

COURSE DESCRIPTION

Department and Course Number	CS 499	Course Coordinator	Skjellum
Course Title	Senior Capstone	Total Credits	1

Current Catalog Description

A series of lectures across the curriculum by faculty and guest lectures on key topics in computer science together with lecture and discussion on computer ethics. Students take the Major Field Test in Computer Science as a requirement for completing this course.

Textbook

Computers, Ethics, and Society, by M. D. Ermann and M. S. Shauf, Oxford Univ. Press, 2003.

References *None*

Course Goals

To recapitulate the key tenets of the undergraduate curriculum, cover topics in ethics, and to interest students in continued advance learning in Computer Science after they graduate. Each student completes the Major Field Test Examination as part of this course as part of the Department's Learning Outcomes Assessment activities.

Prerequisites by Topic

Senior standing in the CIS major

Major Topics Covered in the Course

This course is a series of 13 lectures consisting of review of key topics of the entire curriculum of the CIS undergraduate major, plus special topics and computer ethics. Every faculty member of the department participates in one or more lectures.

Laboratory projects (specify number of weeks on each)

None

Estimate CSAB Category Content

	CORE	ADVANCED		CORE	ADVANCED
Data Structures	2		Computer Organization and Architecture	4	
Algorithms	3		Concepts of Programming Languages	4	
Software Design					

Oral and Written Communications

Every student is required to submit at least 5 written reports (not including exams, tests, quizzes, or commented programs) of typically 1 page and to make 1 oral presentation of typically 10 minutes duration. Include only material that is graded for grammar, spelling, style, and so forth, as well as for technical content, completeness, and accuracy.

This course emphasizes written lecture summaries and a final report on a specific subject in computer science of interest to the student, and pre-approved by the instructor.

Social and Ethical Issues

This course includes several lectures and extensive reading from the text.

Theoretical Content

A wide variety of theory is covered such as programming languages, algorithms, etc, across the series of lectures presented by faculty.

Problem Analysis

None

Solution Design

None