INSTRUCTOR: Prof. Leticia Escobar
TELEPHONE: 972-860-7082
EMAIL: lesobar@dcccd.edu
OFFICE: G-234

EMAIL POLICY: Instructor will reply to emails within 24-48 hours during week days. Not available on weekends.

OFFICE HOURS:
- On Campus: By appointment only
- Online: I will be available by email Monday through Friday from 10:00 AM to 10:00 PM.

INSTRUCTOR CONTACT INFORMATION:
My preferred method of contact is by email. Please keep in mind that it is against the law (FERPA) for me to discuss grades with you via phone or email. See me in person if you need to discuss your personal academic progress or grades in this course.

Complete Instructor Schedule
Department Website

CATALOG DESCRIPTION
This is a course in algebra which includes operations on real numbers, polynomials, special products and factoring, and linear equations and inequalities. Also covered are graphs, systems of linear equations, exponents, quadratics equations and an introduction to complex numbers.

PREREQUISITES
An appropriate assessment test score.

STUDENT LEARNING OUTCOMES
Upon successful completion of this course, students will:
1. Perform the four fundamental operations on the set of real numbers.
2. Solve linear equations.
3. Solve applications of linear equations including stated problems, formula manipulation and proportion problems.
4. Graph linear equations in two variables.
5. Solve systems of linear equations in two variables using the graphing, addition, and substitution methods.
6. Solve stated problems involving systems of linear equations.
7. Apply the definition and laws of integer exponents to simplify expressions.
8. Perform the four fundamental operations on polynomials.
10. Solve quadratic equations.
11. Solve applications of quadratic equations

TEXTBOOK and other COURSE MATERIALS (*Required)
2. *ALEKS Student Access Code: Microsoft Windows 7 and 8 users should use one of the following browsers with ALEKS courses – Chrome, Firefox or Internet Explorer 9 and 10.
3. Calculators: Calculators are allowed in this course for certain activities. A calculator that can signed numbers is recommended. The TI-89, TI-92 or TI-Nspire graphing calculators are NOT allowed on any test.

GRADING RATIONALE
<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>90 – 100%</td>
</tr>
<tr>
<td>B</td>
<td>80 – 89%</td>
</tr>
<tr>
<td>C</td>
<td>70 – 79%</td>
</tr>
<tr>
<td>E or F</td>
<td>0 – 69%</td>
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</table>

GRADING POLICY
<table>
<thead>
<tr>
<th>Percentage</th>
<th>Assignment</th>
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</thead>
<tbody>
<tr>
<td>0%</td>
<td>Knowledge Skills Assessments (ALEKS)</td>
</tr>
<tr>
<td>5%</td>
<td>Welcome Discussion Activity (eCampus)</td>
</tr>
<tr>
<td>10%</td>
<td>Weekly Time in ALEKS (Min. Required)</td>
</tr>
<tr>
<td>25%</td>
<td>Comprehensive Final Exam (ALEKS)</td>
</tr>
<tr>
<td>30%</td>
<td>Online Modular Tests (ALEKS)</td>
</tr>
<tr>
<td>30%</td>
<td>Modular Objective Assignments (ALEKS)</td>
</tr>
<tr>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
“E” GRADE OPTION
Your instructor has the option to award a grade of "E" provided certain conditions are met. The "E" is a grade that indicates that the student met all requirements for attendance and participation but could not achieve a "C" or higher. It does not affect the grade point average. All of the following conditions must be met in the current semester:

1) Student has completed all modular assessments in ALEKS
2) Final Exam was taken
3) Student completed the minimum hours requirement in ALEKS

Even if you meet the conditions above your instructor is not obligated to give you an "E" grade.

CERTIFICATION POLICY
Students must attend and participate in their on-campus or online course(s) in order to receive federal financial aid. Instructors are required by law to validate attendance in order for students to receive financial aid. In an online class, simply logging in is not sufficient by itself to demonstrate academic attendance. Students must demonstrate they are participating in their online class and are engaged in an academically related activity. To be certified as attending online mathematics courses, students must complete the (1) Welcome Discussion Activity and do ONE of the following PRIOR to the certification Date: (2)(a) complete the Initial Knowledge Check in ALEKS; or (2)(b) complete a Progress Assessment upon transferring previous work. Students should contact the instructor with any questions regarding what constitutes the Initial Knowledge Check.

INSTRUCTIONAL COMPONENTS
The ALEKS course is divided into 4 Modules. Each module contain a vast number of objectives that need to master in other to move forward. In other to determine your current knowledge and adapt the course to your skill needs you will first:

**Step 1:** Take the Initial Knowledge Skills Assessment
This skills check will assess your knowledge on the topics to be covered in the course. It will not count as a grade but is an important part of the course as it will create personalized assignments and assessments tailored to your unique skill set.

**Step 2:** Complete the ALEKS personalized assignments
These assignments will assist you in improving your math skills to be able to understand the objective covered in each module and progress in the course.

**Step 3:** Additional Knowledge Checks
After completing 5 hours of continuous learning in ALEKS and have passed 20 topics, ALEKS will generate a tailored Knowledge check to make sure you are understanding the material and calibrate your future learning. These knowledge checks do not count towards your final grade.

**Step 4:** Take a Modular Test
At the end of each Module you will have to take a graded test that will evaluate your mastering of the objectives in that module.

**Step 5:** Keep track of your time
10% of your final grade goes towards satisfying the minimum number of hours that you need to spend weekly on ALEKS.

**Step 6:** Final Exam
After completing all your assessments on ALEKS you will take a comprehensive final exam covering all the objectives from the course. The final exam is 25% of your grade.

TEMPORARY ACCESS TO ALEKS
ALEKS provides a Financial Aid Access Code. This code gives students temporary access to ALEKS for a two-week period. Once the code expires, students will be locked out of their ALEKS account until a regular Student Access Code is purchased. It is highly recommended that students purchase the regular Student Access Code BEFORE the two weeks expire to prevent interruptions in their ALEKS account. ALEKS Corporation developed the Financial Aid Access Code to help students receiving financial aid. The availability of this service will depend on its ethical use by instructors and students, and may be discontinued at the discretion of ALEKS at any time. Students completing the entire course using the Financial Aid Access Code will receive a grade of F regardless of course performance. A regular ALEKS Student Access Code must be purchased in order for students to receive a grade based on course performance.

TECHNICAL SUPPORT
It is the responsibility of the student to contact ALEKS Technical Support to resolve any technical issues. Visit http://www.aleks.com/support for assistance.
ATTENDANCE POLICY
Classroom attendance is not required for this course; however, students are required to remain actively engaged with course curriculum.

- Any student that has not registered on ALEKS and completed the orientation assignment by the DUE DATE will NOT be certified as having attended and consequently may be dropped from the class.
- All students need to complete all discussion board activities to be counted as active students in the course.

If you are unable to complete a course (or courses) in which you are enrolled, it is your responsibility to withdraw from the course by the appropriate date. If you do not withdraw, you will receive a performance grade, usually a grade of "F". (2014-2015, Eastfield College, Dallas County Community Colleges Catalog)

OBTAINING FINAL COURSE GRADES USING eCONNECT
Final grade reports are no longer mailed. Convenient access is available online. Use your student identification number when you log into eConnect, an online system developed by the DCCCD to provide you with timely information regarding your college record. Your grades will also be printed on your Students Advising Report, which is available in the Admissions Office.

DROP DATE
Last date to drop with a grade of “W” is Thursday, 8/03/17.

DROP POLICY
To drop a class or withdraw from the college, students must follow the prescribed procedure as noted on Eastfield College’s website. It is the student’s responsibility to drop or withdraw. Failure to do so will result in receiving a performance grade, usually grade of “F”. No drop or withdrawal requests are accepted by telephone. Students who drop a class or withdraw from the College before the semester deadline receive a “W” (Withdraw) in each class dropped. The deadline for receiving a “W” is indicated on the academic calendar and the current class schedule. If you are unable to complete this course, you must withdraw from it by Thursday, 8/03/17. For more information, contact the Admissions/Registrar’s Office at 972-860-7167 (Room C 119.)

STOP BEFORE YOU DROP (Six Drop Rule)
For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career, unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions. Remember that once you have accumulated 6 non-exempt drops you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges.

FINANCIAL AID
If you are receiving Financial Aid grants or loans, you must begin attendance in all classes to be certified as attending class. In a Distance Learning Class, you must show participation in the class prior to the certification date by either e-mailing your instructor or logging on to eCampus. Do not drop or stop attending any class without consulting the Financial Aid Office. Changes in your enrollment level and failing grades may require that you repay financial aid funds. Failure to contact the instructor will result in your name being submitted to the Financial Aid Office as a “non-attendee”. Student who fail to attend or participate after the drop date are also subject to this policy.

REPEATING THIS COURSE
Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in additional tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 Semester. See Third Attempt to Enroll in a Course rules on the DCCCD website.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974 (FERPA)
In compliance with the Family Educational Rights and Privacy Act of 1974 (FERPA), the College may release information classified as “directory information” to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone numbers, (4) date and place of birth, (5) weight and height of members of athletic teams, (6) participation in officially recognized activities and sports, (7) dates of attendance, (8) educational institution most recently attended, and (9) other similar information, including major field of study and degrees and awards received. Students may protect their directory information at any time during the academic year. If no request is filed, directory information is released upon written inquiry. No telephone inquiries are acknowledged. No transcript or academic record is released without written consent from the student, except as specified by law.

STUDENT E-MAIL
Legal privacy issues prevent your instructor from discussing your work or your grades on commercial e-mail accounts. If you wish to send your papers as attachments to an e-mail (and the instructor permits it), or if you have a question about your grade, you must open a student e-mail account. You may set up your account by clicking on this link. The account is free.
CAMPUS POLICE
In addition to providing general law enforcement on campus, the campus police respond to all emergencies. In any emergency situation, you can get immediate help by any of the following methods:

- call 911 on any campus extension
- use any red phone in the hallways, or any "blue light" call box in the parking lots
- call 972-860-4290 from any off campus extension

DCCCD EMERGENCY OPERATION PROCEDURES
Click on this link for further information.

EMERGENCY & INCLEMENT WEATHER PROCEDURES
In case of emergency (which may include power or air conditioning outages, fires, etc.) or inclement weather conditions, Eastfield students should listen to KEOM-FM Radio Station (88.5) as the primary media source. In partnership with the Mesquite Independent School District, Eastfield College Administration will notify KEOM immediately after a decision is made to cancel classes on any given day of inclement weather or for emergency purposes. Students may also monitor other local radio and television stations. The earliest an announcement may be broadcast on KEOM Radio is 6 a.m. Students may also refer to the Eastfield College website for the Inclement Weather announcement under News/Features.

CHILDREN ON CAMPUS
The institution strives to protect an environment most conducive to teaching and learning for all enrolled students. Children who are taking part in organized scheduled activities or who are enrolled in specific classes are welcomed. Minor children, however, should not be brought to the institution unless closely supervised by their parent. Minor children should not be brought into classrooms, laboratories or other facilities of the college. This practice is disruptive to the learning process. In the case of an emergency where the student-parent has no alternative but to bring the child to campus, classroom faculty or the administrative heads of other units have full discretion as to whether a child may be allowed to quietly stay in the location. These individuals may require that children be removed by the student-parent from the setting if, in their opinion, the presence of the child is deemed to be disruptive to the learning process. For reasons of security and child welfare the institution will not permit unattended children to be left anywhere on the premises. Parents who have problems with childcare should visit the Counseling and/or Advisement Center to receive referrals to childcare services in the area.

INSTITUTIONAL EQUITY
The Office of Institutional Equity, in coordination with DCCCD colleges, has the primary responsibility for reviewing, updating and implementing compliance policies and procedures. The Institutional Equity and Compliance Officer and the Office of Institutional Equity will ensure compliance with College District policies, federal and state laws related to sexual assault, Title IX, Title II (Americans with Disabilities Act) and the Military Veterans Full Employment Act to support diversity and inclusion.

Students with Disabilities
If you are a student with a disability and/or special needs, or if you think you may have a disability, please contact the college Disability Services Office (DSO). Please note that all communication with DSO is confidential. If you are eligible for accommodations, please provide or request that the DSO send your accommodation letter to me as soon as possible (students are encouraged to contact DSO at the beginning of the semester). For more information regarding the College Disability Services Office, please contact DCCCD Office of Institutional Equity at (214) 378-1633 or visit the Student Services website:
https://www.eastfieldcollege.edu/services/Disability/Pages/default.aspx

Eastfield College Disability Services Office: 972-860-8348

A Note on Harassment, Discrimination and Sexual Misconduct
We are committed to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX and DCCCD policy prohibit harassment, discrimination and sexual misconduct. If you encounter harassment, sexual misconduct (sexual harassment, sexual assault, stalking, relationship violence, stalking), retaliation or discrimination based on race, color, religion, age, national origin, disability, sex, sexual orientation, gender identity, and/or gender expression, please contact your College Title IX Coordinator or the Office of Institutional Equity. We treat this information with the greatest degree of confidentiality possible while also ensuring student welfare and college safety.

We are concerned about the well-being and development of our students, and are available to discuss any concerns. There are both confidential and non-confidential resources and reporting options available to you. If students wish to keep the information confidential, please contact the college Counseling or Student Health Services. As required by DCCCD policy, incidents of discrimination and/or sexual misconduct shared with faculty will be reported to the College Title IX Coordinator or District Title IX Coordinator. The Title IX Coordinator will contact the student and determine if further investigation is needed. For more information about policies, resources or reporting options, please contact your college Title IX Coordinator or visit https://www.eastfieldcollege.edu/au/fastfacts/legal/TitleIX/Pages/default.aspx.
STANDARD OF CONDUCT / CLASSROOM ETIQUETTE

No food, drinks or tobacco products are allowed in Eastfield College classrooms. However, if your class is in a non-lab classroom your instructor may allow for food or drink. Electronic Devices including, but not limited to cell phones of all types, pagers, calculators, PDA’s, imaging devices, two-way radios, CD players, DVD players, IPODS, and all other related devices must be stored out of sight and turned off while in the classroom. Violation of this rule may include a grade of “F” in the course and/or expulsion from the class. Please adhere to instructor’s instructions.

NETIQUETTE EXPECTATIONS

Tips about Sending Emails/Messages/Postings
- Don’t type in upper case. Today, many people consider typing in uppercase to be shouting.
- Use courtesy when forwarding or sending information you received from someone else. It is always a good idea to receive the originators permission or to alert them you are sending the message to someone else. Do not link to outside sites unless the assignment asks you to do so and it is subject-related.
- Many people have given proxy rights to other staff members to read their email/posting. Your private message may become open information to someone you didn’t intend (such as minors enrolled in a class).
- Being a public institution, our e-mails are subject to review by anyone who requests access via legal documented procedures. We are required to backup email on District servers so e-mails are available for a very long period of time.
- Best choice, if you cannot shout your message on the 5 o’clock news, don’t put that message on email/posting or voice-mail.
- When replying to a message, always include the sender’s message. The sender may have sent several messages and needs a helpful link about what you are replying.
- Make sure that the “subject” field of your email/posted message is meaningful. When you use the “reply” option, ensure that the subject field (automatically filled in for you) still accurately reflects the content of your message.

Tips about how to convey emotions [or computer body language] in Email/Postings:
- Email/postings lack the cues and clues that convey the sense in which what you say is to be taken, and you can easily convey the wrong impression. If you meant something in jest, use a ”smiley” [ :-) ] or the words in brackets to convey that your are trying to be humorous or light-hearted.
- It is even more important to be more professional and courteous in an email/posting than in face to face conversations, as the person receiving the email/posting will not have the added signals of body language, vocal tone and vocal inflections to guide them in interpreting your meaning.

Suggestions for the smart use of your work email/postings:
- Use email only for communicating business-related information or for positive feedback to someone.
- Never use email for criticizing persons or their work.
- Do not use email to present your arguments or opinion about colleagues, students or work environment.
- Do not post messages that may be offensive to others; do not refer to personal homepages; your messages need to be course-related without offensive material especially in a message that goes to the entire class.
- Remember email messages/postings may be viewed by classmates or even minor children; so do not post offensive material or material that might be considered offensive by minors, other adults, or parents.
- Never use email/postings to communicate if you are angry or frustrated with a person.

CODE OF STUDENT CONDUCT

The Code of Student Conduct can be reviewed by clicking on this link.

STUDENT RESPONSIBILITY

Each student shall be charged with notice and knowledge of the contents and provisions of the College District’s policies, procedures, and regulations concerning student conduct. In this course, you will receive a grade of “0” on that particular assignment or test if you are guilty of cheating on assignments, tests, or plagiarism.

All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. In addition to activities prohibited by law [see policies FLBA, et. seq.], the following types of behavior shall be prohibited:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Intentionally causing physical harm to any person on College District premises or at College District sponsored activities, or intentionally or recklessly causing reasonable apprehension of such harm or hazing.</td>
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<tr>
<td>2.</td>
<td>Unauthorized use, possession, or storage of any weapon on College District premises or at College District sponsored activities.</td>
</tr>
<tr>
<td>3.</td>
<td>Intentionally initiating or causing to be initiated any false report, warning, or threat of fire, explosion, or other emergency on College District premises or at College District sponsored activities.</td>
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<tr>
<td>4.</td>
<td>Intentionally interfering with normal College District sponsored activities, including but not limited to, studying, teaching, conducting research, duties of the College District administration, or fire, security, or emergency services.</td>
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<tr>
<td>5.</td>
<td>Knowingly violating the terms of any disciplinary sanction imposed in accordance with College District policies, regulations, and procedures.</td>
</tr>
<tr>
<td>6.</td>
<td>Unauthorized distribution or possession for purposes of distribution of any controlled substance or illegal drug on College District premises or at College District sponsored activities.</td>
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<tr>
<td>7.</td>
<td>Intentionally or maliciously furnishing false information to the College District.</td>
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</tbody>
</table>
8. Sexual harassment.
9. Forgery, unauthorized alteration, or unauthorized use of any College District document or instrument of identification.
10. Unauthorized use of computer hardware or software.
11. Scholastic dishonesty, which shall constitute a violation of these rules and regulations and is punishable as prescribed by Board policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion.

“Cheating on a test” shall include:
   a. Copying from another student’s test paper.
   b. Using test materials not authorized by the person administering the test. All forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty, plagiarism, and collusion.
   c. Collaborating with or seeking aid from another student during a test without permission from the test administrator.
   d. Knowingly using, buying, selling, stealing, or soliciting, in whole or in part, the contents of an unadministered test.
   e. The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
   f. Substituting for another student, or permitting another student to substitute for one’s self, to take a test.
   g. Bribing another person to obtain an unadministered test or information about an unadministered test.

“Plagiarism” shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another’s work and the unacknowledged submission or incorporation of it in one’s own written work.

“Collusion” shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements.
12. Intentionally and substantially interfering with the freedom of expression of others on College District premises or at College District-sponsored activities.
13. Theft of property or of services on College District premises or at College District-sponsored activities or being in possession of stolen property on College District premises or at College District-sponsored activities.
14. Intentionally destroying or damaging College District property or property of others on College District premises or at College District-sponsored activities.
15. Failure to comply with the direction of College District officials, including campus security/safety officers, acting in performance of their duties.
16. Violation of published College District regulations or policies. Such regulations or policies may include those relating to entry and use of College District facilities, use of vehicles and Dallas County Community College District media equipment, campus demonstrations, misuse of identification cards, and smoking.
17. Use or possession of any controlled substance or illegal drug on College District premises or at College District-sponsored activities.
18. Unauthorized presence on or use of College District premises.
19. Nonpayment or failure to pay any debt owed to the College District with intent to defraud. (Appropriate personnel at a College District may be designated by College District officials to notify students of dishonored checks, library fines, nonpayment of loans, and similar debts. Such personnel may temporarily block admission or readmission of a student until the matter is resolved. If the matter is not settled within a reasonable time, such personnel shall refer the matter to the DA for appropriate action under this code. Such referral does not prevent or suspend proceeding with other appropriate civil or criminal remedies by College District personnel.)
20. Use or possession of an alcoholic beverage on College District premises with the exception of:
   a. Specific beverage-related courses within the El Centro food services program or the International Sommelier Guild’s Diploma program at Bill Priest Institute; or
   b. A course that requires the use of alcohol and is approved by the Texas Commission on Law Enforcement Officers’ Standards and Education.

Any student violating this policy shall be subject to disciplinary sanctions including suspension, in accordance with policy FM. A “violation” means an act or omission that is contrary to a published College District regulation or policy. Sanctions for violations of prohibited conduct may result in expulsion for (1) through (6), in suspension for (7) through (13), and in sanctions other than expulsion or suspension for (14) through (20). Repeated or aggravated violations of any provision of this code may also result in expulsion or suspension or in the imposition of such lesser penalties as are appropriate. “Aggravated violation” means a violation that resulted, or could have resulted if foreseeable, in significant damage to persons or DISCIPLINE Dallas County Community College District property or that otherwise posed a substantial threat to the stability and continuance of normal College District-sponsored activities.

TSI Advice
Achieving college readiness will usually mean completing the prerequisite courses for college level mathematics such as College Algebra. Meeting this standard could mean completing the DMAT sequence from your starting point through DMAT 0310.

TEXAS SUCCESS INITIATIVE (TSI)
The policies and procedures regarding the TSI are made by the Texas Higher Education Coordinating Board, which is the state agency responsible for administering the law. These policies are published by the THECB. On the Eastfield campus, your best sources of information about TSI are:
   1) The Eastfield Advising Center, (972) 860-7106, or
   2) The Eastfield Testing and Assessment Center, (972) 860-7011
The Texas Success Initiative (TSI) is a statewide program designed to ensure that students enrolled in Texas public colleges and universities have the basic academic skills needed to be successful in college-level course work. The TSI requires assessment, remediation (if necessary), and advising of students who attend a public college or university in the state of Texas. The program assesses a student’s basic academic skills in reading, writing, and math. Passing the assessment is a prerequisite for enrollment in many college-level classes such as English 1301/1302, History 1301/1302, Math 1314, etc. Students who do not meet assessment standards may complete prerequisite requirements by taking developmental courses in the deficient area and passing them with a grade of C or higher. In some cases retesting will also be required. It is up to each student to be aware and informed about requirements that are subject to change. Additional information is available from the TSI Office.

ADDITIONAL RESOURCES
The Math Tutoring Center provides tutoring in Mathematics and Developmental Mathematics. Students are encouraged to take advantage of this service for additional help in their course work. The Math Tutoring Center is located in room L-200, and the phone number is 972-860-7062. Visit the link above for more information on tutors, hours of operation and policies.
### COURSE COVERAGE

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<td>§6.7 - Quadratic Equations and Problem Solving</td>
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### SYLLABUS REVISION

The guideline in this syllabus may be changed, deleted, or amended any time by the instructor. The attached course outline is intended as an aid in helping you know your responsibilities for the semester. It is possible that some changes in the course outline or class policies will be made during the semester. Any changes that are made to the class policies or course outline will be announced in class.

Revised 7/11/17
COURSE OUTLINE

Course Content: 388 Topics (358 goal + 30 prerequisite) / 357 accessible topics

Dates Objective
Prerequisite Topics (30 topics)
07/10/2017 - 07/17/2017 1. Module #1 (112 topics)
07/18/2017 - 07/23/2017 2. Module #2 (90 topics)
07/24/2017 - 07/29/2017 3. Module #3 (60 topics)
07/30/2017 - 08/05/2017 4. Module #4 (65 topics)
08/06/2017 - 08/09/2017 5. Module #5 (41 topics)

Prerequisite Topics (30 topics)
Solving a word problem on proportions using a unit rate
Decimal place value: Tenths and hundredths
Rounding decimals
Decimal addition with 3 numbers
Decimal subtraction: Basic
Decimal subtraction: Advanced
Word problem with addition of 3 or 4 decimals and whole numbers
Word problem with subtraction of a whole number and a decimal: Regrouping with zeros
Multiplying a decimal by a whole number
Decimal multiplication: Problem type 1
Multiplication of a decimal by a power of ten
Word problem with decimal addition and multiplication
Division of a decimal by a whole number
Division of a decimal by a 1-digit decimal
Division of a decimal by a power of ten
Converting a fraction with a denominator of 100 to a percentage
Converting a percentage to a fraction with a denominator of 100
Introduction to converting a percentage to a decimal
Introduction to converting a decimal to a percentage
Converting between percentages and decimals
Converting a fraction to a percentage: Denominator of 4, 5, or 10
Converting a fraction to a percentage: Denominator of 20, 25, or 50
Mean of a data set
Solving a value mixture problem using a linear equation
Finding a percentage of a whole number
Finding a percentage of a whole number without a calculator: Basic
Applying the percent equation: Problem type 1
Finding a percentage of a total amount without a calculator: Sales tax, commission, discount
Finding the sale price given the original price and percent discount
Finding the sale price without a calculator given the original price and percent discount

Module #1 (112 topics, due on 07/17/2017)
Writing expressions using exponents
Introduction to exponents
Order of operations with whole numbers
Order of operations with whole numbers and grouping symbols
Order of operations with whole numbers and exponents: Basic
Order of operations with whole numbers and exponents: Advanced
Evaluating an algebraic expression: Whole numbers with two operations
Evaluating an algebraic expression: Whole number operations and exponents
Factors
Prime numbers
Prime factorization
Least common multiple of 2 numbers
Least common multiple of 3 numbers
Equivalent fractions
Simplifying a fraction
Addition or subtraction of fractions with the same denominator
Addition or subtraction of fractions with the same denominator and simplification
Finding the LCD of two fractions
Introduction to addition or subtraction of fractions with different denominators
Addition or subtraction of fractions with different denominators
Addition and subtraction of 3 fractions with different denominators
Word problem involving addition or subtraction of fractions with different denominators
Fractional part of a circle
Product of a unit fraction and a whole number
Product of a fraction and a whole number: Problem type 1
Introduction to fraction multiplication
Fraction multiplication
Product of a fraction and a whole number: Problem type 2
Multiplication of 3 fractions
Exponents and fractions
The reciprocal of a number
Division involving a whole number and a fraction
Fraction division
Order of operations with fractions: Problem type 1
Order of operations with fractions: Problem type 2
Order of operations with fractions: Problem type 3
Writing an improper fraction as a mixed number
Writing a mixed number as an improper fraction
Addition of mixed numbers with the same denominator and carry
Mixed number subtraction with the same denominator and renaming
Addition or subtraction of mixed numbers with different denominators without renaming
Addition of mixed numbers with different denominators and renaming
Subtraction of mixed numbers with different denominators and renaming
Addition and subtraction of 3 mixed numbers with different denominators
Word problem involving addition or subtraction of mixed numbers with different denominators
Mixed number multiplication
Multiplication of a mixed number and a whole number
Mixed number division
Converting a decimal to a proper fraction in simplest form: Basic
Squaring decimal bases: Products greater than 0.1
Exponents and decimals: Products less than 0.1
Converting a fraction to a terminating decimal: Basic
Converting a fraction to a terminating decimal: Advanced
Converting a fraction to a repeating decimal: Basic
Interpreting a bar graph
Perimeter of a polygon
Perimeter of a square or a rectangle
Perimeter of a polygon involving mixed numbers and fractions
Area of a square or a rectangle
Area of a rectangle involving fractions
Acute, obtuse, and right angles
Finding supplementary and complementary angles
Plotting integers on a number line
Writing a signed number for a real-world situation
Introduction to ordering decimals
Ordering integers
Square root of a perfect square
Using a calculator to approximate a square root
Absolute value of a number
Integer addition: Problem type 1
Integer addition: Problem type 2
Integer subtraction: Problem type 1
Integer subtraction: Problem type 2
Integer subtraction: Problem type 3
Addition and subtraction with 3 integers
Addition and subtraction with 4 or 5 integers
Word problem with addition or subtraction of integers
Integer multiplication and division
Multiplication of 3 or 4 integers
Division involving zero
Identifying numbers as integers or non-integers
Identifying numbers as rational or irrational
Signed fraction addition or subtraction: Basic
Signed fraction subtraction involving double negation
Addition and subtraction of 3 fractions involving signs
Signed fraction multiplication: Basic
Signed fraction multiplication: Advanced
Signed fraction division
Signed decimal addition and subtraction
Signed decimal multiplication
Operations with absolute value: Problem type 2
Exponents and integers: Problem type 1
Exponents and integers: Problem type 2
Exponents and signed fractions
Order of operations with integers
Order of operations with integers and exponents
Evaluating a linear expression: Integer multiplication with addition or subtraction
Evaluating a quadratic expression: Integers
Introduction to properties of addition
Properties of addition
Multiplying a constant and a linear monomial
Distributive property: Whole number coefficients
Distributive property: Integer coefficients
Introduction to properties of multiplication
Properties of real numbers
Identifying solutions to a linear equation in one variable: Two-step equations
Writing a one-step expression for a real-world situation
Translating a phrase into a one-step expression
Translating a phrase into a two-step expression
Translating a sentence into a one-step equation
Translating a sentence into a multi-step equation
Translating a sentence by using an inequality symbol

Module #2 (90 topics, due on 07/23/2017)
Distinguishing between the area and perimeter of a rectangle
Area of a triangle
Area of a parallelogram
Area of a trapezoid
Circumference of a circle
Circumference and area of a circle
Volume of a rectangular prism
Volume of a cylinder
Word problem involving the rate of filling or emptying a cylinder
Volume of a sphere
Combining like terms: Whole number coefficients
Combining like terms: Integer coefficients
Distributive property: Whole number coefficients
Distributive property: Integer coefficients
Using distribution and combining like terms to simplify: Univariate
Using distribution with double negation and combining like terms to simplify: Multivariate
Combining like terms in a quadratic expression
Additive property of equality with whole numbers
Additive property of equality with decimals
Additive property of equality with integers
Additive property of equality with signed fractions
Multiplicative property of equality with whole numbers
Multiplicative property of equality with fractions
Multiplicative property of equality with decimals
Multiplicative property of equality with integers
Multiplicative property of equality with signed fractions
Using two steps to solve an equation with whole numbers
Additive property of equality with a negative coefficient
Solving a two-step equation with integers
Introduction to solving an equation with parentheses
Solving a multi-step equation given in fractional form
Solving a two-step equation with signed decimals
Introduction to solving an equation with variables on the same side
Solving a linear equation with several occurrences of the variable: Variables on the same side
Solving a linear equation with several occurrences of the variable: Variables on both sides
Solving a linear equation with several occurrences of the variable: Variables on the same side and distribution
Solving a linear equation with several occurrences of the variable: Variables on both sides and distribution
Solving a linear equation with several occurrences of the variable: Variables on both sides and two distributions
Solving a linear equation with several occurrences of the variable: Fractional forms with monomial numerators
Solving a two-step equation with signed fractions
Solving a linear equation with several occurrences of the variable: Variables on both sides and fractional coefficients
Solving a linear equation with several occurrences of the variable: Fractional forms with binomial numerators
Solving equations with zero, one, or infinitely many solutions
Solving for a variable in terms of other variables using addition or subtraction: Basic
Solving for a variable in terms of other variables using addition or subtraction: Advanced
Solving for a variable in terms of other variables using multiplication or division: Basic
Solving for a variable in terms of other variables using multiplication or division: Advanced
Solving for a variable inside parentheses in terms of other variables
Solving for a variable in terms of other variables in a linear equation with fractions
Writing a one-step expression for a real-world situation
Translating a phrase into a two-step expression
Solving a fraction word problem using a linear equation of the form Ax = B
Solving a word problem with two unknowns using a linear equation
Solving a decimal word problem using a linear equation of the form Ax + B = C
Solving a word problem involving consecutive integers
Solving a one-step word problem using the formula d = rt
Solving a word problem involving rates and time conversion
Converting between temperatures in Fahrenheit and Celsius
Finding the side length of a rectangle given its perimeter or area
Finding a side length given the perimeter and side lengths with variables
Finding the perimeter or area of a rectangle given one of these values
Finding an angle measure of a triangle given two angles
Finding angle measures of a triangle given angles with variables
Finding the value for a new score that will yield a given mean
Translating a sentence into a one-step inequality
Translating a sentence into a multi-step inequality
Writing an inequality for a real-world situation
Graphing a linear inequality on the number line
Translating a sentence into a compound inequality
Graphing a compound inequality on the number line
Set builder and interval notation
Identifying solutions to a two-step linear inequality in one variable
Additive property of inequality with whole numbers
Additive property of inequality with integers
Additive property of inequality with signed decimals
Multiplicative property of inequality with integers
Multiplicative property of inequality with signed fractions
Solving a two-step linear inequality: Problem type 1
Solving a two-step linear inequality: Problem type 2
Solving a linear inequality with multiple occurrences of the variable: Problem type 1
Solving a linear inequality with multiple occurrences of the variable: Problem type 2
Solving a compound linear inequality: Graph solution, basic
Solving a decimal word problem using a two-step linear inequality
U.S. Customary unit conversion with whole number values
Metric distance conversion with whole number values
Converting between metric and U.S. Customary unit systems
Converting between compound units: Basic
Converting between compound units: Advanced

Module #3 (60 topics, due on 07/29/2017)
Interpreting a bar graph
Interpreting a line graph
Reading a point in the coordinate plane
Plotting a point in the coordinate plane
Table for a linear equation
Identifying solutions to a linear equation in two variables
Finding a solution to a linear equation in two variables
Graphing a linear equation of the form \( y = mx \)
Graphing a line given its equation in slope-intercept form: Integer slope
Graphing a line given its equation in slope-intercept form: Fractional slope
Graphing a line given its equation in standard form
Graphing a vertical or horizontal line
Finding \( x \)- and \( y \)-intercepts given the graph of a line on a grid
Finding \( x \)- and \( y \)-intercepts of a line given the equation: Basic
Finding \( x \)- and \( y \)-intercepts of a line given the equation: Advanced
Graphing a line given its \( x \)- and \( y \)-intercepts
Graphing a line by first finding its \( x \)- and \( y \)-intercepts
Classifying slopes given graphs of lines
Finding slope given the graph of a line on a grid
Finding slope given two points on the line
Finding the slope of horizontal and vertical lines
Graphing a line given its slope and \( y \)-intercept
Identifying linear equations: Advanced
Rewriting a linear equation in the form \( Ax + By = C \)
Finding the slope and \( y \)-intercept of a line given its equation in the form \( y = mx + b \)
Graphing a line by first finding its slope and \( y \)-intercept
Writing an equation of a line given its slope and \( y \)-intercept
Writing an equation in slope-intercept form given the slope and a point
Writing an equation in point-slope form given the slope and a point
Writing an equation of a line given the \( y \)-intercept and another point
Writing the equation of the line through two given points
Writing the equations of vertical and horizontal lines through a given point
Finding slopes of lines parallel and perpendicular to a line given in slope-intercept form
Finding slopes of lines parallel and perpendicular to a line given in the form \( Ax + By = C \)
Identifying parallel and perpendicular lines from equations
Writing equations of lines parallel and perpendicular to a given line through a point
Writing and evaluating a function that models a real-world situation: Advanced
Interpreting the parameters of a linear function that models a real-world situation
Application problem with a linear function: Finding a coordinate given two points
Finding intercepts of a nonlinear function given its graph
Identifying solutions to a system of linear equations
Classifying systems of linear equations from graphs
Graphically solving a system of linear equations
Solving a system of linear equations using substitution
Solving a system of linear equations using elimination with addition
Solving a system of linear equations using elimination with multiplication and addition
Solving a system of linear equations with fractional coefficients
Solving a system of linear equations with decimal coefficients
Solving a \( 2 \times 2 \) system of linear equations that is inconsistent or consistent dependent
Creating an inconsistent system of linear equations
Interpreting the graphs of two functions
Solving a word problem involving a sum and another basic relationship using a system of linear equations
Solving a word problem using a system of linear equations of the form \( Ax + By = C \)
Solving a word problem using a system of linear equations of the form \( y = mx + b \)
Solving a value mixture problem using a system of linear equations
Solving a percent mixture problem using a system of linear equations
Solving a distance, rate, time problem using a system of linear equations
Solving a tax rate or interest rate problem using a system of linear equations
Solving a word problem using a 3x3 system of linear equations: Problem type 1

Module #4 (65 topics, due on 08/05/2017)
Power of 10: Positive exponent
Exponents and integers: Problem type 1
Exponents and integers: Problem type 2
Combining like terms: Whole number coefficients
Combining like terms: Integer coefficients
Combining like terms in a quadratic expression
Understanding the product rule of exponents
Introduction to the product rule of exponents
Product rule with positive exponents: Univariate
Product rule with positive exponents: Multivariate
Understanding the power rules of exponents
Introduction to the power of a power rule of exponents
Introduction to the power of a product rule of exponents
Power rules with positive exponents: Multivariate products
Power rules with positive exponents: Multivariate quotients
Power and product rules with positive exponents
Simplifying a ratio of multivariate monomials: Basic
Introduction to the quotient rule of exponents
Simplifying a ratio of univariate monomials
Quotient of expressions involving exponents
Simplifying a ratio of multivariate monomials: Advanced
Power and quotient rules with positive exponents
Evaluating expressions with exponents of zero
Power of 10: Negative exponent
Evaluating an expression with a negative exponent: Whole number base
Evaluating an expression with a negative exponent: Positive fraction base
Evaluating an expression with a negative exponent: Negative integer base
Ordering numbers with negative exponents
Rewriting an algebraic expression without a negative exponent
Introduction to the product rule with negative exponents
Product rule with negative exponents
Quotient rule with negative exponents: Problem type 1
Quotient rule with negative exponents: Problem type 2
Power of a power rule with negative exponents
Power rules with negative exponents
Power and quotient rules with negative exponents: Problem type 1
Power and quotient rules with negative exponents: Problem type 2
Scientific notation with positive exponent
Scientific notation with negative exponent
Converting between scientific notation and standard form in a real-world situation
Multiplying numbers written in scientific notation: Basic
Multiplying numbers written in scientific notation: Advanced
Dividing numbers written in scientific notation: Basic
Dividing numbers written in scientific notation: Advanced
Degree and leading coefficient of a univariate polynomial
Degree of a multivariate polynomial
Simplifying a sum or difference of two univariate polynomials
Simplifying a sum or difference of three univariate polynomials
Simplifying a sum or difference of multivariate polynomials
Multiplying a univariate polynomial by a monomial with a positive coefficient
Multiplying a univariate polynomial by a monomial with a negative coefficient
Multiplying a multivariate polynomial by a monomial
Multiplying binomials with leading coefficients of 1
Multiplying binomials with leading coefficients greater than 1
Multiplying binomials in two variables
Multiplying conjugate binomials: Univariate
Multiplying conjugate binomials: Multivariate
Squaring a binomial: Univariate
Squaring a binomial: Multivariate
Multiplying binomials with negative coefficients
Multiplication involving binomials and trinomials in one variable
Dividing a polynomial by a monomial: Univariate
Dividing a polynomial by a monomial: Multivariate
Polynomial long division: Problem type 1
Polynomial long division: Problem type 2

Module #5 (41 topics, due on 08/09/2017)
Greatest common factor of 2 numbers
Factoring a linear binomial
Introduction to the GCF of two monomials
Greatest common factor of three univariate monomials
Greatest common factor of two multivariate monomials
Factoring out a monomial from a polynomial: Univariate
Factoring out a monomial from a polynomial: Multivariate
Factoring out a binomial from a polynomial: GCF factoring, basic
Factoring a univariate polynomial by grouping: Problem type 1
Factoring a univariate polynomial by grouping: Problem type 2
Factoring a multivariate polynomial by grouping: Problem type 1
Factoring a quadratic with leading coefficient 1
Factoring a quadratic in two variables with leading coefficient 1
Factoring out a constant before factoring a quadratic
Factoring a quadratic with leading coefficient greater than 1: Problem type 1
Factoring a quadratic with leading coefficient greater than 1: Problem type 2
Factoring a quadratic with leading coefficient greater than 1: Problem type 3
Factoring a quadratic by the ac-method
Factoring a quadratic in two variables with leading coefficient greater than 1
Factoring a quadratic with a negative leading coefficient
Factoring a perfect square trinomial with leading coefficient 1
Factoring a perfect square trinomial with leading coefficient greater than 1
Factoring a perfect square trinomial in two variables
Factoring a difference of squares in one variable: Basic
Factoring a difference of squares in one variable: Advanced
Factoring a difference of squares in two variables
Factoring a polynomial involving a GCF and a difference of squares: Univariate
Factoring a polynomial involving a GCF and a difference of squares: Multivariate
Factoring a product of a quadratic trinomial and a monomial
Factoring a sum or difference of two cubes
Solving an equation written in factored form
Finding the roots of a quadratic equation of the form ax^2 + bx = 0
Finding the roots of a quadratic equation with leading coefficient 1
Finding the roots of a quadratic equation with leading coefficient greater than 1
Solving a quadratic equation needing simplification
Solving a word problem using a quadratic equation with rational roots
Roots of a product of polynomials
Introduction to the Pythagorean Theorem
Pythagorean Theorem
Word problem involving the Pythagorean Theorem
Using the Pythagorean Theorem and a quadratic equation to find side lengths of a right triangle