

## MATH 1215 INTERMEDIATE ALGEBRA 4 CREDITS

### SYLLABUS

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#### CATALOG DESCRIPTION

A study of linear and quadratic functions, and an introduction to polynomial, absolute value, rational, radical, exponential, and logarithmic functions. A development of strategies for solving single-variable equations and contextual problems.

Prerequisites:

Semester Offered: Fall, Spring

#### ***Common Student Learning Outcomes***

*Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...*

##### **BROAD AND SPECIALIZED LEARNING**

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

##### **CRITICAL THINKING**

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

##### **CULTURAL AND CIVIC ENGAGEMENT**

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

##### **EFFECTIVE COMMUNICATION**

Students will exchange ideas and information with clarity in multiple contexts.

##### **INFORMATION LITERACY**

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

##### **INTEGRATING TECHNOLOGIES**

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

*Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.*

#### **Student Learning Outcomes**

Upon successful completion of the course, the student will be able to...

Students will build on their knowledge of linear and quadratic functions and will begin to build an understanding of absolute value, polynomial, rational, power, radical, exponential and logarithmic functions in the following contexts:

1. Demonstrate appropriate use of basic function language and notation.

2. Convert between equivalent forms of algebraic expressions.
3. Solve single-variable equations of the types listed above.
4. Interpret and communicate algebraic solutions graphically and numerically.
5. Demonstrate contextual problem-solving skills that include setting up and solving problems, and interpreting solutions in context.
6. Apply appropriate problem solving methods from among algebraic, graphical, and numerical.