SU DEPARTMENT OF MATHEMATICS & COMPUTER SCIENCE
SYLLABUS *(Tentative)*
MATH 300 *Introduction to Abstract Mathematics*

Intended for: Minors and majors in Mathematics, particularly prospective teachers.

Objective: To provide students with an opportunity to develop the foundations of abstract mathematics in a manner similar to that employed by professional mathematicians. For majors, to form an intellectual bridge from the computational courses such as calculus and linear algebra to the theoretical ones such as abstract algebra, analysis, and number theory. For minors, to serve as a capstone to the undergraduate mathematical experience.

Prerequisite: MATH 210, completed with a grade of C or better.

Text: "Chapter Zero: Fundamental Notions of Abstract Mathematics," by Carol Schumacher; Pearson Education, 2nd edition, 2001.

		Weeks
Chapter 0	***Introduction***	.5
Chapters 1-5	***Review and further development of topics from MATH 210:*** Logic, Sets, Induction, Relations and Functions	5.0
Chapter 6	***Elementary Number Theory***	2.5
Chapter 7	***Cardinality***	1.5
Chapter 8	***Real numbers***	2.5
	Exams, reviews and optional topics	2.0

EVALUATION

Home and board work	50%
Hour Exams	30%
Final Exam	20%

Note: The Writing Across the Curriculum Program is supported strongly in this writing-intensive course. Students will be expected to communicate mathematics and mathematical ideas effectively in speech and writing, and more than 50% of the grade will depend on written work, including writing on exams and written presentations at the board in class.