SAN JUAN COLLEGE
Success Matters

MATH 1220 COLLEGE ALGEBRA 3 CREDITS

SYLLABUS

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: High School above Algebra II course grade of C or better, GPA of 2.8 or better or High School Algebra II course grade of C or better, GPA of 3.2 or higher or enroll in Math 115

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.

COURSE LEARNING OUTCOMES

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

1. Students will build on their knowledge of polynomial, rational, absolute value, radical, exponential and logarithm functions in the following contexts:

A copy of this approved syllabus is on file in the dean's office.
Updated 12/14/18

2. Use function notation; perform function arithmetic, including composition; find inverse functions.
3. Identify functions and their transformations given in algebraic, graphical, numerical, and verbal representations, and explain the connections between these representations.
4. Graph and interpret key feature of functions, e.g., intercepts, leading term, end behavior, asymptotes.
5. Solve equations algebraically to answer questions about graphs, and use graphs to estimate solutions to equations.
6. Solve contextual problems by identifying the appropriate type of function given the context and creating a formula based on the information given.
7. Communicate mathematical information using proper notation and verbal explanations.

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