

## COURSE OUTLINE

Revision: Marjie Vittum-Jones, April 2008

DEPARTMENT:	Academic Programs
CURRICULUM:	Developmental Mathematics
COURSE TITLE:	Modular Math Lab
COURSE NUMBER:	MATH 081
TYPE OF COURSE:	College Preparatory, Developmental
Special Requirement Met:	None
AREA(S) OF KNOWLEDGE:	None
COURSE LENGTH:	1 quarter
CREDIT HOURS:	5
LECTURE HOURS:	0
LAB HOURS:	55
CLASS SIZE:	25
PREREQUISITES:	Appropriate placement scores

## COURSE DESCRIPTION:

The course covers all the Developmental Math courses (Math 083, 084, 085 and 098) in a modular format. Math 081 consists of 20 modules, 5 modules for each of the developmental classes. Each student will complete up to 5 modules in a quarter. Students are diagnosed during the first few days of the quarter, during class, to place them in to the correct modules. At the end of the quarter, each student will be given course credit for the developmental class in which they complete the material successfully (75% or higher) or in Math 081 if not all modules for a developmental class are completed.

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STUDENT LEARNING OUTCOMES ADDRESSED:

1. Communication – Read and listen actively to learn and communicate.
2. Computation – Use arithmetic and other basic mathematical operations as required by program of study. Apply quantitative skills for personal, academic, and career purposes. Identify, interpret and utilize higher level mathematical and cognitive skills; for those students who choose to move beyond the minimum requirements as stated above.
3. Critical thinking and problem solving – Think critically in evaluating information, solving problems, and making decisions.
4. Personal responsibility – Be motivated and able to continue learning and adapt to change. Value one's own skills, abilities, ideas and art. Take pride in one's work. Be aware of civic and environmental issues.
5. Technology – Select and use appropriate technological tools for personal, academic and career tasks.

GENERAL COURSE OBJECTIVES:

The student will do most or all of the following:

1. Demonstrate success by earning 75% or higher on all evaluations over the topics in modules in which the student is placed.
2. Be able to work with the basic arithmetic skills.
3. Work to build a foundation of math skills for subsequent mathematical classes.
4. Practice basic algebra skills.
5. Develop skills in basic measurement and geometry.
6. Develop skills in intermediate algebra through symbolic manipulation and applications.
7. Develop regular attendance and time management/organizational skills.

TOPICAL OUTLINE: Topics likely to be completed include the following:

- I. Math 083 topics: Operations on whole numbers, fractions, decimals, ratios, proportions, percents, measurement (English and metric) and real numbers as well as basic geometry, real numbers and algebraic expressions.  
Math 084/085 topics: Solving equations and inequalities, linear equations, slopes, graphs of linear equations, and applications, polynomial operations, factoring polynomials and problem solving, rational expressions and

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TOPICAL OUTLINE CONTINUED:

- II. equations, systems of linear equations, radical expressions and equations and quadratic equations.
- III. Math 098 topics: Algebra review, solving linear equation, solving linear inequalities, introduction to functions, exponents, polynomials, logarithms, rational expressions, equations in two variable, inequalities in two variables, rational exponents, roots, quadratic equations and systems of linear equations.

APPROX HOURS: 55

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DATE: April 2008

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SLO #	Included in Course Objective Number	SSCC Student Learning Outcomes
SLO 1.1	1 - 7	Communication - Read and listen actively
SLO 1.2		Communication - Speak and write effectively
SLO 2.1	1 - 7	Computation - Use mathematical operations
SLO 2.2	1 - 7	Computation - Apply quantitative skills
SLO 2.3	1 - 7	Computation - Identify, interpret, and utilize higher level mathematical and cognitive skills
SLO 3.1		Human Relations - Use social interactive skills to work in groups effectively
SLO 3.2		Human Relations - Recognize the diversity of cultural influences and values
SLO 4.1	1 - 7	Critical Thinking and Problem Solving -
SLO 5.1	1 - 7	Technology - Select and use appropriate technological tools
SLO 6.1	1 - 7	Personal Responsibility - Be motivated and able to continue learning and adapt to change
SLO 6.2	1 - 7	Personal Responsibility - Value one's own skills, abilities, ideas and art
SLO 6.3	1 - 7	Personal Responsibility - Take pride in one's work
SLO 6.4		Personal Responsibility - Manage personal health and safety
SLO 6.5	1 - 7	Personal Responsibility - Be aware of civic and environmental issues
SLO 7.1		Information Literacy - Access and evaluate information
SLO 7.2		Information Literacy - Use information to achieve personal, academic, and career goals, as well as to participate in a democratic society

PREPARED BY: M. Vittum-Jones and O. Shatunova  
DATE: April 2008