Course: MAT111- Algebra II  
CRN #23150/23995  
Instructor: T. Koukounas  
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Office Phone: 548-2670  
Email: koukout@virtulacampus.sunysuffolk.edu (Access via D2L only)

DESCRIPTION:

Continuation of study of basic concepts of algebra. Topics include brief review of elementary algebra, solutions of second-degree equations, radicals, complex numbers, rational expressions, polynomial expressions, rational exponents and roots, systems of equations and inequalities

OBJECTIVES:

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

1. Solve the following types of equations: linear equations, quadratic equations, absolute-value equations, equations involving rational expressions, equations involving radicals, systems of two equations in two unknowns, systems of three equations in three unknowns;

2. Solve the following types of inequalities: linear inequalities, absolute-value inequalities, systems of linear inequalities in two variables;

3. Graph the following: lines, parabolas, linear inequalities in two variables;

4. Perform the elementary operations on the following: polynomials, rational expressions, complex numbers, radicals;

5. Simplify algebraic expressions including: reducing to lowest terms; complex fractions; algebraically rewriting results using basic definitions, laws of exponents, distributive law, factoring, and other basic properties of real numbers; rationalizing the denominator;

6. Set up and solve word problems which apply linear equations, quadratic equations, equations involving rational expressions;

7. Interpret the basic relationships linking linear equations and linear inequalities in two variables, and parabolic equations to their graphs such as: solution sets, slope, parallel and perpendicular lines, forms of equations of lines, x-intercepts, y-intercepts, intersection of lines.
Procedure for Accomplishing These Objectives:

For each module, the reading material, mini-lesson, discussion where appropriate, homework assignment, and quiz directions will be posted on the D2L site. Each student must log onto D2L for each module to get the lesson for that module. Each module on D2L represents a chapter in the text. It is up to the student to make sure they are doing the appropriate assignment for each module/chapter. The textbook we are using has an online component called MATHXL found through www.mathxl.com. For each module, the student will be required to access mathxl for video lessons for each objective. Each student will be expected to participate in discussions by either asking relevant questions or responding to questions posed by I, the instructor or by other students in the class.

Grading

Grading will consist of the assessments listed below. There will be homework to be submitted for each section, a quiz for some section(s), and Chapter Exams. A final exam will be available the last week of the semester (see academic calendar). Grading will be determined by the following distribution:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework/ D2L login and Correspondence(Attendance)</td>
<td>30%</td>
</tr>
<tr>
<td>Section Quizzes / Weekly Updates</td>
<td>15%</td>
</tr>
<tr>
<td>Chapter Exams</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

The last day to officially withdraw from the class is 3/23/09. Thereafter, permission is essential and you must file necessary paperwork if that is granted. I do not assign any W grades at the end of the semester.
Attendance and Student Requirements for Completion of the On-line Course:

1. For each chapter, you must access D2L and open the module the class will be working on. The assignment for each module (chapter) as well as the due date will be posted there.

2. Access mathxl and complete the assignment as requested on D2L. This is where your video lessons, homework and Chapter Exams are to be completed.

3. Regular attendance is mandatory. Attendance is determined by the level of correspondence and time spent on each chapter through D2L and mathxl. You should expect to spend no less than four (4) hours per week on-line. This is addition to the time spent on doing and studying the material.

4. Weekly Updates are mandatory and count as your attendance for the week. Since our weeks will begin on Monday, you are required to post your weekly update by each Sunday. Guidelines and suggestions for the updates are given in the “Discussion” area.

4. You will need to keep up with each module, as late assignments will not be accepted.


This is the textbook I will use for this class. Since mathxl includes selected textbook pages, you have the option of purchasing only the access code to mathxl and use the electronic version of the textbook pages available that comes with your mathxl access code. If you decide to go this route, I would also recommend any Intermediate Algebra textbook that you can refer to. You can find used and older editions of a textbook for a reasonable price on many internet sites.

DO NOT purchase the MYMATHLAB kit that also includes mathxl. You need the stand-alone MATHXL student access kit that is bundled with the textbooks at the Eastern campus Bookstore. The mathxl access code can also be purchased separately from the text at www.mathxl.com.

TOPICS TO BE COVERED

Topics/Activities
1.1, 1.2, 1.3, 1.4
2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7
3.1, 3.2, 3.3, 3.4, 3.5
4.1, 4.2, 4.3,
5.1, 5.2, 5.3, 5.4, 5.5
6.1, 6.2, 6.3, 6.4, 6.5
7.1, 7.2, 7.3, 7.4, 7.5
8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7
9.1, 9.2, 9.3, 9.4, 9.5, 10.1, 10.2
Final Exam