

SU DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
COSC/MATH 495 Directed Consulting
SYLLABUS (*Tentative*)

Objectives:

- (1) Develop the ability to work as part of a team in the analysis and solution of problems which arise in the world of applied science, management, and industry.
- (2) Improve the student's ability to do technical writing and speaking.
- (3) Give the student an opportunity to serve regional business and industry.

Prerequisites: Invitation by the department; willingness on the student's part to spend at least fourteen hours per week on the course.

References: Portions of texts; articles from professional journals; technical reports; computer aids such as data, models, and simulation results.

	Weeks
1. Meeting of the team members with the project director and the technical liaison from the client company for the purpose of being introduced to the problem.	1
2. Individual study and analysis of the problem and the relevant mathematics, computer science, and statistics; work as part of the full project team or a subteam in the sharing of ideas, the analysis and possible solution of the problem, and the <i>writing of a report</i> on it; weekly meetings with the project director and the full team to discuss progress and plan further work; monthly meetings with the technical liaison to report progress and receive clarification, suggestions, and direction; occasional meetings with one or more experts in fields pertinent to the problem (perhaps on-campus seminars or workshops conducted by experts); occasional trips, perhaps to the client's location.	12
3. WRITING ACROSS THE CURRICULUM is accomplished by each student keeping a personal journal, contributing to the class written report, and submitting a value-added paper (which expresses what s/he has learned and how s/he has grown in the course). The class presents to the client an oral report, and its planning becomes a pre-writing exercise for the written report.	1 14

EVALUATION

Research, discussion, computation	30%
Contributing to the written report	30%
Participating in the oral report	20%
Value-added paper	20%

NOTE:

COSC/MATH 495 may be taken twice, but used only once toward a degree in Mathematics. COSC/MATH 495 may be taken for a maximum of eight credit hours. (P/F grading only.)