COMMON COURSE OUTLINE:  Course discipline/number/title:  MATH 0082: Developmental Mathematics II

A.  CATALOG DESCRIPTION
1. Credits: 3
2. Hours/Week: 3
3. Prerequisites (Course discipline/number): Successful completion of MATH 0081 or MATH 0093, or appropriate placement test score.
4. Co-requisites (Course discipline/number): None
5. MnTC Goals (if any): NA

This is a self-paced, skill mastery developmental mathematics course. It is an individualized learning experience. The instructor will provide instruction, guidance, and monitor progress. Students who completed the minimum of content in MATH 0081 may begin with the MATH 0082 content and continue progressing in the MATH 0080 series. The student will demonstrate a minimum level of mastery of 75% for the content areas in the MATH 0080 series required to complete their program prerequisites.

B.  DATE LAST REVISED (Month, year): June, 2014

C.  OUTLINE OF MAJOR CONTENT AREAS:
1. Ratios and proportions
2. Conversions
3. Linear Equations and Inequalities
4. Equations of Lines
5. Polynomials
6. Systems of Equations and Inequalities

D.  LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Express quantities as ratios and solve basic ratio and proportion equations.
2. Apply dimensional analysis to solve length, volume, and mass conversion problems (English/American and Metric).
3. Graph linear equations and inequalities in two variables.
4. Apply formulas (slope-intercept, point-slope) to find the equation of a line, or lines which are parallel or perpendicular.
5. Simplify and evaluate expressions involving integer exponents.
6. Add, subtract, multiply, divide, and simplify polynomial expressions.
7. Solve systems of linear equations in two variables (by graphing, substitution, addition/elimination methods)
8. Solve systems of linear inequalities in two variables by graphing.
9. Apply problem solving techniques to contextual problems (types from; content areas 1-6)

E.  LEARNING OUTCOMES (MNTC): NA

F.  METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Proctored computer/paper tests
2. Computer generated homework
3. Homework Notebooks/Attendance

G.  RCTC CORE OUTCOME(S) ADDRESSED:
☒ Communication ☐ Civic Responsibility
☒ Critical Thinking ☒ Personal/Professional Accountability
☐ Global Awareness/Diversity ☒ Aesthetic Response

H.  SPECIAL INFORMATION (if any): None