Math 112 Section __________
College Algebra Concepts and Applications
Course Policy – Spring 2016

Instructor: ___________________________ Office: ___________________________

Email: ___________________________ Phone: ___________________________

Office Hours: ___________________________

Required Materials:
MyMathLab access code for *College Algebra, 2nd edition* by Kirk Trigsted.
Guided Workbook for Math 112 – Available in UA Bookstore
Graphing calculator (see below for specific details).

Main websites:  
http://d2l.arizona.edu  
http://math.arizona.edu/~algebra/math112/  
http://www.mymathlab.com

**Catalog Course Description**
Topics include properties of functions and graphs, linear and quadratic equations, polynomial functions, exponential and logarithmic functions with applications. A graphing calculator is required for this course. We recommend the TI-83 or TI-84 models. Calculators that perform symbolic manipulations, such as the TI-89, NSpire CAS, or HP50g, cannot be used. Except as per University policy on repeating a course, credit will not be given for this course if the student has credit in a higher level math course. Such students may be dropped from the course. Examinations are proctored.

**Course Structure**
Math 112 is a 3 credit hour hybrid course. Students will meet in person two days per week except when there are no class meetings due to University holidays. For the third unit, students will be expected to watch videos posted on the College Algebra website, http://math.arizona.edu/~algebra/math112, and complete specific examples in the Guided Workbook. The examples that must be completed are identified with a video projector icon.

**Course Prerequisites**
Appropriate Math Placement Level or Proctored/Prep for Calculus 45+ or Proctored/Prep for College Algebra 55+ or Math 112.

**Course Objectives**
- To help students improve basic algebra skills by way of an integrated review of these skills as they are needed in the course.
- To promote problem-solving and critical thinking skills through the application of algebraic concepts to common situations.
- To enhance learning and understanding of algebraic concepts through the integrated use of graphing calculators.
- To promote and utilize the “Rule of Four”: All concepts are explored algebraically, numerically, graphically and in context with applications.
- To provide a sufficient algebra background for Math 113, Math 116, and Math 163/263.

* More specific objectives are listed in the Guided Workbook

**Communication with Students**
Announcements and important course information may be sent out via official University email or through D2L. It is the student’s responsibility to check for messages and announcements regularly.

**Accessibility and Accommodations**
It is the University’s goal that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please meet with your instructor to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you register with Disability Resources (621-3268; drc.arizona.edu) and notify your instructor of your eligibility for reasonable accommodations by Tuesday, January 26, 2016. You will then be able to work with your instructor to plan how best to coordinate your accommodations. Please be aware that the accessible table and chairs in the classroom should remain available for students who find that standard classroom seating is not usable.

**Attendance/Administrative Drops**
Daily attendance is expected from every student. Students who miss the first class meeting will be administratively dropped unless they have made other arrangements. In addition, students with more than 3 unexcused absences may be administratively dropped from the course. (See Administrative Drop Policy at  
http://catalog.arizona.edu/2015-16/policies/classatten.htm) Other actions that may result in an administrative drop from this course include failing to sign up for MyMathLab by January 22, 2016, or missing more than
5 assignments. If you need to miss class for unavoidable circumstances, see your instructor as soon as possible.

- All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion.
- Absences pre-approved by the UA Dean of Students (or Dean’s designee) will be honored.

It is the student’s responsibility to notify the instructor in advance of an absence related to religious observation or an activity for which a Dean’s excuse has been granted, and to arrange for how any missed work will be handled.

**Academic Integrity**

Students are responsible to inform themselves of University policies regarding the Code of Academic Integrity. Students found to be in violation of the Code are subject to penalties ranging from a loss of credit for work involved to a grade of E in the course, and risk possible suspension or probation. The Code of Academic Integrity will be enforced in all areas of the course, including, but not limited to, homework, quizzes, and tests. For more information about the Code of Academic Integrity policies and procedures, including information about your rights and responsibilities as a student, see the following website: http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity

**Student Code of Conduct**

Students at The University of Arizona are expected to conform to the standards of conduct established in the Student Code of Conduct. Prohibited conduct includes:

1. All forms of student academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, and plagiarism.
2. Interfering with University or University-sponsored activities, including but not limited to classroom related activities, studying, teaching, research, intellectual or creative endeavor, administration, service or the provision of communication, computing or emergency services.
3. Endangering, threatening, or causing physical harm to any member of the University community or to oneself or causing reasonable apprehension of such harm.
4. Engaging in harassment or unlawful discriminatory activities on the basis of age, ethnicity, gender, handicapping condition, national origin, race, religion, sexual orientation, or veteran status, or violating University rules governing harassment or discrimination.

Students found to be in violation of the Student Code of Conduct are subject to disciplinary action. For more information about the Student Code of Conduct, including a complete list of prohibited conduct, see the following website: http://deanofstudents.arizona.edu/accountability/students/student-accountability

**Other Relevant University Policies Relating to Conduct**

Please take note of the following University policies:

- Policy on Threatening Behavior by Students: http://policy.web.arizona.edu/education-and-student-affairs/threatening-behavior-students

**Expected Classroom Behavior**

Students should turn off all electronic devices during class unless the device is deemed necessary for the class by the instructor. This includes, but is not limited to cell phones, tablets, mp3 players, and laptops. If you have a disability-related accommodation that involves the use of a computer during class, please discuss this with your instructor in advance.

**Calculators**

A graphing calculator (TI-83, 84, or 86) is required for this course. Calculators that perform symbolic manipulations (such as the TI-89 or TI-92 or certain TI-Nspire CAS) cannot be used. For in-class exams, quizzes, and the final exam, the only program allowed in your calculator is the QUADRATIC FORMULA program found in the Guided Workbook.

**MyMathLab**

The course textbook and several graded components for Math 112 are found in MyMathLab. MyMathLab can be accessed through the University of Arizona’s D2L website (http://d2l.arizona.edu). Students will need to purchase access to MyMathLab. This can be done by one of the following two methods:

1. Purchase access using a credit card or PayPal account.
2. Purchase an access code from the University of Arizona bookstore.

Students may only register for MyMathLab by enrolling through http://d2l.arizona.edu. When registering for MyMathLab, students will need to enter a valid email address and password. If you have previously used a MyMathLab (or other My Labs) product, you should use your previous login credentials. If you have not used a MyMathLab product before, you are STRONGLY encouraged to use your University of Arizona email address.
Homework (Modified by the instructor of each section)

There are 4 components to homework: Completing Guided Workbook Examples, Reading Assessments, MyMathLab Homework, and Written Work. Late homework is generally not accepted. Students who register for the class after the first class meeting may not be able to make up missed assignments. Exceptions may be considered by the student’s instructor. Grading disputes regarding homework must be addressed within one week after the homework has been returned.

1. Completing Guided Workbook Examples (20 course points)
   Students will need to watch videos posted on the College Algebra website: [http://math.arizona.edu/~algebra/math112](http://math.arizona.edu/~algebra/math112) and fill out their notes in the Guided Workbook for all questions that are identified with a video projector icon.

2. Reading Assessment Assignments (20 course points)
   There will be 23 reading assessment assignments this semester, posted in MyMathLab. These assignments are scheduled to be completed **BEFORE** the instructor covers the material and are due by 11:59 PM on the due dates. Students are required to read the material in the textbook and answer a few questions about the reading.

3. MyMathLab Assignments (40 course points)
   There will be 23 online homework assignments this semester, posted in MyMathLab. These assignments are scheduled to be completed **AFTER** the instructor covers the material and are due by 11:59 PM on the due dates.

4. Written Work Assignments (40 course points)
   There will be 23 written work assignments, posted by your instructor in D2L. Written work assignments generally consist of two questions from each section and will relate to the material covered in the Guided Workbook. Each question will be provided on a pre-formatted sheet that will have space for the answer as well as space to check your work. Students must print the assignment and handwrite all work on the printed assignment. Once your homework is completed, you will need to submit the assignment by the start of class on the due date. The work that is submitted should be the **FINAL** draft, created after the first drafts of the solutions were attempted. Since there are only two questions assigned per section, each student should submit work that is of high quality.

Students are expected to complete the following procedures to receive full points on their written work assignments.

- Show and clearly explain an algebraic method used to solve the problem. Proper mathematical notation should be used and the student’s work should be neat and well-organized in the final draft that is submitted. Points will be awarded for correctness and completeness. Simply giving an answer is not acceptable and will receive little or no credit.
- Clearly indicate the final answer.
- Check the solution by using an alternative method to solve the problem or by rigorously examining the solution for validity. Some of the points for each assignment will be allotted for checking one’s work. See the Guided Notebook for information and guidelines on checking work. Note: Students who write “Checked on calculator” will generally receive no credit for their check.
- No late homework is accepted.

In addition to the 23 handwritten homework assignments, the instructor may supplement assignments with additional written work, including but not limited to additional practice problems and quizzes.

**MyMathLab Tests**

There are four online tests, posted in MyMathLab, that cover certain topics in the course. Prior to completing each online test, students will have an opportunity to work through an **optional** practice tests. The online tests will be open for a period of about 5 days and have a 2-hour time limit. Students will have one attempt on each MML test and each test must be completed in one session. Each test will be worth 25 course points, for a total of 100 points for all four MyMathLab tests.

- MML Test 1: Chapters 1 & 2
- MML Test 2: Chapter 3
- MML Test 3: Chapter 4
- MML Test 4: Chapter 5

**Midterm Exams**

There are three midterm exams. The dates, times, and content for the midterms are given below.

- **Midterm 1**:
  - **Thursday, February 11, 2016**, taken in a 50-minute period **online** between 8:00 AM – 8:00 PM Mountain Standard Time (Arizona Time)
  - Sections 1.1-1.2, 1.4-1.5, 2.3-2.4
  - 80 points
• Midterm 2:
  - **Thursday, March 24, 2016**, from 6:30 PM – 8:00 PM
  - Sections 3.1-3.6, 4.1-4.2
  - 150 points

• Midterm 3:
  - **Thursday, April 28, 2016**, from 6:30 PM – 8:00 PM
  - Sections 4.3-4.4, 4.6, 5.1-5.6
  - 150 points

Please put all of these dates in your calendar immediately. The location of the midterm exams will be posted on the College Algebra website.

Please note that Midterm 1 will be taken online. This first exam will be administered in D2L and proctored using a service called Examity®. There are minimum system requirements for using Examity®. These requirements include:
  - Desktop computer or laptop (not a tablet)
  - Webcam and microphone (built-in or external)
  - Connection to network with sufficient internet speed (at least 3Mbps download speed and 3Mbps upload – test internet speed at [http://www.speedtest.net](http://www.speedtest.net))
  - Browser with pop-up blocker disabled

Issues related to the grade received on the exam need to be discussed within 1 week of the exam being graded. Study guides for the midterms will be posted as PDF documents on the College Algebra website.

**Final Exam**
The comprehensive Final Exam will be given on **Monday, May 9, 2016**, from 8:00 AM – 10:00 AM. Please put this date in your calendar immediately. The location of the final exam will be posted on the College Algebra website.

A study guide for the final exam will be posted as a PDF document on the College Algebra website.

Please note the following:

• University rules relating to final examinations may be found at: [http://www.registrar.arizona.edu/schedule101/exams/examrules.htm](http://www.registrar.arizona.edu/schedule101/exams/examrules.htm)
• The University final exam schedule may be found at: [http://www.registrar.arizona.edu/schedules/finals.htm](http://www.registrar.arizona.edu/schedules/finals.htm)

**Missed Exams**
Students who are unable to attend Midterm 2 or Midterm 3 for a **LEGITIMATE** reason will be asked to complete an online request form by a specific date. Information about this form will be sent to every student’s UA email address approximately 2 weeks before each exam. In addition to completing the online form, students should also notify their instructor. Failure to submit the request for a make-up midterm may result in the request being denied or the student receiving a penalty on the exam.

Only legitimate reasons will be considered for make-up exams. Legitimate reasons include UA class conflicts, Dean’s excuses, religious holiday’s recognized by the University, and verifiable emergencies. University related events without a Dean’s excuse will generally not be considered as an exam conflict (e.g., club meeting or club dinner).

If a verifiable emergency arises which prevents you from taking an exam at the regularly scheduled time, you must notify your instructor or the Mathematics Department as soon as possible. Students who fail to notify their instructor or Mathematics Department within 24 hours after the test has been given may receive a grade of zero on the exam. Make-up exams will be administered only at the discretion of the Mathematics Department and/or the instructor. If a student is allowed to make up a missed exam, (s)he must take it at a mutually arranged time. No further opportunities will be extended. Failure to contact the Mathematics Department and/or instructor as stated above or inability to produce sufficient evidence of a real emergency will result in a grade of zero on the exam.

**Grades**

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Percentage</th>
<th>Grade Guarantee conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework (Guided Workbook)</td>
<td>20</td>
<td>(2.5%)</td>
<td>A if you earn at least 720 points (90%)</td>
</tr>
<tr>
<td>Homework (Reading Assessments)</td>
<td>20</td>
<td>(2.5%)</td>
<td>B if you earn at least 640 points (80%)</td>
</tr>
<tr>
<td>Homework (MyMathLab)</td>
<td>40</td>
<td>(5.0%)</td>
<td>C if you earn at least 560 points (70%)</td>
</tr>
<tr>
<td>Homework (Written Work)</td>
<td>40</td>
<td>(5.0%)</td>
<td>D if you earn at least 480 points (60%)</td>
</tr>
<tr>
<td>MML Tests</td>
<td>100</td>
<td>(12.5%)</td>
<td></td>
</tr>
<tr>
<td>Midterm 1</td>
<td>80</td>
<td>(10.0%)</td>
<td></td>
</tr>
</tbody>
</table>

You are Guaranteed a Grade of:
Please note that neither exam scores nor final grades will be curved. No extra credit or bonus points are offered in this course.

A grade of Incomplete will be given only at the instructor’s discretion, according to University Policy as described at [http://www.registrar.arizona.edu/gradepolicy/incomplete.htm](http://www.registrar.arizona.edu/gradepolicy/incomplete.htm)

**Withdrawal**
A student may withdraw from the course with a deletion from record through January 27, 2016, using UAccess. A student may withdraw with a grade of "W" through March 29, 2016, using UAccess.

**Using Math 112 as a Prerequisite for Other Courses**
The Undergraduate Committee of the Department of Mathematics has adopted a policy that a grade of C or better in Math 112 is a necessary prerequisite for Math 122A/B (Calculus I). This policy took effect in the Fall 2010 semester. Students who receive a D in Math 112 will receive credit for the course towards graduation requirements, and will be able to use the course for their general education math requirement or as a prerequisite for Math 113, 116, 163, 263, or 302A, but will not be automatically qualified to register for Math 122A/B. Students may always exercise the option of taking the math placement tests to achieve placement into Math 122A/B.

**Tentative Weekly Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topics Covered</th>
<th>Assignments Due*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/11-1/17</td>
<td>Linear equations</td>
<td>MML Reading 1.1</td>
</tr>
<tr>
<td>2</td>
<td>1/18-1/24</td>
<td>Linear equations Applications of linear equations</td>
<td>Workbook 1.1 &amp; 1.2; MML Reading 1.2; MML 1.1</td>
</tr>
<tr>
<td>3</td>
<td>1/25-1/31</td>
<td>Applications of linear equations Quadratic equations</td>
<td>Workbook 1.4 &amp; 1.5; MML Reading 1.4 &amp; 1.5; MML 1.2 &amp; 1.4; Written 1.1 &amp; 1.2</td>
</tr>
<tr>
<td>4</td>
<td>2/1-2/7</td>
<td>Applications of quadratic equations Lines</td>
<td>Workbook 2.3 &amp; 2.4; MML Reading 2.3 &amp; 2.4; MML 1.5; Written 1.4 &amp; 1.5</td>
</tr>
<tr>
<td>5</td>
<td>2/8-2/14</td>
<td>Parallel and perpendicular lines Review and Midterm 1 Relations and functions</td>
<td>Workbook 3.1; MML Reading 3.1; MML 2.3 &amp; 2.4; Written 2.3 &amp; 2.4; MML Test 1</td>
</tr>
<tr>
<td>6</td>
<td>2/15-2/21</td>
<td>Relations and functions Properties of a function’s graph Piecewise functions</td>
<td>Workbook 3.2 &amp; 3.3; MML Reading 3.2 &amp; 3.3; MML 3.1 &amp; 3.2; Written 3.1</td>
</tr>
<tr>
<td>7</td>
<td>2/22-2/28</td>
<td>Piecewise functions Transformations of functions</td>
<td>Workbook 3.4; MML Reading 3.4; MML 3.3; Written 3.2 &amp; 3.3</td>
</tr>
<tr>
<td>8</td>
<td>2/29-3/6</td>
<td>Transformations of functions Algebra of functions One-to-one functions Inverse functions</td>
<td>Workbook 3.5 &amp; 3.6; MML Reading 3.5 &amp; 3.6; MML 3.4 &amp; 3.5; Written 3.4</td>
</tr>
<tr>
<td>9</td>
<td>3/7-3/13</td>
<td>One-to-one functions Inverse functions Quadratic functions Applications and modeling quadratic functions Polynomial functions</td>
<td>Workbook 4.1, 4.2 &amp; 4.3; MML Reading 4.1, 4.2, &amp; 4.3; MML 3.6; Written 3.5 &amp; 3.6; MML Test 2</td>
</tr>
<tr>
<td>10</td>
<td>3/21-3/27</td>
<td>Applications and modeling quadratic functions Polynomial functions Review and Midterm 2 Division of polynomials Remainder &amp; Factor Theorems</td>
<td>Workbook 4.4; MML Reading 4.4; MML 4.1 &amp; 4.2; Written 4.1 &amp; 4.2</td>
</tr>
<tr>
<td>11</td>
<td>3/28-4/3</td>
<td>Polynomial functions Division of polynomials Remainder &amp; Factor Theorems Rational functions</td>
<td>Workbook 4.6; MML Reading 4.6; MML 4.3 &amp; 4.4; Written 4.3</td>
</tr>
<tr>
<td>12</td>
<td>4/4-4/10</td>
<td>Rational functions</td>
<td>Workbook 5.1 &amp; 5.2; MML Reading 5.1 &amp; 5.2;</td>
</tr>
<tr>
<td>Week</td>
<td>Dates</td>
<td>Topics</td>
<td>Resources</td>
</tr>
<tr>
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</tr>
<tr>
<td>13</td>
<td>4/11-4/17</td>
<td>Natural exponential function, Applications of exponential functions, Logarithmic functions, Properties of logarithms</td>
<td>MML 4.6 &amp; 5.1; Written 4.4 &amp; 4.6; MML Test 3</td>
</tr>
<tr>
<td>14</td>
<td>4/18-4/24</td>
<td>Logarithmic functions, Properties of logarithms, Exponential and logarithmic equations, Applications of exponential &amp; logarithmic functions</td>
<td>Workbook 5.3 &amp; 5.4; MML Reading 5.3 &amp; 5.4; MML 5.2 &amp; 5.3; Written 5.1 &amp; 5.2</td>
</tr>
<tr>
<td>15</td>
<td>4/25-5/1</td>
<td>Applications of exponential &amp; logarithmic functions, Review and Midterm 3</td>
<td>MML 5.6; Written 5.5 &amp; 5.6; MML Test 4</td>
</tr>
<tr>
<td>16</td>
<td>5/2-5/8</td>
<td>Review for Final Exam</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Due dates for assignments will be posted in class or at an online location by the instructor.

**Changes to the Course Policies**
The information contained in the course policies, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.