

COURSE IMPLEMENTATION DATE:	1994
COURSE REVISED IMPLEMENTATION DATE:	May 2009
COURSE TO BE REVIEWED:	March 2011
(Four years after UPAC final approval date)	(MONTH YEAR)

**OFFICIAL COURSE OUTLINE INFORMATION**

Students are advised to keep course outlines in personal files for future use.

Shaded headings are subject to change at the discretion of the department and the material will vary - see course syllabus available from instructor

FACULTY/DEPARTMENT:	<b>Upgrading &amp; University Preparation</b>	
<b>MATH 072</b>		<b>3</b>
COURSE NAME/NUMBER	FORMER COURSE NUMBER	UCFV CREDITS
	<b>Intermediate Algebraic Mathematics</b>	
COURSE DESCRIPTIVE TITLE		

**CALENDAR DESCRIPTION:**

The course reviews fractions, decimals, ratio, proportion, percent, and the metric system. Topics include integers, primes and factors; perimeter, area, and volume; formulas, algebraic equations and expressions; coordinate and statistical graphs; powers, roots, and scientific notation. The course also introduces polynomials and right angle trigonometry. Students will acquire the mathematical knowledge, skills, and strategies needed to enter higher level courses, or to satisfy personal or career goals.

**PREREQUISITES:** Math 061 or UUP department permission (assessment may be required).

**COREQUISITES:**

SYNONYMOUS COURSE(S)	<b>SERVICE COURSE TO:</b>
(a) Replaces: _____ (Course #)	_____
(b) Cannot take: _____ for further credit. (Course #)	_____

TOTAL HOURS PER TERM: <b>90</b>	TRAINING DAY-BASED INSTRUCTION
<b>STRUCTURE OF HOURS:</b>	LENGTH OF COURSE: _____
Lectures: <b>45</b> Hrs	HOURS PER DAY: _____
Seminar: _____ Hrs	
Laboratory: _____ Hrs	
Field Experience: _____ Hrs	
Student Directed Learning: _____ Hrs	
Other (Specify): Individual/ <b>45</b> Hrs small group work	

MAXIMUM ENROLLMENT:	<b>24</b>
EXPECTED FREQUENCY OF COURSE OFFERINGS:	Every semester
<b>WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**AUTHORIZATION SIGNATURES:**

Course Designer(s): _____ CCP Math Curriculum Committee	Chairperson: _____ Greg St Hilaire
Department Head: _____ Sue Brigden	Dean: _____ Karen Evans
UPAC Approval in Principle Date: _____	UPAC Final Approval Date: Mar. 2, 2007

**LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:**

Upon successful completion of the course, it is expected that students will be able to:

1. Apply the concepts of factors and multiples to solve whole numbers, fractions, and variable expression problems.
2. Add, subtract, multiply, and divide integers and rational numbers.
3. Use the Cartesian coordinate system to graph linear equations and find the slope of a straight line using rise/run.
4. Solve problems using a variety of strategies, including algebra.
5. Evaluate and simplify variable expressions.
6. Solve equations containing variables.
7. Apply concepts of perimeter, area, and volume to solve problems involving a variety of two and three-dimensional shapes.
7. Interpret and use conventional geometric vocabulary and notation.
8. Use the basic operations and exponential and trigonometric functions on a scientific calculator.
9. Perform operations using powers, roots, and scientific notation.
10. Use basic trigonometric ratios (sine, cosine, and tangent) and the Pythagorean theorem to solve problems involving right triangles.

**METHODS:**

Methods will vary with the instructor but may include: lectures, group activities, individual tutoring, textbook exercises, lab activities, and assignments.

**PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):**

Credit can be awarded for this course through PLAR (Please check:)  Yes  No

**METHODS OF OBTAINING PLAR:**

**TEXTBOOKS, REFERENCES, MATERIALS:**

[Textbook selection varies by instructor. An example of texts for this course might be:]

Hutchison, D, Berman, B, & Baratto, S. (2007). Prealgebra: An Integrated Equations Approach (2nd Edition). McGraw-Hill Ryerson.

Instructor-developed material.

**SUPPLIES / MATERIALS:**

A scientific calculator and a geometry set (ruler, compass, and protractor) are required.

**STUDENT EVALUATION:**

[An example of student evaluation for this course might be:]

Weightings will vary with individual instructors but assessment methods may include the following:

- |                      |          |
|----------------------|----------|
| 1) Assignments       | 0 - 25%  |
| 2) Quizzes and tests | 25 - 50% |
| 3) Mid-term exam     | 20 - 30% |
| 4) Final exam        | 30 - 40% |

**COURSE CONTENT:**

[Course content varies by instructor. An example of course content might be:]

Estimating skills and calculator use  
Measurement  
Perimeter, area, and volume  
Ratio and proportion  
Percent  
Geometry  
Statistics  
Signed (rational) numbers  
Algebra  
Powers, roots, and scientific notation  
Trigonometry  
Graphing