NEW JERSEY CITY UNIVERSITY
MATHEMATICS DEPARTMENT
ACADEMIC FOUNDATIONS
MA098 ALGEBRA FOR COLLEGE

Semester __________________Section _____________
Instructor _________________Phone _______________ (Adjuncts enter 201-200-3201)
Office Hours ________________ Office_________ (Adjuncts indicate availability)
E-Mail Address________________________ (Especially helpful for adjuncts)


I. Description
   Contents: This course is an introduction to algebra which concentrates on graphic representation, problem solving, and the use and manipulation of polynomials and other algebraic expressions to model and interpret real-life situations. The central themes are the applications of linear and quadratic relationships.
   Credits: Algebra for College is a 4 (non-college) credit course.
   Placement: Placement into this course is determined by the results of Academic Advisement Placement Testing, by the results of the Math Department Confirming Exam, or by a customized test with the Math Chair. The last two options are at the discretion of the Mathematics Chair or the Mathematics Department Academic Foundations Coordinator, Dr. Chen.
   Withdrawal Policy: Withdrawal from this course requires special permission from the Dean of Arts & Sciences.
   Prerequisite: Successful completion of Ma 095 (Basic College Math), or equivalent.

II. Goals
   1. To improve the students’ ability to simplify and evaluate algebraic expressions.
   2. To increase the students’ ability to solve and graph linear equations and inequalities.
   3. To reinforce students’ knowledge of polynomials, roots and graphs.
   4. To increase students’ knowledge of operations on polynomials.
   5. To introduce methods of solving and graphing quadratic equations.
   6. To increase the students’ ability to apply algebraic skills to reading problems.
   7. To prepare students for Intermediate Algebra or Fundamentals of Math.
   8.

III. Contents
   • Linear Equations and Inequalities with applications
   • Exponents and Polynomials with applications
   • Polynomials and Factoring with Applications
   • Systems of linear Equations and their applications
   • Radicals and their applications
   • Quadratic Equations with Applications
IV. Evaluation

There are TWO ways to pass this course. The first way is the module tests way. There will be three of these at approximately equal intervals. Each test will have 15 problems worth one point each. Partial credit will not be given. Calculators may be used. All work must be shown. Each module test covers the material since the previous test. The second way for a student to pass the course is by taking a final exam. Each of 25 problems is worth one point. Partial credit will not be given. Calculators may be used. **You may pass the course either way. Those who pass by the module method do not have to attend class after that point and they do not have to take the final. Students who fail by the module method will still be allowed to take the final; and if they pass the final they pass the course. Instructors may not impose additional requirements for passing this course.** You are responsible for learning all the course material, as indicated on the syllabus.

**Starting spring 2011, we will count homework towards the grading system.** The following table indicates how the students are to be graded based on their cumulative scores:

<table>
<thead>
<tr>
<th>Module 1</th>
<th>Module 2</th>
<th>Module 3</th>
<th>Homework</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td>30%</td>
<td>30%</td>
<td>10%</td>
<td>90%</td>
</tr>
</tbody>
</table>

For AFC, there are total of 310 homework problems assigned. Here is the grading grid:

(1) For homework part:

<table>
<thead>
<tr>
<th>Points</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td># of homework problems done</td>
<td>31</td>
<td>62</td>
<td>93</td>
<td>124</td>
<td>155</td>
<td>186</td>
<td>217</td>
<td>248</td>
<td>279</td>
<td>310</td>
</tr>
</tbody>
</table>

(2) To calculate the average, use \((M1 + M2 + M3) \times 90\% + \text{points of homework} \times 40\%\), where M1, M2, M3 mean the scores of Module 1, Module 2 and Module 3.

(3) Then use the average to give the letter grade according to the following table:

<table>
<thead>
<tr>
<th>Score</th>
<th>0 – 31</th>
<th>32 – 33</th>
<th>34 – 35</th>
<th>36 – 37</th>
<th>38 – 39</th>
<th>40 – 41</th>
<th>42 – 43</th>
<th>44 – 45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>student must take final exam</td>
<td>C</td>
<td>C+</td>
<td>B-</td>
<td>B</td>
<td>B+</td>
<td>A-</td>
<td>A</td>
</tr>
</tbody>
</table>
Students who do not pass through the modules must take the final exam. This is how they are to be graded:

(1) To calculate the average, use $F \times 90\% + \text{points of homework} \times 20\%$, where $F$ means the score of final.

(2) Then use the average to give the letter grade according to the following table:

<table>
<thead>
<tr>
<th>Score</th>
<th>0 – 14</th>
<th>15 – 17</th>
<th>18 – 19</th>
<th>20 – 22</th>
<th>23 – 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>R or F</td>
<td>C</td>
<td>C+</td>
<td>B-</td>
<td>B</td>
</tr>
</tbody>
</table>

- The **R** is for students taking the course for the first time who did not pass. Students who receive a grade of R will be required to repeat the course the next semester.
- The **F** must be given to any students who repeated the course and did not pass. Such students are subject to dismissal from the university regardless of GPA.
- Approval of **W** comes by recommendation from the instructor and the AF Coordinator to Dept Chair, then to Dean A&S, and finally to the registrar. W’s are not to be given except in exceptional circumstances in AF courses.
- Students who did not pass by the module method could not get grade higher than B by taking the final exam.
- Students who passed the module tests and still want to take the final can not get grades higher than B.
- **The module tests will be given on the following dates in this class:** __________

V  **Test method**

Starting from spring 2008, we adopted the mymathlab for all the module tests and final. In order to use mymathlab, you **must** have a password. Please be aware of the following situation:

1. If you buy the used book, the cost is approximately $82. That price does not cover the password. And you need to buy the password for $75 online at mymathlab.com or through the university bookstore.

2. If you buy the new book, the cost is approximately $109. The password is bundled with the new book for free. (This is a better deal than the used book + password combination)

VI  **Attendance**

Any student who is absent for 6 class hours without acceptable documented reason will **NOT** be allowed to take the final.

All the module tests and final MUST be taken in the lab. If you take it somewhere else, your grade will **NOT** be counted.
VII Tutoring

Free tutoring is available for this course. Information is available at K-506.

Revised Jan, 2012