10-21

LSC Use Only No:	LSC Action-Date:	UWUCC USE Only No.	UWUCC Action-Date:	Senate Action Date:
		09-95c	App 9-7-10	App- 10/5/10

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person	Email Address
DR. MICKI HYDE	hydem@iup.edu
Proposing Department/Unit	Phone
MIS and Decision Science	724-357-7780

Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

1. **Course Proposals** (check all that apply)

_____New Course   _____Course Prefix Change   _____Course Deletion

__X__ Course Revision   _____Course Number and/or Title Change   _____Catalog Description Change

IFMG 300 Management Info. Systems: Theory and Practice

Current Course prefix, number and full title	*Proposed course prefix, number and full title, if changing*

2. **Additional Course Designations:** check if appropriate

_____ This course is also proposed as a Liberal Studies Course.   _____ Other: (e.g., Women's Studies,
_____ This course is also proposed as an Honors College Course.   Pan-African)

3. **Program Proposals**

_____Catalog Description Change   _____Program Revision

_____New Degree Program   _____Program Title Change   _____Other

_____New Minor Program   _____New Track

Current program name	*Proposed program name, if changing*

4. **Approvals**		**Date**
Department Curriculum Committee Chair(s)	*Micki Hyde*	9-28-09
Department Chair(s)	*CMBm*	9/28-09
College Curriculum Committee Chair	*C. Tunell*	9/28/09
College Dean	*R Camp*	3/17/10
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate:		
(include title)		
UWUCC Co-Chairs	*Gail Sechrist*	9-7-10

* where applicable

Page 1

Part II. Description of the curriculum Change

1. New syllabus of record. (See Appendix A).

2. A summary of the proposed revision.

    a. The Course Objectives have been updated to ensure currency in the field. Specifically, course objectives numbers 8 and 9 address the Assurance of Learning Outcomes required at the college level for this business core course. The New Course Objectives are as follows:

Course Outcomes/Objectives:
The primary objective of this course is to integrate MIS theory with standard managerial practice, and expose the student to the contemporary IS practice and news/literature. This integration will describe the importance of information as business assets and the role of MIS within the business organization and result in three approaches that include foundations, technology, and managerial considerations. At the end of this course the student will be able to:

1. Describe the importance of data and information as business assets in the modern competitive environment, describing its implementation through the concept of information resource management.

2. Identify the various types and functions of organizational Information Systems and their role in the global environment.

3. Describe and discuss how Information Systems support managers in organizational decision processes.

4. Identify the hardware and software components of various types of systems.

5. Understand how telecommunication/internet facilities facilitate data transfer and consequent knowledge retrieval.

6. Analyze the IS of chosen organizations and their impact on that organization as well as the impact on industries and other organizations.

7. Identify ethical, social, security, and control issues related to the use of computer based information systems in the business environment.

8. Comprehend, analyze, and evaluate different technologies employed in Computer Based Information Systems in organizations. (Eberly UG Goal 7, Objective A)

9. Comprehend, analyze, and evaluate the application of various business software including spreadsheets, databases, ERP, for solving organizational problems. (Eberly UG Goal 7, Objective B)

3. Justification/rationale for the revision.

   The change in the course objectives is to recognize the current environment in business and the importance of presenting and discussing the significance of basic Management Information Systems, fundamentals and practices, using the computer as a problem solving tool and organizational information systems. The addition/changes will also enable us to map our course objectives with the program goals that have been established by inclusion in the course content as detailed in the course outline, along with in-class discussion and testing.

4. The old Syllabus of Record. (See Appendix B.)

5. Liberal Studies course approval form and checklist. (Not applicable).

Part III. Letter of Support or Acknowledgement
   No other department/programs are affected by this revision.

Catalog Description remains the same.

APPENDIX A

Eberly College of Business and Information Technology
Department of Management Information Systems and Decision Science
IFMG 300
SYLLABUS OF RECORD

1. Catalog Description

IFMG 300 Management Information Systems:
Theory and Practice   3c-01-3cr
Prerequisites: COSC/BTED/IFMG 101
Includes basic MIS concepts, fundamentals, and practices. Broad areas of coverage are principles, the computer as a problem-solving tool, computer-based information systems (CBIS), organizational information systems, and Information Systems management.

2. Course Outcomes/Objectives:

The primary objective of this course is to integrate MIS theory with standard managerial practice, and expose the student to the contemporary IS practice and news/literature. This integration will describe the importance of information as business assets and the role of MIS within the business organization and result in three approaches that include foundations, technology, and managerial considerations. At the end of this course the student will be able to:

1. Describe the importance of data and information as business assets in the modern competitive environment, describing its implementation through the concept of information resource management.

2. Identify the various types and functions of organizational Information Systems and their role in the global environment.

3. Describe and discuss how Information Systems support managers in organizational decision processes.

4. Identify the hardware and software components of various types of systems.

5. Understand how telecommunication/internet facilities facilitate data transfer and consequent knowledge retrieval.

6. Analyze the IS of chosen organizations and their impact on that organization as well as the impact on industries and other organizations.

7. Identify ethical, social, security, and control issues related to the use of computer based information systems in the business environment.

8. Comprehend, analyze, and evaluate different technologies employed in Computer Based Information Systems in organizations. (Eberly UG Goal 7, Objective A)

9. Comprehend, analyze, and evaluate the application of various business software including spreadsheets, databases, ERP, for solving organizational problems. (Eberly UG Goal 7, Objective B)

10. Course Outline

	(Hours)	Objectives
A. The Modern Organization	(3)	1, 2, 3

   i. Information Systems: Concepts and Definitions
   ii. The Global Web-Based Platform
   iii. The Global Economy and the Role IS played in that Evolution
   iv. Business Pressures and Organizational/IS Responses

	(Hours)	Objectives
B. Types of Information Systems	(3)	3, 4, 8, 9

   i. Competitive Advantage
   ii. Functional Systems
   iii. The Organizational Structure and supporting IS systems

	(Hours)	Objectives
C. Computer Hardware	(3)	4, 6, 8

   i. The Central Processing Unit
   ii. Computer Memory
   iii. Computer Hierarchy
   iv. Input and Output Technologies
   v. Innovations in Hardware
   vi. Strategic Hardware Issues

	(Hours)	Objectives
D. Computer Software	(3)	4, 6, 8, 9

   i. Significance of Software
   ii. Systems Software
   iii. Application Software
   iv. Software Issues
   v. Programming Languages

EXAM ONE	(1)	

	(Hours)	Objectives
E. Data and Knowledge Management	(5)	1, 2, 3, 8, 9

   i. Managing Data
   ii. The Database Approach
   iii. Database Management Systems
   iv. Data Warehousing
   v. Data Governance
   vi. Knowledge Management

F. Telecommunications and Networks   (4)   4 - 9
    i. Basics
        1. The Telecommunications System
        2. Types of Networks
        3. Network Fundamentals
    ii. Applications
        1. Web 2.0
        2. Distance Learning
        3. Telecommuting

G. Basics of the Internet and The World Wide Web   (1)   1-3, 6, 7
    i. The Difference between the Internet, World
        Wide Web, intranets, and extranets
    ii. How the Internet Operates

EXAM TWO   (1)

H. E-Business and E-Commerce   (3)   1-3, 6, 7
    i. Overview and Definitions
    ii. Business-to-Consumer E-Commerce
    iii. Business-to-Business E-Commerce

I. Wireless, Mobile Computing, and Mobile Commerce   (3)   4 - 9
    i. Wireless Technologies
    ii. Wireless Computer Networks and Internet Access
    iii. Mobile Computing and Mobile Commerce
    iv. Pervasive computing
    v. Wireless Security

J. Ethics, Privacy, and Security   (3)   6, 7
    i. Ethical Issues
    ii. Threats to Information Security
    iii. Protecting Information Resources

K. Organizational Information Systems   (5)   2, 3, 6, 8, 9
    i. Transaction Processing Systems
    ii. Functional Area Information Systems
    iii. Enterprise-Wide Information Systems
    iv. Electronic Data Interchange and Extranets

L. Managerial Support Systems   (4)   2, 3, 6, 8, 9
    i. Managers and Decision Making
    ii. Business Intelligence, Multidimensional Data
       Analysis, Data Mining, and
       Decision Support Systems
    iii. Data Visualization Technologies
    iv. Intelligent Systems

FINAL EXAM	During Final Exam Week

IV. Evaluation Methods

The final grade will be determined as follows:

	Weight	Objectives Measured
Participation	10%	1 – 9
Quizzes and Homework (Eberly Goal 7, Objective A Measured) (Eberly Goal 7, Objective B Measured)	20%	1 - 9
Project	20%	8, 9
Exams (3)	50%	1 - 9
TOTAL	100%	

IFMG 300 – Management Information Systems: Theory and Practice
Assurance of Learning

Learning Goal: 7	Demonstrate proficiency in the use of technology.
Learning Objective: A	Comprehend, analyze, and evaluate different technologies employed in Computer Based Information Systems in organizations.
Learning Objective: B	Comprehend, analyze, and evaluate the application of various business software including spreadsheets, databases, ERP, for solving organizational problems.
Assessment Tool	Quizz(es)

V. Grading Scale

90% - 100% = A
80% - 89% = B
70% - 79% = C
60% - 69% = D
<60%   = F

VI. Attendance Policy

The course attendance policy is consistent with the university policy.

VII. Required Textbooks, Supplemental Books, and Readings

This field of study is very dynamic and therefore changes to required materials are on-going in nature. Historically, several publishers produce current textbooks. The following are examples of acceptable, required textbooks for this course:

Rainer, R.K., Jr., and E. Turban, *Introduction to Information Systems: Supporting and Transforming Business, 2d Ed.* John Wiley & Sons, Inc.: USA. 2009.

Laudon, K. C. and J. P. Laudon, Management Information Systems: Managing the Digital Firm, 11th Ed. Pearson/Prentice Hall: Upper Saddle River, NJ, USA. 2010.

This course will also include current articles of interest to the field. These additional supplemental materials will be supplied to the students.

VIII. Special Resource Requirements

None.

IX. Bibliography

O'Brien, J. (1999). *Management Information Systems – Managing Information Technology in the Internetworked Enterprise.* Boston: Irwin McGraw-Hill.

Trcek, D., R. Trobec, N. Pavesic, and J. F. Tasic. (2007). "Information Systems Security and Human Behaviour." *Behaviour & Information Technology,* 26(2), 113-118.

Ciborra, C. (2002). *The Labyrinths of Information: Challenging the Wisdom of Systems.* Oxford, UK: Oxford University Press

Lindsay, John (2000). *Information Systems – Fundamentals and Issues.* Kingston University, School of Information Systems.

Preston, J., S. Preston, and R. Ferrett (2005). *Computers in a Changing Society.* Upper Saddle River, NJ: Prentice Hall.

Gray, Paul. (2006). *Manager's Guide to Making Decisions about Information Systems.* Danvers, MA: John Wiley& Sons, Inc.

Freeman, L. and A. G. Peace. (2005). *Information ethics: Privacy and Intellectual Property.* Hershey, PA: Information Science Publishing.

APPENDIX B

NEW COURSE SYLLABUS

A. Catalog Description (A1)

IM 300 Title: Information Systems: Theory and Practice
3 credits
Prerequisites: CO/BE/IM 101, AG 202.

This course will include basic MIS concepts, fundamentals and practices. Broad areas of coverage are: Principles, the computer as a problem solving tool, Computer Based Information Systems (CBIS), organizational information systems, and IS management.

B. Course Objectives

The primary objective of IM 300 is to provide the student with an understanding of how the computer can be used as part of a Decision Support System (DSS) or Management Information System (MIS).

Specific objectives are:

1. To introduce the student to information, its value and characteristics.

2. To demonstrate how the informational needs of managers vary according to their place in the organization's hierarchy.

3. To describe the kinds of information systems that support decisions at the various functional levels of the organization.

4. To contrast and compare information processing capabilities in the human being and computerized systems, the linkages between them, and the problems created by their differences.

5. To create in every business student information literacy as contrasted to, and in addition to, computer literacy, where every student learns to retrieve, process and evaluate information requirements.

6. To introduce the general business student to the concepts and techniques used to develop a computerized business information system.

C. Methodology

Teaching methods will include lecture, case studies, and exercises using one each of the types of end user systems discussed in the course. These will include Database, Lotus 1-2-3, a DSS, a simple Expert System, and a User Oriented Design Package. Case studies will be written, thereby fulfilling the writing requirement. At least one of these areas will be approached experientially.

D. Suggested Evaluation

Three examinations will be given. Exams, quizzes, software application assignments, class participation, written cases and/or a research paper.

Suggested point distribution:

	Points
Major Exams	500
Case assignments and/or paper(s)	500
Software Assignments (4 or 5)	400
Quizzes (15 each)	150
Participation - 10% of total points	

E. Recommendation to the Instructor

Although mainly a lecture-oriented course, students should be informed that a substantial amount of lab-time is required. (3-4 hours a week) for developing solutions to assignments.

Software application assignments should vary, each assignment requiring student to implement the concepts and approaches covered in class. These should correspond to textbook content. The instructor should encourage students to allocate their time equally between class, individual and group effort as an effective means to learn the material. Group activities may be extended to projects and introduction of group decision support systems (GDSS).

F. Required Text

Laudon, Kenneth C. and Laudon, Jane Price, Management Information Systems, New York, NY: MacMillan, (1991).

McLeod, R., Management Information Systems, Fourth Edition, MacMillan, (1990).

McLeod, R. and Schell, Management Information Systems Case Book, Fourth Edition, MacMillan, (1990).

G. Course Outline (A2)

TOPIC	Text Chapters	% of coverage
I. Information Management	1, 2	8
A. Importance		
B. The Modern Manager		
C. Management Skills		
D. Manager and Systems		
E. Data vs. Information		
F. Role of the Computer		

II.   Systems Theory   3, 4   7
- A. The General Model
- B. Use of the Model
- C. Concept of Resource Flows
- D. Systems Approach
- E. Problem Solving
  - Preparation, Definition, Solution

III. The Computer as a Problem Solving Tool   5   8
- A. Computer Architecture
  - 1. Mainframe
  - 2. Microcomputer
- B. I.P.O.
- C. Software
  - Systems vs. Application
- D. User Friendliness
- E. Cost Justification

IV. The Data Base   6   10
- A. Information Data Management
- B. Storage
  - 1. Media and their uses
  - 2. Secondary storage
- C. The Database Era
- D. The Database
  - 1. Concept
  - 2. Structure
  - 3. Software
  - 4. Use of
  - 5. Creation of
- E. The Database Administration

V. Communications   7   8
- A. The Model
- B. Equipment
- C. Software
- D. Networks
  - 1. Topologies
  - 2. Protocols
  - 3. Architecture
- E. The Network Manager
- F. The Role of Datacommunications

VI. CBIS   8, 9   8
- A. DP Tasks
- B. Systems overview
- C. MIS and Functional Subsystems
- D. Behavioral Influences in Design
- E. Use in Problem Solving

REFERENCES

1. Burch, J., Strater, F. and Grudnitsic, G., <u>Information Systems: Theory and Practice</u>, New York, NY: John Wiley and Sons, (1989).

2. Cohen, Alan, <u>A Guide to Networking</u>, Boston, MA: Boyd and Fraser, (1991).

3. Davis and Olsen, <u>Management Information Systems</u>, New York, NY: McGraw-Hill, (1982).

4. Dickson and Wetherbe, <u>Management of Information Systems</u>, New York, NY: McGraw-Hill, (1985).

5. Kronke, David, <u>Management Information Systems</u>, Santa Cruz, CA: Mitchell Publishing, (1989).

6. Lucus, <u>Managing Information Services</u>, New York, NY: MacMillan, (1989).

7. McLeod, R., <u>Management Information Systems</u>, Chicago, IL: SRA, (1990).

8. O'Brien, James, <u>Management Information Systems: A Managerial End-User Perspective</u>, Chicago, IL: Irwin, (1990).

9. Stallings, William, <u>Business Data Communications</u>, New York, NY: MacMillan, (1990).

10. Turban, Efraim, <u>Decision Support and Expert Systems</u>, New York, NY: MacMillan, (1990).

11. Wysocki, Robert K. and James Young, <u>Information Systems: Management Principles in Action</u>, New York, NY: John Wiley and Sons, (1990).

Scoring Rubric

Assurance of Learning

IFMG 300 – Management Information Systems: Theory and Practice

KARS	Assessment Tool/s Results
Target	A, B
Acceptable	C, D
Unacceptable	F