

MATH 401: Math Modeling Textbook: A First Course in Mathematical Modeling, Giordano, Weir, & Fox Instructor: George Voutsadakis Office: CAS 206J Phone: 635-2667 Email: gvoutsad@lssu.edu URL: http://pigozzi.lssu.edu/WWW/TEACH/LSSU401F02/LSSU401F02.html Office hours: MWF 3:00 - 3:50, TR 4:00 - 4:50

From the Catalog: Selected applications of mathematics in such areas as biology, economics, social science and engineering are discussed. The construction of a mathematical model used to study a real situation will be stressed as well as interpretation of mathematical results in that context.

Prerequisites: junior/senior standing, a course in computer programming and mathematical maturity at the level of MA305, MA308 or MA310 with a minimum grade of C.

Course Objectives:

To explore and be ready to use in real life situations modeling tools such as difference equations, proportionality, model fitting, experimental and simulation modeling, Markov chains and linear programming. The students that are interested may enter teams to compete internationally in the annual modeling competition and the course will hopefully enrich them with some of the tools and ideas needed to excel.

Week	Tuesday	Thursday
1	No Class	2.1
2	1.1	1.2
3	1.3	1.4
4	PRESENTATION	PRESENTATION
5	2.2	2.3
6	2.4 & 2.5	DISCUSSION
7	PRESENTATION	PRESENTATION
8	3.1 & 3.2	3.3 & 3.4
9	4.1 & 4.2	4.3 & 4.4
10	PRESENTATION	PRESENTATION
11	5.1 & 5.2	5.3 & 5.4
12	5.5 & 6.1	6.2 & 6.3
13	7.1 & 7.2	No Class
14	PRESENTATION	PRESENTATION
15	7.3 & 7.4	7.5 & 7.6

SYLLABUS FOR FALL 2002: TR 2:00 - 3:20

THERE IS ONE MORE PRESENTATION DUE IN THE FINALS WEEK! Final Exam Time: Monday, December 16, 3:00pm-5:00pm