

COURSE IMPLEMENTATION DATE: January 2005
 COURSE REVISED IMPLEMENTATION DATE:
 COURSE TO BE REVIEWED: January 2009
 (Four years after implementation 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:	Science, Health & Human Services / Mathematics & Statistics	
MATH 205		4
COURSE NAME/NUMBER	FORMER COURSE NUMBER	UCFV CREDITS
	Math for the Elementary School Teacher II	
COURSE DESCRIPTIVE TITLE		

CALENDAR DESCRIPTION:

This course will continue the aims of MATH 105 by providing a direct experience of mathematics and by encouraging students to explore reasoning strategies in solving problems appropriate to the elementary school curriculum. This course is designed to develop confidence in verbalizing mathematics to one's peers as well as to students in an elementary classroom. Fifteen hours of elementary classroom observation is mandatory. Topics include strategies in problem solving, descriptive statistics, an introduction to probability, coordinate geometry, elementary logic, modular arithmetic, and an introduction to graph theory.

PREREQUISITES: **MATH 105 with a C or better**
 COREQUISITES:

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

TOTAL HOURS PER TERM:	75	TRAINING DAY-BASED INSTRUCTION
STRUCTURE OF HOURS:		LENGTH OF COURSE: _____
Lectures: 60	Hrs	HOURS PER DAY: _____
Seminar:	Hrs	
Laboratory:	Hrs	
Field Experience: 15	Hrs	
Student Directed Learning:	Hrs	
Other (Specify):	Hrs	

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

AUTHORIZATION SIGNATURES:

Course Designer(s): _____ Jane Cannon	Chairperson: _____ Gillian Mimmack (<i>Curriculum Committee</i>)
Department Head: _____ Gillian Mimmack	Dean: _____ Jacalyn Snodgrass
PAC Approval in Principle Date: _____	PAC Final Approval Date: December 10, 2004

LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:

The successful student will be able to:

1. Use appropriate problem-solving strategies in order to structure clear and concise solutions to problems related to the elementary school curriculum.
2. Perform the necessary computations in order to demonstrate an understanding of descriptive statistics, introduction to probability, coordinate geometry, logic, modular arithmetic and graph theory.
3. Observe at least 15 hours in an elementary classroom and record activities that influenced student learning.
4. Create and/or use models that represent mathematical concepts.
5. Organize and present a coherent and focused unit of study appropriate within the elementary curriculum.

METHODS:

Lectures are balanced with problem sessions, discussion sessions, and group activities. Evaluation will include tests, assignments, projects, and a three-hour comprehensive exam.

PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

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

METHODS OF OBTAINING PLAR:

Course challenge. Please check online at <http://www.ucfv.ca/math/challenge.htm> for the departmental challenge policy.

TEXTBOOKS, REFERENCES, MATERIALS:

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

The text is chosen by a departmental curriculum committee. Recent text:
Musser, Burger, Peterson. 2003. Mathematics for Elementary Teachers. 6th ed. Wiley.

SUPPLIES / MATERIALS:

Calculator, compass, and protractor

STUDENT EVALUATION:

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

Assignments, Projects	40%
Tests	30%
Final Exam	30%

A student must obtain at least 40% on the final exam in order to receive credit for this course.

COURSE CONTENT:

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

Patterns and Problem Solving Strategies
Descriptive Statistics
Introduction to Probability
Coordinate Geometry
Elementary Logic
Modular Arithmetic
Introduction to Graph Theory