Carthage Mathematics Department
Course Summary for Math 2470 Mathematics for Scientists and Engineers

1. Credits: 4 cr.
2. Terms Offered: Spring
3. Text(s): *Mathematical Methods in the Physical Sciences* by Boas, current edition
4. Topics Covered:
    a. Infinite series
    b. Complex numbers
    c. Linear algebra
    d. Partial differentiation
    e. Multiple integrals
    f. Vector analysis
    g. Differential equations
5. Skills Enhanced:
    a. Quantitative reasoning
    b. Critical thinking
    c. Problem solving
6. Miscellanea
    a. This course is taken by math, physics, and chemistry majors
7. Course Goals: By the end of the course, students should be able to do the following.
    a. Demonstrate knowledge of the basic vocabulary and concepts needed by applied mathematicians
        i. Assessment: Projects, exams, quizzes
    b. Seek additional direction on their own concerning applied math topics
        i. Assessment: Projects, exams, quizzes
    c. Demonstrate skills necessary for success in upper-level physics and engineering courses
        i. Assessment: Projects, exams, quizzes