Course Description
Math 002 prepares students for work in a college-level mathematics course. The course focuses on the study of algebraic operations and equation-solving procedures with an emphasis on linear and quadratic functions. The content includes studying operations with real numbers, algebraic expressions, exponents, polynomials, rational expressions, radicals and rational exponents. Students will study linear equations and inequalities, absolute value equations, systems of linear equations and inequalities, quadratic equations, rational and radical equations, and functions.

Instructional Approach
Course delivery is a hybrid format with regular class discussions and activities building on class preparation to be completed prior to class meetings. These preview assignments will include readings and videos. Both in-class and online homework are required. Daily class participation and "doing math every day" are key to success in the course. Take advantage of the resources offered by the Kansas Algebra Program via the drop-in help room, study groups, and opportunities to meet individually with your class discussion leader or the Program Directors.

Enrollment
- There is no enforced prerequisite for Math 002; however, it is suggested that students have successfully completed at least one introductory algebra course.
- If you question your placement in this or any mathematics course, you may take a placement exam. Refer to the Math Department information on the Placement Exam for details.

Add/Change/Drop Information
- Enrollment in Math 002 will be strictly enforced for students who fall under the CLAS Early and Continuous Enrollment in English and Math policy. Students in the College of Liberal Arts and Sciences may not drop Math 002 until Tuesday, September 23, 2014, to ensure that a full effort is given. If you are a student in another school, such as Journalism or Engineering, and would like to alter your math enrollment, please contact Lindsey Deaver to discuss your options.
- Any add or change of sections after the on-line period allowed by the university must be approved by the KAP office, Strong 323.
- The Kansas Algebra Program adheres to the university-wide drop policy. See the KU Registrar’s site for deadlines. Students who consider dropping the course during the second withdrawal period are encouraged to discuss their academic performance with one of the KAP Directors or the Advising Specialist before taking action.
Course Objectives/Topics
There are five units in the course. Each unit includes applications.

1. Solving Equations & Inequalities In One Variable
   (a) Analytical solutions to linear, literal, and absolute value equations.
   (b) Analytical solutions to linear and absolute value inequalities.

2. Polynomials
   (a) Simplifying expressions using integer exponent rules.
   (b) Simplifying polynomials using operations: addition, subtraction, multiplication, and division.
   (c) Factoring polynomials

3. Radical and Rational Expressions and Equations
   (a) Simplifying expressions using rational exponent rules.
   (b) Simplifying expressions with complex numbers using the operations of addition, subtraction, and multiplication.
   (c) Analytical solutions to rational and radical equations.
   (d) Using the distance formula

4. Functions and Graphs
   (a) Graphing and evaluating functions.
   (b) Analyzing function characteristics including domain and range.
   (c) Linear Functions: identifying slopes and intercepts, writing equations, and finding solutions.
   (d) Polynomial Functions: finding solutions using the square root method, factoring, and the Quadratic Formula.

5. Systems of Equations & Inequalities
   (a) Linear systems of equations in two variables
   (b) Graphing linear inequalities in two variables.
   (c) Linear systems of inequalities in two variables.
Required Materials

- **Graphing Calculator**, TI-83 or TI-84 series.
- **Text**: The course utilizes the MyMathLab (MML) online homework system which requires the purchase of the MyLabsPlus Access Code. Class discussions and in-class submitted homework will require regular access to the text as well.

  1. **Text/access code package:**
     *Intermediate Algebra, a Graphing Approach (5e)*, Martin-Gay & Greene, 2015, Prentice Hall, a la carte version packaged with the *MyLabsPlus (MLP) Access Kit*. The text package is available only at the KU Bookstore.
     This option is for students who prefer to have a hardbound copy of the text or may not have consistent access to the internet.
  2. Alternative to purchased text: The online materials include an e-text. Students who are comfortable with online access only, and have reliable internet resources, may purchase the *MyLabsPlus* code by itself when logging in to the site through the My KAP Info link. A credit card or Paypal account is required.

Evaluation & Grading Scale

- There are 5 Units in the course. Each of Units 1-4 will include a unit exam and the Unit 5 material will be included in the comprehensive final exam. Homework and classwork are distributed across each of the 5 units.
- Students are expected to complete all assignments and exams.
- An adjustment to the final grade is built-in to allow for individual circumstances. Note the difference in the total points in the course compared to the grading scale.

<table>
<thead>
<tr>
<th>Requirements</th>
<th>In Class</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework/Quizzes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classwork</td>
<td>45 pts</td>
<td></td>
</tr>
<tr>
<td>Attendance</td>
<td>25 pts</td>
<td></td>
</tr>
<tr>
<td>Exams</td>
<td>400 pts</td>
<td></td>
</tr>
<tr>
<td>Final Exam</td>
<td>120 pts</td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td><strong>840 pts</strong></td>
<td></td>
</tr>
</tbody>
</table>

- The grading scale for the course will be:

<table>
<thead>
<tr>
<th>Grading Scale</th>
<th>800 - 720</th>
<th>719 - 640</th>
<th>639 - 560</th>
<th>559 - 480</th>
<th>479 - 0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grading</strong></td>
<td>A 90%</td>
<td>B 80%</td>
<td>C 70%</td>
<td>D 60%</td>
<td>F &lt;60%</td>
</tr>
</tbody>
</table>
Special Needs

- The Academic Achievement and Access Center (AAAC) coordinates academic accommodations and services for all eligible KU students with disabilities. If you have a disability for which you wish to request accommodations and have not contacted the AAAC, please do so as soon as possible. They are located in 22 Strong Hall and can be reached at 785-864-4064 (V/TTY). Information about their services can be found at http://www.disability.ku.edu.
- Classroom or testing accommodations for Math 101 should then be arranged through the KAP office in ST 323.

Academic Misconduct

- University Senate Rules and Regulations, Section 6, Academic Misconduct:
  '2.6.1 Academic misconduct by a student shall include, but not be limited to, disruption of classes; threatening an instructor or fellow student in an academic setting; giving or receiving of unauthorized aid on examinations or in the preparation of notebooks, themes, reports or other assignments; knowingly misrepresenting the source of any academic work; unauthorized changing of grades; unauthorized use of University approvals or forging of signatures; falsification of research results; plagiarizing of another’s work; violation of regulations or ethical codes for the treatment of human and animal subjects; or otherwise acting dishonestly in research.'

Intellectual Property

- Course materials prepared by the instructor, together with the content of all lectures and review sessions presented by the instructor are the property of the instructor.
- Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited.
- Permission to make such recordings may be granted by the instructor on a case by case basis, on the condition that these recordings are used only as a study aid by the individual making the recording.
- Unless explicit permission is obtained from the instructor, recordings of lectures and review sessions may not be modified and must not be transferred or transmitted to any other person, whether or not that individual is enrolled in the course.