

UNIVERSITY OF INDIANAPOLIS  
School for Adult Learning  
Discovery in Mathematics (Math 108, AU1)

General Information:

Welcome to Math 108. This course is designed to give you a positive approach to the mathematics of our contemporary society. Upon reading this syllabus, I would like each of you to provide me with your preferred e-mail address and phone number for contact purposes.

Course Information:

Discovery in Mathematics (math 108, AU1)  
Credit Hours - 3  
Day of Meeting - Wednesday  
Hours: 6:00 p.m. - 9:45 p.m.  
Dates of meeting -8/27, 9/3, 9/10, 1/17, 9/24, 10/1, 10/8, 10/15, 10/22,  
10/29 Location - Please contact SAL  
Prerequisite: Math 090 or its equivalent

Instructor Information:

Thomas B. Williams, MAT  
Adjunct instructor, School for Adult Learning,  
University of Indianapolis  
Office Hours: One-half hour before class, or arranged.  
Phone: (317) 862-4283  
Cell: (317) 695-4603.  
E-Mail: [twilliams@uindy.edu](mailto:twilliams@uindy.edu)  
E-Mail: [tbwilliams4@comcast.net](mailto:tbwilliams4@comcast.net)

My role as an instructor is to do what I can to expand your knowledge and use of mathematics. I would like to accomplish this in an atmosphere conducive to personal success and accomplishment for each student.

Course Description: Math 108 emphasizes problem-solving and applications of the topics included in the course. The course is intended to promote critical thinking and mathematical skills. Topics may include: problem-solving techniques, number theory, numeration systems, statistics, probability, graph theory, combinatorics, and management science.

Required Text: Angel, Allen R., et.al. A Survey of Mathematics with Applications expanded 8<sup>th</sup> edition. ISBN#032150108X

Specific Materials: You will need a calculator that has the square root function.

Course Purpose, Goals, and Objectives:

The course is designed to present topics in mathematics that will enhance the student's numerical literacy. A problem solving approach is used throughout in an effort to increase the mathematical skills of the student and develop the critical thinking ability necessary to function in contemporary society.

The successful student will:

Develop an understanding of our number system's evolution and its affect on our daily lives.

Assess the effect of how statistical information is presented in their work and leisure environment.

Compare the use of statistical measurements with regard to the situation in which they are used.

Apply the mathematics of chance to their personal environment.

Adapt the knowledge gained through the presented topics to their own interests and needs.

Personalize the presented problem-solving techniques.

## POSSIBLE TOPICS

Session I: Problem - solving techniques and numeration systems

Session II: Numeration systems and number bases.

Session III: Introduction to statistics.

Session IV: Statistics continued.

Session V: Measures of Central Tendency

Session VI: Scatter grams and lines of best fit.

Session VII: Probability

Session VIII: Chance / Odds

Session IX: Graph Theory

Session X: Graph Theory continued

### Proposed exam schedule

Exam 1 session 3

Exam 2 session 6

Exam 3 session 10

There is no assignment prior to the first class meeting.

### Grading:

You will be graded on a total point system. The following scale will be used.

100% - 93%	A
92% - 90%	A-
89% - 87%	B+
86% - 83%	B
82% - 80%	B-
79% - 77%	C+
76% - 73%	C
72% - 70%	C-
69% - 67%	D+
66% - 63%	D
62% - 60%	D-

59% - F

Points will be given for specific in class activities and for the exams. It is always possible that a part or all of the assignment will be collected and assigned points. There is no assignment for the first class.

Attendance is required and essential to successfully complete this course. Classes missed, with prior approval of the instructor, will be considered on a case-by-case basis.

It is expected that the policies of the University and those of the School for Adult Learning will be followed.

Withdrawal from the course is your responsibility. You will not be automatically withdrawn for not attending class.

There is a mathematics lab available on-campus for student support.

This syllabus is a dynamic document and, as such, is subject to change.

It is my intention to prove to most of you, that you can enjoy taking a mathematics class.