

MASTER COURSE OUTLINE

Prepared By: Salah Abed, Johanna Doty, Eric Fleming, David Mayhugh, Tyler Wallace Date: April 2021

COURSE TITLE: Just in Time Math Support

GENERAL COURSE INFORMATION

Dept.: DVS Course Num: 070 (Formerly:)
CIP Code: 32.0240 Intent Code: 12 Program Code:

Credits: 2

Total Contact Hrs Per Qtr.: 22

Lecture Hrs: 22 Lab Hrs: Other Hrs:

Distribution Designation:

COURSE DESCRIPTION (as it will appear in the catalog)

This course will cover prerequisite content from MATH 098 that support successful completion of MATH& 107. Topics include: simplifying expressions, solving and graphing linear equations, working with polynomials, interest rate problems, and unit conversions. The course must be taken concurrently with MATH& 107.

PREREQUISITES:

MATH 094 or placement. Must be taken concurrently with MATH& 107.

TEXTBOOK GUIDELINES:

Appropriate college level text or handouts and supplemental materials as chosen by the instructor.

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills:

- 1. Uses order of operations to simplify expressions and solve algebraic equations.
- 2. Uses given points or a graph to find the slope of a line and write its equation.
- 3. Uses the quadratic formula to solve problems with quadratics.
- 4. Evaluates an expression given in function notation.
- 5. Uses properties of exponents and logarithms to solve simple exponential equations and simplify expressions.

INSTITUTIONAL OUTCOMES

IO2 Quantitative Reasoning: Students will be able to reason mathematically

COURSE CONTENT OUTLINE

- 1. Describe several strategies that can be used to combat math anxiety
- 2. Apply study skills in college-level mathematics courses
- 3. Simplify algebraic expressions

- 4. Evaluate a function at a point
- 5. Solve linear equations
- 6. Graph linear equations
- 7. Find the equation of a line
- 8. Simplify rational expressions with negative exponents
- 9. Evaluate expressions with scientific notation
- 10. Multiply polynomials
- 11. Solve quadratic equations using the quadratic formula
- 12. Solve compound interest problems
- 13. Solve exponential and logarithmic equations
- 14. Convert units using dimensional analysis

DEPARTMENTAL GUIDELINES (optional)

This course will be pass/fail. Students must earn a 75% in the course to earn a passing grade. At least 60% of the grade will be based on quantifiable work such as exams, homework, research project and quizzes. Up to 40% of the grade may be based, attendance, projects, journal work, etc. at the instructor's discretion. Grading procedures must be clearly stated in the class syllabus.

Students who only pass DVS 070 and do not pass MATH 107 will not earn any placement adjustment.

Students who only pass MATH 107 and do not pass DVS 070 will earn the SQR credit, but will not be permitted to take any class that lists MATH 098 as a prerequisite.

Students who pass both DVS 070 and MATH 107 will earn the SQR credit and receive a placement score allowing them to take any non-math class that lists MATH 098 as a prerequisite.

DIVISION CHART APPROVAL

DATE