I. Description of Course:
   1. **Department/Course:** MATH - 171
   2. **Title:** Mastering Math Skills: Fractions
   3. **Cross Reference:**
   4. **Units:** 0.5
      - Lec Hrs: 1.5
      - Lab Hrs: 1.5
      - Tot Hrs: 27.00
   5. **Repeatability:** Yes Times: 3
   6. **Grade Options:** Letter Grade, May Petition for Pass/No Pass (GP)
   7. **Degree/Applicability:** Credit, Not Degree Applicable (C)
   8. **General Education:**
   9. **Field Trips:** Not Required
   10. **Requisites:**

II. Catalog Description:
   Students will refresh their knowledge of operations with fractions and the applications of fractions. It is intended for students currently enrolled in Math 151 or Math 151AB who feel they will benefit from a review of this material.

III. Class Schedule Description:
   Refresh your knowledge of how to use and apply fractions.

IV. Counselor Information:
   Students at any level who have difficulty with fractions will benefit from enrolling in this course. It is a self-paced course, with students completing modules either through self-study and/or with help from the staff at the Math Learning Center.

II. Student Learning Outcomes
   The student will:
   1. Demonstrate proficiency in performing operations (+, -, *, /) with fractions without the use of a calculator.
   2. Demonstrate proficiency at using a standard four-function calculator to solve problems involving fractions.
   3. Use fractions to solve real-world problems.

III. Course Outline:
   A. Perform operations with fractions without a calculator.
      1. Multiplication and division of fractions
      2. Addition and subtraction of fractions with common denominators
      3. Addition and subtraction of fractions without common denominators
      4. Combining multiple fraction operations
   B. Perform operations with fractions using a calculator.
   C. Apply the use of fractions to word problems.

IV. Course Assignments:
A. **Reading Assignments**
   1. Read sample material on how to perform each skill.

B. **Projects, Activities, and other Assignments**
   1. Complete a sequence of practice problems for each topic. While different instructors may emphasize different learning methods, it is expected that all students will be proficient with both calculator and non-calculator methods.

C. **Writing Assignments**
   1. none

V. **Methods of Evaluation/Assessment:**
   A. Assessment will be done through three exams and a comprehensive final.
   B. Each exam must be completed at an 85% success rate to proceed to the next exam.
      Finishing the course also requires completion of the final exam at an 85% success rate.

VI. **Methods of Instruction:**
   A. Independent Study
   B. Computer Assisted Instruction

VII. **Textbooks:**
   - **Recommended**
   - **Supplemental**

VIII. **Supplies:**
   A. none

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