



MASTER COURSE OUTLINE

Prepared By: Johanna Doty, David Mayhugh, Tyler Wallace

Date: 11/10/20

COURSE TITLE: Math for Elem Educ 1

GENERAL COURSE INFORMATION

Dept.: MATH&

Course Num: 131

(Formerly:)

CIP Code: 13.1311

Intent Code:

Program Code:

Credits: 5

Total Contact Hrs Per Qtr.: 55

Lecture Hrs: 55

Lab Hrs:

Other Hrs:

Distribution Designation: SQR

COURSE DESCRIPTION (as it will appear in the catalog)

Covers the mathematics elementary teachers are responsible for teaching at K-8 levels, including computing with whole numbers, fractions, decimals and percents; multiplicative comparisons and reasoning; ratio, rates, and proportions; negative numbers; algebra and graphing; relationships between time, distance and rate; patterns and functions.

PREREQUISITES: MATH 098 or placement

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. A basic understanding of numbers and theories, including fractions, decimals, and percents
2. Knowledge of ratios, rates, and proportions
3. The theory related to negative numbers
4. Basic algebraic function and graphing skills
5. Critical thought with regard to time, distance, rate, and patterns in the form of applied problems

INSTITUTIONAL OUTCOMES

IO2 Quantitative Reasoning: Students will be able to reason mathematically

IO3 Human Relations/Workplace Skills: Students will be able to demonstrate teamwork, ethics, appropriate safety awareness and/or workplace specific skills

COURSE CONTENT OUTLINE

1. Mathematical Processes, Operations and Properties
2. Computation and Estimation
3. Theories of Numbers
4. Working with Integers
5. Working with Rational Numbers
6. Ratios, Proportions and Critical Thought
7. Algebraic Functions and Graphs

DEPARTMENTAL GUIDELINES *(optional)*

At least 70% of the grade will be based on quantifiable work such as exams, homework, research project and quizzes. Up to 30% 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.


DIVISION CHAIR APPROVAL

12/9/20
DATE