
<td><strong>B. Review of Algebra</strong></td>
<td></td>
</tr>
<tr>
<td>1. linear and quadratic equations and graphs</td>
<td>2 weeks</td>
</tr>
<tr>
<td>2. simplification of expressions involving exponents and radicals</td>
<td></td>
</tr>
<tr>
<td><strong>C. Functions</strong></td>
<td></td>
</tr>
<tr>
<td>1. domain, range, intercepts</td>
<td>2-3 weeks</td>
</tr>
<tr>
<td>2. arithmetic operations and composition</td>
<td></td>
</tr>
<tr>
<td>3. graphs</td>
<td></td>
</tr>
<tr>
<td>4. inverses</td>
<td></td>
</tr>
<tr>
<td>5. special functions, absolute value, split domain, greatest integer, etc.</td>
<td></td>
</tr>
<tr>
<td>6. even and odd functions, symmetry, translations</td>
<td></td>
</tr>
<tr>
<td><strong>D. Polynomial and Rational Functions</strong></td>
<td></td>
</tr>
<tr>
<td>1. synthetic division, Remainder Theorem</td>
<td>3-4 weeks</td>
</tr>
<tr>
<td>2. Factor Theorem, Rational Zero</td>
<td></td>
</tr>
<tr>
<td>Topic</td>
<td>Approximate time (including examinations)</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Theorem, and Fundamental Theorem of Algebra</td>
<td></td>
</tr>
<tr>
<td>3. graphing polynomial functions</td>
<td></td>
</tr>
<tr>
<td>4. asymptotes and graphs of rational functions</td>
<td></td>
</tr>
<tr>
<td>5. applications</td>
<td></td>
</tr>
<tr>
<td>E. Exponential and Logarithmic Functions</td>
<td></td>
</tr>
<tr>
<td>1. exponential functions and their graphs</td>
<td></td>
</tr>
<tr>
<td>2. logarithmic functions and their graphs</td>
<td></td>
</tr>
<tr>
<td>3. inverse relationship, properties</td>
<td></td>
</tr>
<tr>
<td>4. use of logarithmic functions to solve exponential equations</td>
<td></td>
</tr>
<tr>
<td>5. applications including compound interest, growth and decay</td>
<td></td>
</tr>
<tr>
<td>F. Introduction to Right triangle Trigonometry and Trigonometric Functions</td>
<td></td>
</tr>
<tr>
<td>1. definition of trigonometric functions by right triangle relationships</td>
<td></td>
</tr>
<tr>
<td>2. Pythagorean Theorem</td>
<td></td>
</tr>
<tr>
<td>3. radian measure and trigonometric functions of any angle</td>
<td></td>
</tr>
<tr>
<td>4. standard reference angles</td>
<td></td>
</tr>
<tr>
<td>5. graphs of trigonometric functions</td>
<td></td>
</tr>
<tr>
<td>6. applications</td>
<td></td>
</tr>
</tbody>
</table>

MATHEMATICS LEARNING CENTER:
Free tutoring and use of computer software is available in the Riverhead Building, room R235, the Math Learning Center (MLC). Hours are posted on the door. You must sign in each time you use the MLC. The college and the mathematics department support the MLC. The MLC’s website is [http://www3.sunysuffolk.edu/Academics/Dept/Mathematics/MLC.asp](http://www3.sunysuffolk.edu/Academics/Dept/Mathematics/MLC.asp).

MISCELLANEOUS INFORMATION:

- Students are required to use the Discussion Board area (CourseCompass MAT124 course website) for each week. Use the Discussion Board area for discussions of course concepts with other students.
- Students are required to post on the Journal Semi-Weekly Report area (D2L MAT124 course website) 28 times during the semester. Use the Journal Report area to describe to
your Professor what activities you have accomplished in MAT 124 since the last Journal Semi-Weekly Report.

- Students are encouraged to use the Message area (D2L MAT124 course website) for private communications with the Professor. Use the Message area for private discussions of course procedures with your Professor.
- Students can use a graphing calculator (TI84 Plus Silver Edition) in the course.

**SUPPLEMENTARY READING:**
The readings associated with this course are within your textbook or e-Book. Should you decide you need additional material, do not hesitate to use alternate sources. If your post refers to a source other than your text, please indicate where it is from so that we can all have access to it.

Some possible reference materials:

- Cheryl Ooten’s Math Anxiety Videos (located on CourseCompass website as an e-Book within Tools for Success.)
  - Watch Re-Frame and Neutralize Negative Math Thoughts.
  - Watch Multiple Intelligences and Math.
  - Watch Flow with Math.
  - Watch Tackling Test Tremors--Before the Test.
  - Watch Tackling Test Tremors--During the Test.
  - Watch Tackling Test Tremors--After the Test.

- The Student’s Solution Manuals for your text (located on CourseCompass website as an e-Book within Tools for Success.)
- Graphing Calculator Reference Card for help using your Graphing Calculator (located on CourseCompass website within e-Books Tools for Success.)
- Graphing Calculator Tutorial to learn basic TI calculator functions (located on CourseCompass website within e-Books Tools for Success.)
- PowerPoint slides associated with your text (located on CourseCompass website within e-Books Tools for Success.)
- Camtasia Section Videos provide section-by-section PowerPoint presentations, which include voice over instruction recorded using Camtasia by Mike Sullivan over a semester in his classroom (located on CourseCompass website within e-Books Tools for Success.)
- Chapter Test Prep Videos associated with your Chapter Tests at the end of your textbook’s chapters (located on CourseCompass website as within the Multimedia Library section.)
- Section Video Lectures associated with your text (located on CourseCompass website as within the Multimedia Library section.)