

EDUCATION 475-4 (D4.00)

Designs for Learning Secondary Mathematics

Regular Summer Semester
May 9 - August 5, 1988
Wednesday, 5:30 - 9:20 P. M.
MPX 7600B

Instructor: Ken Harper
Phone: 922-3637

PREREQUISITES: EDUCATION 401/402. *Students other than those who intend to teach Secondary Mathematics are encouraged to consider enrolling in this course to develop their own sense and awareness of mathematics.*

OBJECTIVES: The main objectives of this course are for the students to become familiar with the curriculum for Secondary Mathematics and to develop teaching strategies that can be used in the classroom.

REQUIREMENTS: Because of the nature of this course, students will be expected to participate fully in each session and keep a journal containing their work and observations. Each student will make one short (15 minute) presentation to the class, develop a unit plan, and complete one major paper. These may be combined with permission from the instructor. A discussion of possible topics and formats will take place during the second week of classes. Students wishing to receive exceptional marks should consult with the instructor regarding additional work.

Some students struggle with mathematics and rely on their memory to get them through. Many people avoid mathematics wherever possible. I believe that most of the material found in the secondary curriculum can be mastered and enjoyed. Much of this course will be presented in a workshop and seminar format where the students will be presented with many situations leading to an awareness of mathematics. They will also be given the opportunity to develop their own teaching style and work with their colleagues to develop lessons and materials for the classroom. Some of the topics that will be covered in this course include: an overview of Elementary Mathematics, elementary Algebra and Geometry, introductory Trigonometry, Probability and Statistics, and Historical information.

REQUIRED TEXT: To Be Announced

RECOMMENDED READING: Mindtools by R. Rucker