Summer 2012

MAT 032
Intermediate Algebra

Section 102 & Section 301
Monday & Wednesday
11:30 AM – 2:15 PM
T 104 (Wye Mills) & Room 105 (Cambridge Center)

Instructor
Matt Pantusa
Desk phone: 410-822-5400 ext. 2319
Email address: mpantusa@chesapeake.edu
Academic Instruction Emergency Management Plan

In the event that Chesapeake College needs to close for an extended period of time due to a flu pandemic, severe weather event, or other emergency situation, consideration will be given to the timing and duration of the closure as follows:

1. Closure during the semester for up to one week – there will be an opportunity to make up work missed without significant alteration to the semester calendar.
2. Closure extending beyond one week (or in situations where classes are cancelled on the same days/evenings over multiple weeks) dates, and/or the processing of final grades might be impacted.

Students can acquire information about closures on the College website or by calling 410-822-5400 or 410-228-4360. Chesapeake College courses held at off campus sites will follow the protocol of the host facility.

(Adapted from Memorandum to Members of the Adjunct Faculty, July 30, 2009, Office of Academic Affairs, Dr. Kathryn Barbour, Vice President for Academic Affairs & Economic Development)

Department of Education Policy – Effective July 1, 2011: An amount of work represented in intended learning outcomes and verified by the evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class students work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or
2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

Middle States, our accrediting body, is required to verify this.
I. Office Hours:

I will be in the LRC/Multi Service Center before our classes. I will be in Wye Mills Mondays and in Cambridge Wednesdays. You can email me at mpantusa@chesapeake.edu and call me by phone at 410-822-5400 ext. 2319 (Wye Mills LRC), and ext. 2601 (Cambridge Multi Service Center).

II. Course Description:
A continuation of beginning algebra. Topics include systems of equations and graphs, polynomials in several variables, fractional expressions and equations, radical expressions and equations, quadratic equations, and inequalities. Class notes will be posted on Angel for students to print before classes. This course is three hours per week. 3 load hours, 0 credits

Prerequisite: Appropriate score on placement test or C or better grade in MAT 031.

In order to comfortably succeed in MAT 032 you will need to be proficient in the following skills which are covered in MAT023 and MAT031. If you need to brush up on any of these skills, refer to earlier chapters in your textbook or get help immediately!

- Solving equations and inequalities
- Graphing equations and inequalities
- Exponents and polynomials
- Solving systems of equations

III. Textbook and “MyMath Lab” folder:
MyMath Lab is required for this class.

MyMathLab Course Number: pantusa77144

IV. Introduction:
This course, Intermediate Algebra, is approximately equivalent to the second year of high school algebra and is the second of two sequential courses in algebra taught at Chesapeake College in preparation for college level mathematics courses.

In addition to the lectures, the average student should plan to spend six hours outside of class each week (2 hours for every hour spent in class). Students whose background in mathematics is below average, or who normally work at a slower than average pace, should schedule more time in order to keep up with the course materials.
If you find you need help:
1. Meet with the instructor to get one-on-one help.
2. Take advantage of the Academic Support Centers on both campuses. You can “drop in” for help on math whenever a math tutor is available. Check for posted tutoring hours.
3. If you anticipate needing much help during the semester, you may apply for an hour-long weekly tutoring session, but you must apply early in the semester as scheduled tutoring is limited. See our STUDENT SUPPORT SERVICES Office in the Academic Support Center in the LRC as soon as possible.

NOTE: College policy prohibits children from accompanying parents to class.

V. Attendance:
Students whose attendance is sporadic often do not do well because of the nature of the course. In addition, since in-class activities constitute 10% of the student’s final grade, it is for the benefit of each student to be present at every class session. Most students need guidance in understanding the procedures involved in developing a new mathematical process. If you find yourself unable to keep up with the class, make an appointment to see me outside of class time. It is the student’s responsibility to make up any work missed due to an absence for any reason.

MyMathLab Course Number: pantusa77144

VI. Grades:
This course consists of all or parts of chapters 6, 7, 8 and 9 in the assigned textbook. The following syllabus outlines in detail the material, which will be presented from each of the chapters and the intended order of presentations. The numerical final course grade will be computed as indicated in the following distribution, and letter grades will be assigned as follows.

<table>
<thead>
<tr>
<th>Components of Final Grade</th>
<th>Letter Grade</th>
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<tr>
<td>In-Class Quizes</td>
<td>A: 90% - 100%</td>
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<td>Homework (On-line)</td>
<td>B: 80% - 89%</td>
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<td>Test Average</td>
<td>C: 70% - 79%</td>
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<td>#Final Examination</td>
<td>*F: less than 69%</td>
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* please note that there are no “D” grades given in any developmental class.

VII. Testing:
Dates for the tests will be announced. It is my intention to give four “unit” tests during the semester plus the final exam at the semester’s end. Each “unit” test will cover material presented since the previous test, and the final exam will be cumulative on Wednesday, August 1, 2012.
Students are expected to **be present** for class on **test days**! A separate make-up test will be given only for an Extreme emergency. The instructor reserves the right to request documentation before a make-up test is prepared. It is my intention to give quizzes daily. There will be no opportunities to make up a missed quiz.

If you are absent prior to a scheduled test, you will still be expected to take the test at the scheduled time and are expected to contact a classmate or me in advance to obtain the information required to prepare for the test.

VII. **Classroom Etiquette:**

It is assumed that all students will respect each other’s rights to fully participate in the discussion of the day. To that end, it is expected that students will not engage in behaviors that distract not only the instructor but also their fellow classmates. Students who engage in activities such as talking to each other, talking on cell phones or text messaging, leaving class for non-emergency needs, will be asked to leave. If you are unlucky enough to be one of these students, you will be required to meet with me prior to returning to class. I expect that all of my students will behave in an adult, respectful, and professional manner.

**Homework Guidelines**

In order to effectively learn mathematics, you must be prepared to work the problems for yourself. No amount of watching someone else perform mathematical manipulations will allow you to fully understand the process. Homework is to be done by you individually. If a student is caught copying someone else’s homework, the instructor reserves the right to count that assignment as a zero.

Homework assignments for this class will be assigned and completed using the MyMathLab. They will be discussed at each class meeting. Please come to class with questions and or comments about the homework. It is expected that each student will be able to solve ALL of the exercise problems in each section covered.

**After each class, you will need to complete the section(s) assignments from the book that were covered in class.**

**Please note the "cut-off" date for each assignment in My Math Lab.**

**MyMathLab Course Number: pantusa77144**

Acceptable homework will be completed online by the due dates announced posted. Late homework is not productive for either one of us.
Although you will be tested on the subject matter of each chapter, tests for specific sections may be combined so as to maximize course effectiveness. A brief description of the objectives for each chapter is detailed on the following pages. After completing each chapter, students should be able to accomplish the following:

**CHAPTER OBJECTIVES**

**Chapter Six – Factoring Polynomials**

**Objectives:**
- a) Factor the greatest common factor from polynomials
- b) Factor four term polynomials by grouping
- c) Factor trinomials
- d) Factor special products
- e) General strategy for factoring
- f) Solving Quadratic Equations by factoring
- g) Applications of Quadratic Equations

**Chapter Seven - Rational Expressions**

**Objectives:**
- a) Evaluate rational expressions
- b) Simplify rational expressions.
- c) Multiply and divide rational expressions
- d) Add or subtract expressions with the same denominator.
- e) Add or subtract expressions with different denominators.
- f) Solve equations containing rational expressions.
- g) Use tables to solve problems involving work and motion.
- h) Solve applications involving direct and inverse variation.
- i) Simplify complex fractions.
Chapter Eight - Roots and Radicals

Objectives:
- a) Simplify radicals
- b) Find the square, cube and n\textsuperscript{th} roots.
- c) Use the rules for exponents to simplify expressions that contain rational exponents.
- d) Adding and Subtracting radicals.
- e) Multiplying and Dividing radicals.
- f) Rationalize denominators.
- g) Solve equations containing radicals.

Chapter Nine - Solving Quadratic Equations

Objectives:
- a) Use the Square Root Property to solve quadratic equations...
- b) Solve quadratic equations by completing the square.
- c) Use the Quadratic Formula to solve quadratic equations.
- d) Determine the number and types of solutions by using the discriminate.
- e) Solve problems involving variation.
- f) Graph quadratic equations of the form \( y = ax^2 + bx + c \).
REVIEW MATERIAL FOR FINAL EXAMINATION

The Final Examination for this course consists of computational problems. The problems are similar to those that you have worked to complete each chapter. One way to review all of the material from this course is to work the Summary Exercises located at the end of each chapter. These highlights review the major definitions and concepts of the chapter, and an example of each concept is presented. If you have any difficulties you should review that section of the chapter more thoroughly. If you have any questions please get them answered before the scheduled final exam date.

The following is a partial list of the tasks that may be included on the Final Examination.

- Add, subtract, multiply and divide rational expressions
- Solve rational equations
- Solve all types of equations.
- Solve absolute value equations and inequalities.
- Graph linear, nonlinear and quadratic equations.
- Solve systems of linear equations by various methods.
- Solve applications problems that involve systems of linear equations.
- Simplify radicals.
- Add, subtract, multiply, and divide radicals.
- Simplify expressions containing fractional exponents.
- Solve radical equations.
- Solve quadratic equations by various methods.
- Solve application problems that contain quadratic equations.

GOOD LUCK! - STUDY HARD!!
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