Math 1111 – College Algebra – 3 Credit Hrs
Section 12, Spring 2015
TTh 11:00-12:20 pm Boyd rm. 303

Instructor: Mr. Ricky Johnson
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Office Hours: M-F 10:00-12:00; M 2:00-4:00; T 1:00-3:00; or by appointment

Prerequisites: None.

Course Description: This course is a functional approach to algebra that incorporates the use of technology. Emphasis will be placed on the study of functions, and their graphs, inequalities, and linear, quadratic, piece-wise defined, polynomial, rational, exponential and logarithmic functions. Appropriate applications will be included.

Text: Precalculus (5th edition) by Robert Blitzer, Pearson/Prentice-Hall

Required Resources: Students will need to register at MyMathLab.com and purchase an access code for this course in order to work the required homework problems. This can be purchased either at the UWG bookstore or online at the website. Instructions on how to enroll in MyMathLab.com are on courseDen at https://westga.view.usg.edu. Note, an access code also grants access to additional practice problems, study aids, and an online version of the textbook. (Use course id: johnson42973 to enroll on MyMathLab.com).

Calculator: You will need a graphing calculator. Calculators equivalent to the TI-83, 84, 85, and 86 will be allowed on exams as well as scientific calculators. Cell phone calculators, the TI-89 and other equivalent calculators will not be permitted.

Learning Outcomes: Students will be able to demonstrate:
1. An understanding of the equations of circles and lines
2. An understanding of functions and how to graph functions
3. An understanding of operations on functions including function composition
4. An understanding of polynomial graphs, including intercepts and end-behavior
5. An understanding of how to find the zeroes of a polynomial and how to factor polynomials
6. An understanding of inverse functions and how to find them graphically and algebraically
7. An understanding of the properties of exponential and logarithmic equations
8. An understanding of how to solve exponential and logarithmic equations
9. An understanding of how to solve a system of equations

Attendance: Attendance is mandatory and is important in order to do well in this course. Roll will be taken at every class. If you are late and miss the roll, you are absent. You
will be allowed 3 unexcused absences. After the third, 1% will be deducted from your overall grade for each unexcused absence for up to a maximum of 4%. An unexcused absence is any absence other than one where you have documentation for an illness or a sponsored university event (e.g. athletes). If you miss a class you are still responsible for all material you may have missed including lecture notes, announcements, and assignments.

**Grading Policy:** Final grade will be based on the following scale:
(A=90-100%, B=80-<90%, C=70-<80%, D=60-<70%, F=<60%)

<table>
<thead>
<tr>
<th>4 Tests</th>
<th>46%(11.5 % each)</th>
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<tbody>
<tr>
<td>Test 1 Tuesday, January 27</td>
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<tr>
<td>Test 2 Thursday, February 19</td>
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<td>Test 3 Thursday, March 26</td>
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<td>Test 4 Tuesday, April 14</td>
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<tr>
<td>Attendance</td>
<td>4%</td>
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<tr>
<td>MyMathLab Homeworks</td>
<td>15%</td>
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<tr>
<td>Assignments</td>
<td>10%</td>
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<tr>
<td>Final (Comprehensive) Tues, April 21</td>
<td>25%</td>
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<tr>
<td>Total</td>
<td>100%</td>
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**Test Policy:** The test dates are tentative and are subject to change. You will need a scantron form for each test and the final. Make-up tests will only be given for students with a documented excused absence. In that case, students should contact the instructor in advance, if possible, to reschedule the make-up test. Note, that make-up tests will usually be more difficult. There will be no make-up final exam.

**MyMathLab Homeworks:** There will be a homework set on the mymathlab.com website for each section covered in the text. Once you have an account you will see instructions on how to complete the homework sets and their due dates. Generally, they will be due on the date of the test which covers them. (See courseDen for MyMathLab enrollments.)

**Assignments:** In addition to the mymathlab homework sets mentioned above, there will be approximately 6-8 assignments to be written up and turned in. The lowest assignment grade will be dropped. These will be similar to the homework sets but will include application problems. Late assignments will not be accepted for ANY reason. If you anticipate missing a class to turn in an assignment, you may turn it in early.

**Practice Problems:** In addition to the assignments and MyMathLab homework sets, practice problems will be assigned from the text. They will be announced in class as well as listed on courseDen. These will not be graded and not required to be turned in. However, it is strongly suggested that you work as many of them as you can. They are designed to prepare you for the tests and final exam.
Other Course Policies:
1. I use courseDen to record grades, announcements, assignments, practice problems.
2. Cell phones should be set to an inaudible setting or turned off.
3. All electronic correspondence between student and instructor should be by way of your UWG email account.
4. Arriving late and leaving early is discouraged as it is distracting and disrespectful.
5. You need to be prepared to study a minimum of 6-8 hours every week outside of class in order to do well in this course.
6. Additional course policies:  http://tinyurl.com/UWGSyllabusPolicies

Disabilities: Students with documented disabilities (through West Georgia’s Disability Services) will be given all reasonable accommodations. Students must take the responsibility to make their disability known and request academic adjustments or auxiliary aids. Adjustments needed in relation to test-taking must be brought to the instructor’s attention well in advance of the test (at least one week prior).

Important Dates:
January 5-January 11:  Drop/Add and late registration
January 19:  MLK Holiday (no classes, offices closed)
February 27:  Last day to withdraw with a grade of W
March 16-20:  Spring Break (no classes)
April 16:  Last Day of Class
April 21:  Final Exam Tuesday 11:00 am -1:30 pm

The following sections of Blitzer’s book will be covered:

P.2  Exponent and Scientific Notation
P.3  Radicals and Rational Exponents
P.5  Factoring Polynomials
P.6  Rational Expressions
P.7  Equations
P.9  Linear and Absolute Value Inequalities
1.2  Basics of Functions and their Graphs
1.3  More on Functions and their Graphs
1.4  Linear Functions and Slope
1.5  More on Slope
1.6  Transformations of Functions
1.7  Combinations of Functions, Composite Functions
1.8  Inverse Functions
1.9 Distance and Midpoint formulas, Circles
2.1 Complex Numbers
2.2 Quadratic Functions
2.3 Polynomial Functions and Graphs
2.4 Dividing Polynomials
3.1 Exponential Functions
3.2 Logarithmic Functions
3.3 Properties of Logarithms
3.4 Exponential and Logarithmic Equations
3.5 Exponential Growth and Decay
7.1 Systems of Equations in Two Variables

If time permits:

7.2 Systems of Nonlinear Equations