# COMPUTER SCIENCE 5734 COMPUTER-SUPPORTED COOPERATIVE WORK (ADP TITLE: COMPTR-SUPP COOP WORK)

#### I. CATALOG DESCRIPTION

# 5734 COMPUTER-SUPPORTED COOPERATIVE WORK

Review and critique of state-of-the-art computing systems supporting cooperative work. Introduction to toolkits, software architectures and implementation issues relevant to development of systems for cooperative work. Analysis of group interactions and concerns in collaborative activities such as writing, design, meetings, communication, and decision-making.

Pre: Graduate Standing. (3H, 3C). II. Alternate years.

#### II. LEARNING OBJECTIVES

Having successfully completed this course, students will be able to:

- apply appropriate methods to the study of cooperative work situations;
- relate empirical analyses of collaborative tasks such as shared writing, design, meetings, communication and decision-making to the design of software supporting these tasks;
- compare and contrast the designs of paradigmatic computing systems supporting cooperative work;
- analyze tradeoffs among alternative software architectures for systems supporting cooperative work;
- prototype and develop design rationale for a system supporting cooperative work in a specific domain.

#### III. JUSTIFICATION

The increasing pervasiveness of computer networks has enabled a corresponding increase in the variety and extent of computer-supported collaboration. As a result, computer-supported cooperative work (CSCW) has emerged as a key area of research in Human-Computer Interaction (HCI). Many HCI graduate students in Computer Science, Education, Engineering and elsewhere are developing thesis and dissertation projects that involve some degree of computer support for collaborative tasks but have not received any specific background on issues and techniques that would guide such research. This course will provide a survey and analysis of a variety of collaboration activities and of approaches to the design and evaluation of CSCW systems.

#### IV. PREREQUISITES AND COREQUISITES

Graduate standing is required in order to insure that students have the educational maturity and the discipline-specific background necessary for this course.

#### V. TEXTS AND SPECIAL TEACHING AIDS

Greif, I. COMPUTER-SUPPORTED COOPERATIVE WORK: A BOOK OF READINGS. San Mateo, CA: Morgan Kaufman, 1988. vii, 783.

#### VI. SYLLABUS

Percent of Course
1. History of CSCW
5%

2.	Studies of Groups and Collaboration	
	a. Research Methods, Organizational Context	5%
	b. Communication	5%
	c. Collaborative Writing	5%
	d. Meetings and Decision-Making	5%
	e. Design Teams	5%
	f. Education	5%
3.	Technology for CSCW	
	a. Electronic Mail and Listservs	5%
	b. Discussion and News Groups	5%
	c. Network Communities	5%
	d. Shared Workspaces	5%
	e. Video Teleconferencing	5%
	f. Media Spaces	5%
4.	Representative CSCW Systems	10%
5.	Software Issues for CSCW	
	a. Centralized and Distributed Architectures	10%
	b. Floor Control	5%
	c. I/O Synchronization	5%
	d. Collaboration Transparency	5%
		100%

## VII. OLD (CURRENT) SYLLABUS

NA

## VIII. CORE CURRICULUM GUIDELINES

NA