CSC 411 – ETHICS IN COMPUTER SCIENCE

LECTURE HOURS: 1
CREDIT HOURS: 1
PREREQUISITES: Eighteen hours of computer science with at least six hours advanced and department chair approval.

GRADE REMINDER: Must have a grade of C or better in each prerequisite course.

CATALOG DESCRIPTION

Study of ethical concepts to guide computing professionals. Implications and effects of computers on society. Responsibilities of computing professionals in directing emerging technology. May not be used to satisfy requirements toward a minor in computer science, computer information systems or information technology.

PURPOSE OF COURSE

Studies the ethical, social, and professional concerns of the computer science field. Covers the social impact of the computer, implications and effects of computers on society, and the responsibilities of computer professionals in directing the emerging technology; to further develop oral and written communications skills by enabling students to gain first-hand experience in presenting information.

EDUCATIONAL OBJECTIVES

Upon successful completion of the course, students should be able to:

1. Describe and distinguish between the various ethical theories which can be used to form the basis of solutions to moral dilemmas in computing.
2. Identify and define the components of a structured plan for solving ethical problems and, in the process, will be able to understand the basis for her/his own ethical system.
3. Indicate which of a variety of ethical problems may be unique to computing and what makes each unique.
4. Prepare case studies dealing with moral dilemmas related to computing, including appropriate components of the plan described in objective 2 above.
5. Compare and contrast several examples of professional codes of ethics related to computing, discussing their commonalities, differences, and implications.
6. Demonstrate research skills using the library and the Internet.
7. Effectively express ideas through written communication.
8. Demonstrate oral communication abilities by presenting oral reports and case studies.

CONTENT

Lecture .........................................................................................................................................................11
Introduction to ethics
Social and ethical issues affecting computing
Case studies
Projects

Projects are assigned at the discretion of the instructor. Project work will be accomplished outside of student's scheduled classroom hours. One term project for each student. Approximately 10 weeks to complete. Project requires research, a formal paper of eight to twelve pages and a formal presentation lasting ten to fifteen minutes. Topics are drawn from social and ethical issues.

Presentations

Oral presentation of projects and case studies

Exams

TOTAL 15

REFERENCES


