

Prepared by: D. Mitchell  
Reviewed by: M. Martinez  
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Date Prepared: Fall 2022  
Textbook:  
C & GE Approved:  
Semester effective:

**Mathematics (Math) 1540C Support for Precalculus (1 unit)**

**Prerequisite: None**

**Corequisite: Math 1540 (Precalculus) 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 1540 Precalculus. This 1-unit course is intended to provide additional support for students who are concurrently enrolled in Math 1540. Emphasis will be placed on prerequisite math skills needed to be successful in Math 1540, 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: Lial, Margaret L., et al. *Precalculus*. 6th ed. Pearson, 2016.**

**Additional Required Materials: Calculator or any other technology/materials required in Math 1540.**

**Course Objectives:**

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

- 1. Develop strong study skills to become independent, active learners**
- 2. Demonstrate mastery of the mathematical skills necessary to complete the Math 1540 course**
- 3. Utilize technology when appropriate**

**Course Scope and Content:**

- A. Real Numbers and their Properties**
- B. Solving Equations**
- C. Factoring and Simplifying Polynomials and Rationals**
- D. Exponents & Logarithms**
- E. Systems of inequalities and linear programming**
- F. Functions and Graphs**
- G. Rational and Radical Expressions**
- H. Unit Circle & Trigonometric Identities**

- I. Properties of Matrices
- J. Appropriate Use of Technology
- K. 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:**

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|-----------------------------------|---|
| <b><u>TOP Code:</u></b>           | <b><u>170100: Mathematics, General</u></b>      |
| <b><u>SAM Priority Code:</u></b>  | <b><u>E: Non-Occupational</u></b>               |
| <b><u>Distance Education:</u></b> | <b><u>N/A</u></b>                               |
| <b><u>Funding Agency:</u></b>     | <b><u>Y: Not Applicable(funds not used)</u></b> |
| <b><u>Program Status:</u></b>     | <b><u>Program Applicable</u></b>                |
| <b><u>Noncredit Category:</u></b> | <b><u>Y: Not Applicable, Credit Course</u></b>  |

|  |   |
|--|---|
| <b><u>Special Class Status:</u></b>        | <b><u>N: Course is not a special class</u></b>                                  |
| <b><u>Basic Skills Status:</u></b>         | <b><u>N: Course is not a basic skills course</u></b>                            |
| <b><u>Prior to College Level:</u></b>      | <b><u>Y: Not applicable</u></b>   |
| <b><u>Cooperative Work Experience:</u></b> | <b><u>N: Is not part of a cooperative work experience education program</u></b> |
| <b><u>Eligible for Credit by Exam:</u></b> | <b><u>NO</u></b>  |
| <b><u>Eligible for Pass/No Pass:</u></b>   | <b><u>C: Pass/No Pass</u></b>   |
| <b><u>Discipline:</u></b>                  | <b><u>Mathematics</u></b>   |