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Reviewed by: N. Cahoon

Reviewed by:

Date Prepared: Fall 2022

Textbook:

C & GE Approved:

Semester effective:

Mathematics (Math) 1505C Support for Mathematical Concepts for Elementary Teachers (1 unit)

Prerequisite: None

Corequisite: Math 1505 (Mathematical Concepts for Elementary Teachers) must be taken concurrently

Advisory: None

Hours and Unit Calculations:

16 hours lecture. (32 Outside-of-class Hours); (48 Total Student Learning Hours) 1 Unit

Catalog Description: Co-requisite support for Math 1505 Mathematical Concepts for Elementary Teachers. This 1-unit course is intended to provide additional support for students who are concurrently enrolled in Math 1505. Emphasis will be placed on prerequisite math skills needed to be successful in Math 1505, as well as study skills, appropriate use of technology, and just-in-time review and remediation. Students who earn an A, B, C, will earn credit in this class.

Type of Class/Course: Credit/No Credit

Texts: This course will utilize the same textbook/access code that is being used with Math 1505.

Additional Required Materials: Calculator or any other technology/materials required in Math 1505.

Course Objectives:

By the end of the course, a successful student will:

- 1. Develop strong study skills to become independent, active learners**
- 2. Demonstrate proficiency in the mathematical skills necessary to complete the Math 1505 course**
- 3. Utilize technology when appropriate**

Course Scope and Content:

Course Topics

- 1. Reasoning Mathematically & Representational Reasoning**
- 2. Problem Solving with Real Numbers**
- 3. Addition and Subtraction of Real Numbers & Number Lines**
- 4. Multiplication and Division of Real Numbers**
- 5. Numeration Systems & Hindu-Arabic Numeration System**

6. Non-decimal Positional Systems & Place Value Systems
7. Basic Number Theory
8. Rational and Irrational Numbers: Ratio and Proportion and Decimal Representation
9. National and State Curriculum Standards for Elementary School Math including Common Core State Standards
10. Appropriate Use of Technology
11. Study Skills

Learning Activities Required Outside of Class

The students in the class will spend a minimum of 2 hours per week outside of the regular class time doing the following:

1. Completing assigned reading from the textbook
2. Completing assigned homework problems and study activities
3. Watching instructional videos
4. Watching videos related to growth mindset and study skills
5. Review how to use technology to solve problems
6. Work on course-related topics in math lab/learning center or office hours

Methods of Instruction

1. Lecture and sample problems created or curated by the instructor
2. Videos that demonstrate how to utilize technology to solve select problems
3. Individual work with appropriate technology
4. Student presentations

Methods of Evaluation

1. Student Presentations
2. Problem-solving assignments or activities
3. Quizzes
4. Project
5. Discussions
6. Written summaries
7. Time spent in Math lab, Learning Center, or using TC tutoring services

Supplemental Data:

<u>TOP Code:</u>	<u>170100: Mathematics, General</u>
<u>SAM Priority Code:</u>	<u>E: Non-Occupational</u>
<u>Distance Education:</u>	<u>N/A</u>

<u>Funding Agency:</u>	<u>Y: Not Applicable(funds not used)</u>
<u>Program Status:</u>	<u>Program Applicable</u>
<u>Noncredit Category:</u>	<u>Y: Not Applicable, Credit Course</u>
<u>Special Class Status:</u>	<u>N: Course is not a special class</u>
<u>Basic Skills Status:</u>	<u>N: Course is not a basic skills course</u>
<u>Prior to College Level:</u>	<u>Y: Not applicable</u>
<u>Cooperative Work Experience:</u>	<u>N: Is not part of a cooperative work experience education program</u>
<u>Eligible for Credit by Exam:</u>	<u>NO</u>
<u>Eligible for Pass/No Pass:</u>	<u>C: Pass/No Pass</u>
<u>Discipline:</u>	<u>Mathematics</u>