SAN JUAN COLLEGE
Success Matters

Math 1131 -- COMPANION TO CONCEPTUAL MATHEMATICS 2 CREDITS

SYLLABUS

CATALOG DESCRIPTION

Instructs students in the knowledge of basic mathematics necessary for success in Math 130. Topics include basic arithmetic, simplifying and solving algebraic equations, conversions, scientific notation,   percent, ratios and proportions, basic geometry, introduction to basic financial literacy, introduction   to statistics, formulas and the introduction of variable expressions and linear equations.

Co-requisite: MATH 1130

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…

A copy of this approved syllabus is on file in the dean's office.

1. Algebraic Expressions and Equations
2. Equations and Problem Solving
3. Graphs
4. Intro to Statistics and Finance
5. Exponents

Specific Learning Outcomes

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

1.1 translate a verbal/written model to an algebraic model

1.2 evaluate algebraic expressions

1.3 manipulate algebraic expressions using commutative, associative, and distributive laws

1.4 add, subtract, multiply, and divide real numbers

1.5 define absolute value geometrically and algebraically

1.6 simplify algebraic expressions using the order of operations

1.7 perform operations on exponential expressions

2.1 solve linear equations

2.2 manipulate algebraic formulas

2.3 solve linear equations

2.4 solve word problems using linear equations

3.1 analyze graphs and tables

3.2 graph linear equations

3.3 visualize and compute rates and slopes from graphical, numerical, and algebraic representations

3.4 recognize and convert linear functions from numerical, graphical, and algebraic representations

4.1 intro to interest and statistics: central tendencies and standard deviation

5.1 simplify exponential expressions using the rules of exponents

5.2 convert numbers between standard and scientific notation

5.3 perform operations using scientific notation

A copy of this approved syllabus is on file in the dean's office.

Page **2** of **2**