School of Technology
Eastern Illinois University

Request for New Course

1. Course Description
   a. Course number: TEC 5333
   b. Title: Management of Computer Technology
   c. Meeting Times and Credit: 3-0-3
   d. Term to be offered: S or F
   e. Short Title: Mgt. Comp Tech
   f. Course description:
      This course focuses on issues and forces influencing management decisions regarding computer technology. Case problems, software simulation, and site visits provide insight to the operations of computer technology.
   g. Prerequisites: Experience with and access to current computer technology.

2. Objectives of the Course

   Students will:
   a. Identify management decisions related to the architectural structure of computer technology systems.
   b. Identify and select appropriate management software (SNMP, CMIB, etc.) and management tools for a computer technology system.
   c. Evaluate and report on informational technology cost, benefits, and performance.
   d. Identify, select, and recruit qualified computer technology personnel.
   e. Simulate a working computer technology environment with logical topology.
   f. Solve and present findings of at least three case problems related to computer technology systems.
   g. List professional organizations, journals, and vendors for reference as managers of computer technology.
3. Outline of the Course

1. Introduction, data communication industry 1 week

2. Tour of a computer technology system 1 week

3. Organizations and environments in computer technology 1 week
   a. job titles and job descriptions
   b. information technology standards and resources

4. Computer technologies: concepts, security, management, and leadership 1 week

5. Models of architecture and simulations 3 weeks
   a. simulated design, policy and topology
   b. case problem 1

6. Using software for policy, and procedure management 2 weeks

7. Professional Resources: “Managing Computer Technology” 1 week

8. Evaluating computer technology cost, benefits, and performance 2 weeks
   a. case problem 2
   b. cost/benefit analysis of simulated design

9. Final case problems with simulation and presentation 2 weeks

10. Present findings of professional organizations, journals, and vendors 1 week

Evaluation:

Summary of Professional Resource Experiences 10%
   Case problems
   1. Individual 5%
   2. Team of three 10%
   3. Team of 4 or 5 with simulation 25%
Job announcement 10%
Summary of professional organizations and vendors 5%
Simulated design of system with cost/benefit analysis 35%
4. Implementation
   a. Faculty: Graduate faculty
   b. Additional costs to students: None
   d. Term to be first offered: Summer 2002

5. Rationale
   a. **Purpose and need:** The purpose of this course is to tie together the successful implementation of computer management strategy combining policy, process, people, and technology. Effective computer technology management has become necessary with ever changing network user requirements and increased use of multi-vendor network systems. Also within the realms of network management comes increased pressure for managers to monitor not just hardware but software access and usage. This course exposes students to a real environment through on-site visits and guest speakers. It also provides student experience in system design and policy development using simulation and case studies. Finally, this course helps students to identify personnel needs, professional organizations, and resources for designing, developing, and implementing computer technology systems.

   b. **Justification of the course level:** A graduate-level course is suitable for the graduate students who prepare to become managers of computer technology systems. The proposed course will provide individuals who work in management of computer technology with the knowledge and skills to solve problems related to design, development, and management of computer information systems. Students will incorporate information to develop the practical experience needed to be managers of a computer technology system.

   c. **Similarity to existing courses:** None

   d. **Requirement or elective:** Elective for graduate students in Technology

6. Community College Transfer: Not applicable

7. Date approved by the School of Technology Graduate Committee Nov. 16, 2000

8. Date approved by the School of Technology Curriculum Committee Nov. 30, 2000

9. Date approved by the Council of Graduate Studies Feb. 6, 2001