



**Disability Accommodation:** Any student who feels he or she may need an accommodation based on impact of a disability should contact me privately as soon as possible to discuss your specific needs. I rely on the documented files at the Office of Academic Support in 104 Doane to verify the need.

**Course Description:** Here we will consider some of the greatest ideas of humankind - ideas comparable to the works of Shakespeare, Plato, and Michelangelo. The great ideas we will explore here are within the realm of mathematics. What is mathematics? Mathematics is an artistic endeavor which requires both imagination and creativity. In the course, we will experience what mathematics is all about by delving into some beautiful and intriguing issues. There are three basic goals for this course.

- (1) To attain a better understanding of some rich mathematical ideas.
- (2) To build sharper skills for analyzing life issues that transcend mathematics.
- (3) To develop a new perspective and outlook at the way you view the world.

We will cover roughly six different topics. Although you will be challenged, the overriding theme of the course is to *gain an appreciation for mathematics and to discover the power of mathematical thinking in your everyday life*. We will follow the text reasonably closely although we will not cover all the material in class. The only prerequisites for this course are an open and curious mind and the willingness to put aside any preconceived prejudices or dislikes for mathematics. Very little mathematical background will be expected and hopefully this course should be (for the most part) “self contained.”

**Quizzes:** All quizzes must be typewritten (with the exception of “diagrams”). Clarity of exposition is important and one should strive for well written, polished solutions.

**Research Project:** The only way to really understand mathematics is to learn and discover it on one’s own. Thus, students will select a mathematical topic, read and teach themselves any necessary background to understand it and then investigate the topic. Students are **strongly** encouraged to work together in groups of two or three on this project. By working together, the individuals can learn from each other and share the experience. Each group will write a final paper on their findings and submit a completed work (a poster display, a creative work, etc.). Also, each student will write a short individual statement regarding the experience. Various interim reports will be collected throughout the term. Students will discuss all phases of the project with me according to the dates below. Projects are graded based on the following:

<u>Grading</u>		<u>Mile Markers</u>	
Mathematical content	$\frac{1}{3}$	March 12	Project outline due
Creativity	$\frac{1}{3}$	April 2, 23	Project update due
Quality	$\frac{1}{3}$	April 30	Project due

**Important Date:**

February 2, 2004 Last day to drop a course for the second semester.