Course: Math 101 Introduction to College Algebra Spring 2016
Prerequisites: 1) Math placement exam
2) Ability to memorize
including MyMathLab
Instructor: Joseph Erickson
Office Hours: T Th F 1:00 – 2:00 pm (No appointment needed) Office: Lippitt 102C
By appointment for other days/times.
Email: joseph_erickson@uri.edu

Course Description (3 credits): This course in college algebra provides an introduction to algebraic manipulation, and solving equations and inequalities in one variable. Also covered are plotting points and graphing elementary functions, interpreting and expressing mathematics. It is intended for STEM majors who are not prepared to take MTH 111. This course does not satisfy the general education math class requirement.

Course Objectives: To become proficient in algebra, in order to build a firm foundation in preparation for MTH 111. MTH 111 requires a C- or better in MTH 101.

Learning Outcomes:
1. Perform arithmetic operations on polynomials using the rules of exponents.
2. Factor using GCF, difference of two squares, sum/difference of two cubes, trinomials and grouping. Solve quadratic equations by factoring.
3. Perform arithmetic operations on rational and radical expressions and functions.
4. Solve rational and radical equations and solve quadratic equations by the quadratic formula.
5. Solve relevant applications (exponents, quadratic equations, rational expressions).

Sakai: I will use Sakai for your grades, announcements and various resources. You will get an email when I post anything to Sakai. Please check your URI email and Sakai frequently.

Grading:
1. Assessments
   a. Online Homework 15 %
   b. 4 Closed Book/Notes Tests 45 %
   c. In Class Assignments and/or Project 15 %
   d. 1 Cumulative Final 25 %
2. Final Grade
   a. A 94 – 100
   b. A- 90 – 93
   c. B+ 87 – 89
   d. B 83 – 86
   e. B- 80 – 82
   f. C+ 77 – 79
   g. C 73 – 76
   h. C- 70 – 72
   i. D+ 67 – 69
   j. D 60 – 66
   k. F 59 or lower

Each chapter in your book contains Chapter Highlights, a Chapter Review and a Chapter Test. I strongly encourage you to use those sections as review for your tests and final.

Attendance and Make-up Policy:
1. Attendance for classes is required and class participation is strongly encouraged. You are responsible for all material covered in class and any changes made to homework or dates whether or not you are present. Please find someone in class to communicate with.
2. Tests and quizzes are held at the beginning of class periods. Because of this, it is especially important to come to class on-time when they are being held. Arriving late for a test or quiz will only give you less time to work on it – you will not receive extra time simply because you arrived later.

3. If you know in advance that you will be missing a test or quiz, let me know ASAP so that we can schedule a make-up for it. I must know at least 48 hours before the start of the test/quiz in order to consider granting a make-up, and there must be a valid reason for requesting it. The more advance notice you give, the more chance you have of being awarded a make-up quiz/test. All make-ups are given on a case-by-case basis, and may not be granted even with advance notice. Make-ups will not be awarded after 1 week from the original test/quiz without documentation.

4. In the rare event that unforeseen circumstances cause you to miss a test or quiz, the guidelines for make-ups will be a lot stricter, and again will be awarded on a case-by-case basis. Requests for make-ups in this case must be made ASAP, and in most cases will require documentation to be awarded.

**Homework:**

1. Homework will be assigned frequently over the course of the semester. This is because in order to become skilled in Algebra, you must practice it. Graded homework is online through MyMathLab (MML). You will need both the access code from your text and the course code, erickson34176. Specific instructions are on the additional handout. For each homework problem, you will have 3 attempts to earn a 100%, but if you have trouble with the assignment, MML has a number of options to help you succeed. If you have questions on the assignments, you should bring them to class or to my office hours and we will work through the issues together.

2. Each section’s homework is due at 11:59 PM 3-4 days from the class we begin covering that material (on Sunday, Tuesday, or Thursday). The homework is available from the beginning of the semester to start on. **Late homework is not accepted.**

3. Due to the fact that we may cover some sections faster than others, and since unforeseen circumstances may occasionally occur, the homework due dates on MML are tentative until I provide an official due date on Sakai for reference. Nevertheless, **it’s strongly recommended to start homework assignments sooner rather than later** – due dates may change and assignments may be due sooner than you expect!

4. Homework should be done individually, without aid from other students or resources. **Be aware that plagiarism can be grounds for immediate failure of the course, or worse!**

5. Each homework assignment should be completed without the aid of a calculator. This is because in Algebra, calculators will not aid you when it comes to variables, and doing the work by hand will help you build important mathematical skills.

6. It’s expected that students spend approximately **three hours of out-of-class for each one hour of lecture.** This time should be spent reviewing class notes, reading the textbook, completing homework assignments and working with tutors, if necessary.

**Other Policies:**

1. Please come to class prepared by reading over the text to be covered and by bringing your book, notebook and pencil. **Pencils are strongly encouraged over pens,** since in later MTH courses, problems will require much more work and have many more opportunities for mistakes to occur.

2. You are here to learn, so please give class your full attention, ask questions if you do not understand and be respectful and courteous to your fellow students and professor.

3. **Absolutely no calculators or cell phones are permitted in this class.**

4. No disruptive behaviors that distract from the learning process. As examples:
   a. Talking while the instructor is talking.
   b. Sleeping, eating, texting, talking on, making or receiving cell phone calls, connecting or listening to any MP3/Electronic devices, reading non-course material, cursing, leaving early.

5. You may not record (audio or video) any or all of this class without the express written consent of the instructor.
6. For tests and quizzes:
   a. Please come to class prepared with more than one pencil, an eraser and a sharpener.
   b. Desks must be clear, backpacks, books etc must be put away beneath the desk.
   c. Be neat and organized. Reading the answer is an important part of getting it correct!
   d. Be sure to use the restroom before tests and quizzes – There are no breaks during them!
7. There is no extra credit in this course – please don’t ask.
8. No cheating of any kind will be allowed. Cheating will be grounds for failing this course. All URI University policies apply including the Academic Honesty policy found in your student handbook.
9. Students requiring accommodations due to a documented disability (through the Disability Services for Students: Office of Student Life) should make their requests as soon as possible.
10. Extra help is available from me, from the Academic Enhancement Center, or from Math department tutors. Helpful online resources include pulemath.com and khanacademy.org.
11. Over the course of the semester, some policies outlined in this syllabus may be changed. In the event of any changes, all students will be notified in advance both in class and on Sakai before any changes to the syllabus come into effect.
<table>
<thead>
<tr>
<th>WEEK OF</th>
<th>Topics</th>
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| 1/25/2016 | Intro/Assessments  
5.1 Adding and Subtracting Polynomials |
| 2/01/2016 | 5.2 Product and Power Rules  
5.3 Multiplying Polynomials  
5.4 Special Products |
| 2/08/2016 | 5.5 Integer Exponents and Quotient Rule  
5.6 Dividing Polynomial by Monomial  
5.7 Dividing Polynomial by Polynomial |
| 2/15/2016 | EXAM 1  
6.1 Factors; The Greatest Common Factor  
6.2 Factoring Trinomials |
| 2/22/2016 | 6.3 Factoring by Grouping  
6.4 Factoring using FOIL  
6.5 Special Factoring Techniques |
| 2/29/2016 | 6.6 A General Approach to Factoring  
6.7 Solving Quadratic Equations by Factoring  
6.8 Applications of Quadratic Equations  
EXAM 2 |
| 3/07/2016 | 7.1 Rational Expressions and Functions; Multiplying and Dividing  
7.2 Adding and Subtracting Rational Expressions  
7.3 Complex Fractions |
| 3/14/2016 | 7.4 Equations with Rational Expressions and Graphs  
7.5 Applications of Rational Expressions |
| 3/21/2016 | Spring Break (No classes this week!) |
| 3/28/2016 | 9.1 Radical Expressions and Graphs  
EXAM 3  
9.2 Rational Exponents |
| 4/04/2016 | 9.3 Simplifying Radical Expressions  
9.4 Adding and Subtracting Radical Expressions  
9.5 Multiplying and Dividing Radical Expressions |
| 4/11/2016 | 9.6 Solving Equations with Radicals  
10.1 Solving Quadratic Equations by the Square Root Property  
EXAM 4 |
| 4/18/2016 | 10.2 Solving Quadratic Equations by Completing the Square  
10.3 Solving Quadratic Equations by the Quadratic Formula |
| 4/25/2016 | 10.4 Equations Quadratic in Form  
10.5 Formulas and Applications  
10.6 Graphs of Quadratic Functions |
| 5/02/2016 | Review |
| TBA | FINAL EXAM |

Tentative:  
Test 1 – Chapter 5  
Test 2 – Chapter 6  
Test 3 – Chapter 7  
Test 4 – Chapter 9  
Final Exam – Cumulative plus Chapter 10