

An Example of a Syllabus Used In
SMTH 120 - COLLEGE MATHEMATICS *Tentative* - Fall 1998

Catalog Description (partial): (3) Basic concepts of elementary algebra, subsets of the Cartesian plane; rational, exponential, and logarithmic functions; arithmetic and geometric series; simple and compound interest; annuities; fundamentals of probability and statistics. Only one of Mathematics 120, 121 or 126 may be used to satisfy a mathematics requirement for general education or major credit.

Upon successful completion of this course, the student

- * should be a more intelligent consumer of numerical and graphical information, better prepared to read and understand the research and literature in his/her areas of study and interest,
- * will have gained experience in collecting and processing data, and in presenting numerical information, both orally and in writing,
- * will see the need for mathematical thinking and the applications of mathematical concepts in his/her areas of study and interest.

Required Calculator: TI-83 (Texas Instruments). The calculator may be purchased locally at discount stores and at the USCS Bookstore. The TI-82 is acceptable, but the -83 is preferred. The TI-80, -81, -85, -86, and other brands are *not* acceptable.

Suggested Reference: *Mathematics with Applications* by Lial, Miller and Hungerford. *Any similar text may be used.*

Also Required: Ring binder with a set of index dividers
One or two virus-free 3.5" computer disks, formatted for IBM
College Mathematics booklet and handouts, available from the bookstore.

PLEASE NOTE: This section incorporates calculators and computers to obviate much of the calculation required in traditional math courses. Students often will work in groups. The groups will need to arrange some meetings outside of regularly scheduled class hours. If your work schedule is too inflexible to meet occasionally outside of regular hours with a group, you should choose another course. **HAVING TO WORK is no excuse for failing to complete tasks assigned in this course. Other courses acceptable for general education credit are SMTH 121 and 126.**

Course Strategy and Objectives: Topics described in the catalog (see description above) will be learned through individual and group projects. The projects concern problems encountered in the disciplines served by this course: nursing, the social sciences, arts, languages and communications, etc. Project reports will be produced using calculators and computers. **Hand-written reports will not be accepted.** Specifically we will use the TI-83 or -82, Excel or Quattro Pro, and Word or WordPerfect.

You need not be knowledgeable of any of these to enroll. Basic instruction on rudimentary calculator and computer use is part of the course. (Don't drop your computer literacy course! You won't learn that much about computing in SMTH 120!) By the end of the course you should know the characteristics of the functions listed in the catalog description, and you should know how they can be used. You'll be exposed to some elementary statistical concepts as you work on your projects. Your grade will come from your performance in group and individual projects and from regularly

