OTTAWA ONLINE
MAT 10443 – Intermediate College Algebra

Course Description
Emphasizes algebraic skill development such as linear and quadratic equations, rational exponents, radicals, and systems of equations. Designed to prepare students for College Algebra.
This is a fully online, eight-week course. We will not meet face-to-face at any time.

Course Prerequisites
Previous course in algebra, either high school algebra or college beginning level.

Course Objectives
Upon successful completion of this course, students will be able to:

1. Solve linear equations in one and two variables.
2. Graph linear equations and functions.
3. Find the domain and range of a relation, and determine if a relation is a function.
4. Solve systems of linear equations by graphing, using the substitution method, and using the addition method.
5. Add, subtract, multiply, and divide polynomials.
6. Evaluate polynomial functions.
7. Factor trinomials (including perfect square trinomials) and binomials by the difference of two squares.
8. Solve quadratic equations by factoring.
10. Add, subtract, multiply, and divide rational expressions.
11. Solve rational and radical equations.
12. Evaluate expressions with rational exponents.
13. Convert expressions in the form of $a^{1/n}$ and $a^{m/n}$ to radical form and simplify.
14. Simplify radical expressions, and add, subtract, multiply, and divide radicals.
15. Rationalize the denominator of an expression.
16. Add, subtract, multiply, and divide complex numbers.
17. Solve quadratic equations by completing the square and using the quadratic formula.

Required Text
ISBN: 9780077281113
**Course Assignment Descriptions**

You will have several opportunities to demonstrate your knowledge and understanding of the principles taught in this course. The primary means of evaluating your work will be through practical application of the material. In the event that you have difficulty completing any of the assignments for this course, please contact your instructor immediately. Please refer to the Course Materials section of the cyberclassroom for complete details regarding the activities and assignments for this course. The following is merely a summary.

**Discussion contributions (80 points)**

(three postings per week @ 10 points per week)

**Initial Substantive Posts**: Submit an initial response to each of the prompts provided each week by your instructor. Your initial post should be substantive (approximately ½ of a page in length) and must be posted by midnight, Central Time by Wednesday of each week. In your substantive post you are encouraged to use references (you may use your textbook); show evidence of critical thinking as it applies to the concepts or prompt and/or use examples of the application of the concepts to work and life. Proper punctuation, grammar and correct spelling are expected. Please use the spell-check function.

**Required Replies**: You must reply to at least two different peers per prompt. Your replies should build on the concept discussed, offer a question to consider, or add a differing perspective, etc. Rather than responding with, "Good post," explain why the post is "good" (why it is important, useful, insightful, etc.). Or, if you disagree, respectfully share your alternative perspective. Just saying "I agree" or "Good idea" is not sufficient for the posts you would like graded.

**Posting Guidelines**: Overall, postings must be submitted on at least two separate days of the week. It is strongly recommended you visit the discussion forum throughout the week to read and respond to your peers’ postings. You are encouraged to post more than the required number of replies.

(Please review the Policies section of Blackboard for further details.)

**Practice Problems (7 @ 30 points each = 210 points)**

You will be given a set of practice problems that will be based on the concepts from the week’s corresponding chapter(s). You will need to complete these problems, showing all of your work, and submit them via Blackboard. If you have access to a scanner, you may hand write your work, scan it, and submit it to the link provided in the Weekly Materials. If you do not have access to a scanner, you will need to type out your work in order to be able to submit it electronically. You will be able to check the answers to some problems in the back of the book in order to see if you are correct, however, you will have to submit the work that shows how you arrived at your answer in order to earn full credit.

**Practice Quizzes (0 points each – practice only)**

Throughout the course, several practice quizzes will be available to you to assist you in preparing for tests and the Final Exam. These quizzes will be multiple choice and will be automatically graded by Blackboard. You will immediately be able to receive feedback as to which problems you answered incorrectly and what the correct answers are.
should be. These practice quizzes will be available to you for the entire duration of the course, however, you will only be able to attempt them once.

**Midterm Exam (100 points)**
You will be completing a midterm exam in Week 4. This exam will give you an opportunity to demonstrate your knowledge of the concepts explored in the first half of the course. This exam contains multiple choice problems, as well as problems that require you to show all of your work. You will not be timed, however, the midterm will only be available during Week 4.

**Final Exam (170 points)**
This Final Exam is a cumulative test on which you will be able to demonstrate your knowledge and skills from Chapters 2-8. This exam will become available to you on Monday of Week 8 and must be completed by midnight, Central Time, on Saturday of that week. The final will contain multiple choice problems, as well as problems for which you will have to show all of your work.

**Course Schedule At-A-Glance***
Please refer to the Term Calendar in our cyberclassroom for specifics regarding dates.

<table>
<thead>
<tr>
<th>Week</th>
<th>Readings &amp; Activities</th>
<th>Assignments Due</th>
<th>Date/Time Due**</th>
</tr>
</thead>
</table>
| Week 1 | • Chapter 1: Review of Basic Algebraic Concepts – Review on your own as needed  
• Chapter 2: Linear Equations in Two Variables and Functions | • Course Discussion  
• Week 1 Practice Problems | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 2 | • Chapter 3: Systems of Linear Equations | • Course Discussion  
• Week 2 Practice Problems | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 3 | • Chapter 4: Polynomials | • Course Discussion  
• Week 3 Practice Problems | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 4 | • Chapter 5: Rational Expressions and Rational Equations | • Course Discussion  
• Week 4 Practice Problems  
• Midterm Exam | • Midnight CT on Weds/Sun.  
• Sunday at midnight  
• Sunday at midnight |
| Week 5 | • Chapter 6: Radicals and Complex Numbers | • Course Discussion  
• Week 5 Practice Problems | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 6 | • Chapter 7: Quadratic Equations and Functions | • Course Discussion  
• Week 6 Practice Problems | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
| Week 7 | • Chapter 8: More Equations and Inequalities | • Course Discussion  
• Week 7 Practice | • Midnight CT on Weds/Sun.  
• Sunday at midnight |
Problems

Week 8
- Review
- Course Discussion
- Final Exam
- Midnight CT on Weds/Sat.
- Saturday at midnight

* All online weeks run from Monday to Sunday, except the last week, which ends on Saturday.
** All assignments are due at midnight Central Time. (All submissions to the Blackboard system are date/time stamped in Central Time).

Assignments At-A-Glance

<table>
<thead>
<tr>
<th>Assignment/Activity</th>
<th>Qty.</th>
<th>Points</th>
<th>Total Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weeks 1-8: Discussion</td>
<td>8</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>Weeks 1-7: Practice Problems</td>
<td>7</td>
<td>30</td>
<td>210</td>
</tr>
<tr>
<td>Week 4: Midterm Exam</td>
<td>1</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Week 8: Final Exam</td>
<td>1</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td><strong>TOTAL POINTS</strong></td>
<td></td>
<td></td>
<td><strong>560</strong></td>
</tr>
</tbody>
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*Please refer to the Policies menu for more information about our Course Discussions.

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 to 100%</td>
<td>504-560</td>
</tr>
<tr>
<td>B</td>
<td>80 to 89%</td>
<td>448-503</td>
</tr>
<tr>
<td>C</td>
<td>70 to 79%</td>
<td>392-447</td>
</tr>
<tr>
<td>D</td>
<td>60 to 69%</td>
<td>336-391</td>
</tr>
<tr>
<td>F</td>
<td>&lt; 60%</td>
<td>&lt; 336</td>
</tr>
</tbody>
</table>

To access your scores, click on Grades in the Student Tools area in Blackboard.

Important Policies

All course-specific policies for this course are spelled out here in this syllabus. However, additional university policies are located in the Policies section of Blackboard. You are responsible for reading and understanding all of these policies. All of them are important. Failure to understand or abide by them could have negative consequences for your experience in this course.

Editorial Format for Written Papers

All written assignments are to follow the APA writing style guidelines for grammar, spelling, and punctuation. This online course includes information regarding the APA style under “Writing and Research Resources” in the Resource Room on the course menu in Blackboard.

Ottawa Online Late Policy

With instructor approval, assignments may be accepted for up to one week after the due date, but a minimum automatic deduction of 10% of the points will be assessed. The instructor also has the option of increasing this deduction percentage up to a maximum of 20%. Extenuating circumstances may be determined on rare occasions and an extension allowed without a deduction, but only at the sole discretion of the instructor.

Discussion board postings will not be accepted for credit when posted after the close of the discussion week. There are no exceptions to this rule; however, solely at the
discretion of the instructor, the student may be allowed to submit an alternative assignment to make up for the points under extenuating circumstances. If granted, this should be an exception to the rule.

No assignments will be accepted after the last day of the course (end of term) unless arrangements have been made and “approved” by the instructor at least one week in advance.

**Saving Work**
It is recommended that you save all of your work from this course on your own computer or flash drive. The capstone course you take at the end of your program may require you to have access to this work for culminating assignments and/or reflections.

**Academic Integrity**
Plagiarism and cheating will not be tolerated at any level on any assignment. The reality of cyberspace has made academic dishonesty even more tempting for some, but be advised that technology can and will be used to help uncover those engaging in deception. If you ever have a question about the legitimacy of a source or a procedure you are considering using, ask your instructor. As the University Academic Council approved on May 29, 2003, “The penalty for plagiarism or any other form of academic dishonesty will be failure in the course in which the academic dishonesty occurred. Students who commit academic dishonesty can be dismissed from the university by the provost/director.”
Please refer to **Academic Honesty** in the **Policies** section of the online course menu for important information about Ottawa University’s policies regarding plagiarism and cheating, including examples and explanations of these issues.

**Student Handbook**
Please refer to your student handbook for all university regulations. The **Resource Room** on the course menu in Blackboard contains information about where to find the student handbook online for your campus.

Please see **Policies** in Blackboard for additional university policies.

**Blackboard Technical Support**
The Resource Room in Blackboard contains links to student tutorials for learning to use Blackboard as well as information about whom to contact for technical support. Ottawa University offers technical support from 8 a.m. to midnight Central Time for all students, staff, and faculty at no cost. See [www.ottawa.edu/ouhelp](http://www.ottawa.edu/ouhelp) for contact information.

**Ottawa University Mission Statement**
The mission of Ottawa University is to provide the highest quality liberal arts and professional education in a caring, Christ-centered community of grace which integrates faith, learning and life. The University serves students of traditional age, adult learners and organizations through undergraduate and graduate programs.