Instructor's Name: 
Office Location: 
Office Hours: 
Office Phone: 
E-mail: 

MyMathLab Course ID: 

Course Description
This is the first course in the algebra sequence. Topics studied include: real numbers system, solving linear equations, graphing, systems of equations, polynomial operations, and an introduction to factoring.

Illinois Articulation Initiative (IAI) number: N/A

Credit and Contact Hours:
\[
\begin{array}{|c|c|}
\hline
\text{Lecture} & \text{4} \\
\hline
\text{Lab} & 0 \\
\hline
\text{Credit Hours} & 4 \\
\hline
\end{array}
\]

Prerequisites: Satisfactory placement test score or “C” in Math 090 or equivalent.
Not intended for transfer.

Books, Supplies, and Supplementary Materials

A. Textbook

Required: Beginning & Intermediate Algebra (Set: Loose leaf Text/MyMathLab), (3-hole punched), 2017; Elayn Martin-Gay
Publisher: Pearson Education
ISBN: 9781323518988

Required for online sections:
MyMathLab (stand alone access code), 4 th Edition, 2012; Pearson Education
ISBN: 9780321199911

Required for Math Redesign Program sections only:
Developmental Math 090 / 094 / 098, 1st Edition, 2014; Sullivan
Publisher: Pearson Education
ISBN: 9781323015810

B. Other Required Materials

scientific calculator  Graphing calculators are not allowed.
MyMathLab (required for online classes and other specific sections)
Methods of Instruction: Lecture, Online, Redesign

Student Learning Outcomes: General Education Student Learning Outcomes:
Students will demonstrate the ability to accurately apply correct mathematical methods and techniques in various applications such as applied sciences, theoretical mathematics, physics, natural sciences and other applied sciences.

Objectives

Upon completion of this course, the student will be able to:
1. Add, subtract, multiply and divide fractions.
2. Rewrite fractions, decimals and percents using all three notations.
3. Change verbal statements into algebraic statements or equations.
4. Compute absolute value of a real number.
5. Evaluate algebraic expressions using real numbers.
6. Simplify numerical expressions involving exponents using order of operations.
7. Determine whether a number is a solution to a given equation.
8. Add, subtract, multiply and divide signed numbers.
9. Find the reciprocal of a real number.
10. Recognize and apply algebraic properties: commutative, associative, distributive, identity and inverse.
11. Add and subtract like terms.
12. Simplify expressions containing parentheses.
13. Evaluate expressions using order of operations.
14. Know and use properties of exponents where the exponents are any real number.
15. Solve first-degree equations and formulas.
16. Recognize false, conditional and identity statements.
17. Solve word problems involving linear equations and inequalities.
18. Solve linear inequalities and graph the solution.
19. Write and interpret interval notation.
20. Graph a linear equation in two variables.
21. Find and interpret the intercepts for linear equations in two variables.
22. Find and interpret the slope of a line.
23. Find the equation of a line and write it in either slope-intercept or point-slope form.
24. Determine whether lines are parallel, perpendicular or neither. Find a line that is perpendicular or parallel to a given line.
25. Define relation, function, domain and range.
26. Determine whether a given relation is a function.
27. Use and understand function notation.
28. Evaluate a function for a given input.
29. Solve systems of linear equations in two variables.
30. Solve word problems using systems of linear equations in two variables.
31. Solve systems of linear equations in three variables.
32. Solve word problems using systems of equations in three variables.
33. Add, subtract, multiply and divide polynomials.
34. Convert numbers between scientific notation and standard notation.
35. Factor polynomials using the following techniques: GCF and grouping (four terms).
36. Factor a trinomial of the form $x^2+bx+c$. 
TOPICAL OUTLINE

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Topic</th>
<th>Sections</th>
<th>Objectives</th>
<th>Pacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review of Real Numbers</td>
<td>1.2 – 1.8</td>
<td>1 – 10, 12 - 14</td>
<td>3 weeks</td>
</tr>
<tr>
<td>2</td>
<td>Equations, Inequalities, and Problem Solving</td>
<td>2.1 – 2.8</td>
<td>11, 15 – 19</td>
<td>3 weeks</td>
</tr>
<tr>
<td>3</td>
<td>Graphing and Functions</td>
<td>3.1 – 3.6</td>
<td>20 - 28</td>
<td>2.5 weeks</td>
</tr>
<tr>
<td>4</td>
<td>Solving Systems of Linear Equations</td>
<td>4.1 – 4.5</td>
<td>29 - 32</td>
<td>3 weeks</td>
</tr>
<tr>
<td>5</td>
<td>Exponents and Polynomials</td>
<td>5.1 – 5.7</td>
<td>33 - 34</td>
<td>3 weeks</td>
</tr>
<tr>
<td>6</td>
<td>Factoring Polynomials by GCF, Grouping, and those of the form x + bx + c</td>
<td>6.1 – 6.2, 6.3 (optional)</td>
<td>35 - 36</td>
<td>1 week</td>
</tr>
</tbody>
</table>

Testing Recommendations: total of 6 tests: 5 chapter tests, one additional test covering sections 5.7 – 6.2 (6.3 – optional)

Graded Assignments and Policies

Graded Assignments

Grading Policy
In class Quizzes 0 – 20%
Participation 0 - 5%
Projects 0 – 20%
Homework 0 – 30%
Tests 50 - 85%
Final 15 – 30%

The individual instructor will determine which items he or she considers essential for the student to memorize without error and test accordingly.

Each instructor will set minimum standards for performance on tests.

Grading Scale
90-100% A
80-89% B
70-79% C
60-69% D
0-59% F

Major Tests and Quizzes
The individual instructor will determine which items he or she considers essential for the student to memorize without error and test accordingly. Each instructor will set minimum standards for performance on tests. A comprehensive final examination will be given.

Final Exam Information
A comprehensive proctored final examination will be given.
Classroom Policies and Procedures

General Information

Attendance Policy

Make-up Policy

Extra-credit Policy

Academic Honor Code
The objective of the academic honor code is to sustain a learning-centered environment in which all students are expected to demonstrate integrity, honor, and responsibility, and recognize the importance of being accountable for one’s academic behavior.

College Statement about grades of “F” and Withdrawal from Class
Students may withdraw from a course by processing an add/drop form during regular office hours through the Registration and Records Office at Main Campus or Romeoville Campus, or by phone at 815-744-2200. Please note the withdrawal dates listed on your bill or student schedule. Every course has its own withdrawal date. Failure to withdraw properly may result in a failing grade of “F” in the course.

At any time prior to the deadline dates established, an instructor may withdraw a student from class because of poor attendance, poor academic performance or inappropriate academic behavior, such as, but not limited to, cheating or plagiarism.

Intellectual Property
Students own and hold the copyright to the original work they produce in class. It is a widely accepted practice to use student work as part of the college’s internal self-evaluation, assessment procedures, or other efforts to improve teaching and learning and in promoting programs and recruiting new students. If you do not wish your work to be used in this manner, please inform the instructor.

Student Code of Conduct
Each student is responsible for reading and adhering to the Student Code of Conduct as stated in the college catalog.

Sexual Harassment
Joliet Junior College seeks to foster a community environment in which all members respect and trust each other. In a community in which persons respect and trust each other, there is no place for sexual harassment. JJC has a strong policy prohibiting the sexual harassment of one member of the college community by another. See the Catalog or Student Handbook.

Student Support [http://jjc.edu/services-for-students/pages/default.aspx]

a. Disability Services: [http://www.jjc.edu/disability-services/Pages/default.aspx]
   Student Accommodations and Resources (StAR): If you need disability-related accommodations, specialized tutoring, or assistive technology in this class, if you have emergency medical information you wish to share with me, or if you need special arrangements in case the building must be evacuated, please inform me immediately. Please see me privately after class. New students should request accommodations and support by scheduling an appointment with the Student Accommodations and Resources (StAR) Office, Campus Center 1125, (815) 280-2230.

b. Tutoring: [http://jjc.edu/tlc/Pages/default.aspx]
c. Counseling and Advising: [http://www.jjc.edu/counseling-advising/Pages/default.aspx]
d. Academic Resources: [http://www.jjc.edu/academic-resources/Pages/default.aspx]
e. Support Programs and Services: [http://www.jjc.edu/support-programs-services/Pages/default.aspx]
f. Technology Support: [http://jjc.edu/services-for-students/Pages/technology-support.aspx]
g. My Degree Progress: My Degree Progress is a computerized system to track a student’s progress toward graduation. The report indicates every course and places these courses into their appropriate category as a General Education, Major Course, or Elective, according to the degree requirements. This tool is useful for preparing before an advising appointment, for planning, for registering, and for checking that the student is on track for graduation. [https://eresources.jjc.edu]