

# SOUTHEAST MISSOURI STATE UNIVERSITY

Department: Computer Science

Course Number: IS575

Title of Course: Information Technology Management

New: 9-15-04

Revised: \_\_\_\_\_

## I. Catalog Descriptions and Credit Hours of Course:

IS 575 Information Technology Management: Managing Information Technology in an organization. Covers strategic frameworks for IT deployment, trends in technology platforms and application portfolios, and tactics for providing reliable systems and efficient support service. Prerequisite: IS 275 with C (or better) or upper division / graduate status and instructor consent.: (3)

## II. Prerequisite(s): IS 275 with C (or better) or upper division / graduate status and instructor consent

## III. Objectives of the course:

- A. Identify the scope of and key issues in IT Management.
- B. Apply the framework analysis tools for identifying strategic IT solutions.
- C. Evaluate computing platforms and communications networks from planning perspective.
- D. Evaluate strategies for implementing IT-based solutions.
- E. Examine customer service and information security management issues.
- F. *Additional for the graduate students:* Develop an IT strategic plan for an organization

## IV. Expectations of Students

- A. For every contact hour in class, at least three hours of effort will be needed outside the class for the various assignments related to this course.
- B. Regular use of computer resources for assigned activities.
- C. Prior preparation to class (case study preparations and research) is the norm to enable active participation in topical discussions.
- D. Participate in group projects and make formal class presentations.
- E. Interact with outside organizations for applying the concepts learned and prepare consultancy reports.

F. Adhere to the University's Academic Honesty Policy: "Students are responsible for upholding the principles of academic honesty in accordance with the 'University Statement of Student Rights' found in the STUDENT HANDBOOK." Please refer to the STUDENT HANDBOOK and to pages 17 – 19 in the 2004-2005 Undergraduate Bulletin for more details.

G. Students are expected to obey copyright and intellectual property laws. An atmosphere of professional courtesy is expected in the classroom.

V. Course Outline: (Total: 45 hours)

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|--|---------|
| A. Importance of IT management:<br>Information age and IT growth; Processes in IT function;<br>A typical organization for delivering IT services;<br>Current key issues in managing IT | 3 hours |
| B. Strategic nature of IT:<br>IT for competitive advantage – different model;<br>Aligning IT with organizational goals;<br>Identifying opportunities for IT deployment                 | 6 hours |
| C. Dimensions of IT Planning:<br>IT-based solutions planning – practical aspects;<br>Technology symbiosis – influence of other technologies on IT                                      | 3 hours |
| D. Planning issues in computing technology:<br>Trends in computing Technology (platforms);<br>Integration of computers and communications (C & C)                                      | 3 hours |
| E. Planning issues in communications technology:<br>Communications network<br>Trends in communications technology (Hardware and Protocols)   | 3 hours |
| F. Application portfolio management:<br>Corporate Information System architecture;<br>Integration of applications - legacy systems with web front-end                                  | 3 hours |
| G. Implementation strategies<br>Systems implementation: alternative approaches<br>Impact of advances in programming tools and techniques<br>Evaluating and managing alternatives       | 3 hours |
| H. Application development management:<br>Application development processes;<br>Project planning and control strategies;<br>Standards, tools, and quality control                      | 6 hours |
| I. Operations and maintenance management:<br>Operations management;  | 3 hours |

Systems maintenance;  
Systems performance monitoring and review

- J. User support services management: 3 hours  
Call center management;  
Service level agreement
- K. Security management: 6 hours  
Aspects of security;  
Risk management using countermeasures;  
Disaster recovery planning
- L. Personnel issues: 3 hours  
Changing role of IT personnel;  
Managing training and motivational issues

VI. Textbook and Other Required Material or Equipment

Frenzel, C. W. and Frenzel J. C. (2004). *Management of Information Technology* (4th ed.), Thomson, Course Technology.(0-619-03417-3)

\*Applegate L.M, et al (2002). *Creating Business advantage in Information Age*, McGraw-Hill Irwin. (0-07-252367-0)

(\* Reference for case studies and range of IT applications)

Additional case studies and journal papers (provided by instructor)

VII. Basis for Student Evaluation (The weight of evaluation criteria may vary at the discretion of the instructor and will be indicated at the beginning of each class.)

<b>Evaluation Item</b>	<b>Undergraduate</b>	<b>Graduate</b>
Research on technology trend and on security countermeasures (report)	15%	12%
IT deployment plan using strategic framework analysis (report)	15%	12%
Case study analysis in systems development and customer support (report)	20%	16%
Consultancy report: analysis and recommendations concerning IT facilities in an organization that covers application portfolio, infrastructure, service, and security issues (report)	30%	24%
Exams (two: mid-term and final) – All topics (comprehensive)	20%	16%
<i>Additional for graduate students: IT strategic plan for an organization (report)</i>		20%
<b>Total</b>	100%	100%