LSC Use Only
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UWUCC USE Only
Number: ~~98-32F~~ 99-17F
Submission Date: _____
Action-Date: UWUCC App 9/21/99
Senate App 2/29/00

CURRICULUM PROPOSAL COVER SHEET
University-Wide Undergraduate Curriculum Committee

I. **CONTACT**

Contact Person Elizabeth M. Pierce Phone 5773

Department MIS and Decision Sciences

II. **PROPOSAL TYPE (Check All Appropriate Lines)**

X **COURSE** Business Systems Analysis and Design
Suggested 20 character title

____ New Course* _____
Course Number and Full Title

X Course Revision IM 251 Business Systems Analysis and Design
Course Number and Full Title

____ Liberal Studies Approval+ for new or existing course _____
Course Number and Full Title

____ Course Deletion _____
Course Number and Full Title

____ Number and/or Title Change _____
Old Number and/or Full Old Title

_____
New Number and/or Full New Title

____ Course or Catalog Description Change _____
Course Number and Full Title

_____ **PROGRAM:** _____ Major _____ Minor _____ Track

____ New Program* _____
Program Name

____ Program Revision* _____
Program Name

____ Program Deletion* _____
Program Name

____ Title Change _____
Old Program Name

_____
New Program Name

III. **Approvals** (signatures and date)

Elizabeth M. Pierce — Department Curriculum Committee
Laurie B. Burkey — Department Chair
College Curriculum Committee
College Dean

+Director of Liberal Studies (where applicable)
*Provost (where applicable)

Part II Description of the Curriculum Change

1. New syllabus of record, including catalog description with course title, number of credits, prerequisites and an appropriately written course description.

Syllabus of Record: IM 251 Business Systems Analysis and Design

I. Catalog Description

IM 251 Business Systems Analysis and Design

3 credits
3 lecture hours
0 lab hours
(3c-0l-3sh)

Prerequisites: AG201 Principles of Accounting I and IM205 Foundations of MIS

Involves teaching the tools and techniques required for the analysis and the design of business systems. The major steps in the system's development life cycle are presented along with practical applications from the major subsystems of typical business organizations. Issues related to personnel, hardware, software, and procedures are explored as students work individually and in project teams to solve typical business application problems.

II. Course Objectives

By the end of this course, students will have:

- Explored the System's Development Life Cycle as a problem solving methodology.
- Explored information processing concerns from the perspectives of management, users, and computer specialists.
- Analyzed the key aspects comprising a computer information system, including hardware, software, personnel, documentation and training.
- Applied the tools and techniques of systems analysis and design to business problem-solving scenarios.
- Utilized business software in the design and development of systems.

III. Detailed Course Outline

A. Intro to Course, Systems Theory (12 hours)
Systems Development Life Cycle
Preliminary Investigation
Determining Requirements
Analyzing Requirements
Logical Modeling

B. Generating / Evaluating Alternatives (15 hours)
Prototyping, CASE, Object-Oriented Design
Output Design
Input Design
MS Access Software Tools
File Concepts
File and Database Design

C. Software /Interface Design, Systems Architecture (15 hours)
Application & System Development
System Implementation & Evaluation
Project Management
Systems Operation & Support

IV. Evaluation Methods

66% - Exams (3) @ 22% each
24% - Major Project
10% - Minor Assignments
Grading Scale: 90-100=A; 80-89=B; 70-79=C; 60-69=D; below 60=F

V. Required Textbook

Shelly, Cashman, Rosenblatt, Systems Analysis and Design, 3rd ed., Course Technology (ITP), 1998.

VI. Special Resource Requirements

The coure will utilize existing PC labs in the Eberly College of Business.

VII. Bibliography

Bradley, Julia Case & Anita C. Millspaugh. Programming in Visual Basic 5.0, McGraw-Hill, 1998.

Burrows, William E. & Joseph D. Langford. Programming Business Applications with Microsoft Visual Basic 5.0, McGraw-Hill, 1998.

Capron, H.L. Computers: Tools for an Information Age, 5th ed., Addison-Wesley, 1998.

Carey, Patrick. Creating Web Pages with HTML, Course Technology, 1998.

Davis, William S. Business Systems Analysis and Design, Wadsworth Publishing, 1994.

Ekedahl, Michael V. & William A. Newman. Microsoft Visual Basic 5.0 for Windows: An Object-Oriented, Data-Driven Approach, Course Technology, 1998.

Grauer, Robert T & Maryann Barber. Exploring Microsoft Windows 98 and Essential Computing Concepts, Prentice Hall, 1998.

Grauer, Robert T. & Maryann Barber. Exploring Microsoft Office 97 Professional, Volume II, Prentice Hall, 1998.

Kendall, Kenneth E. & Julie E. Kendall. Systems Analysis and Design, 3rd ed., Prentice Hall, 1995.

Kroenke, David M. Database Processing: Fundamentals, Design, and Implementation, 6th ed., Prentice Hall, 1998.

Laudon, Kenneth C. & Jane P. Laudon. Management Information Systems: New Approaches to Organization & Technology,5th ed., Prentice Hall, 1998.

Nickerson, Robert C. Business and Information Systems, Addison-Wesley, 1998.

Pratt, Philip J. & Joseph J. Adamski. Database Systems Management and Design, 3rd ed., Boyd & Fraser, 1994.

Pratt, Philip J. A Guide to SQL, 3rd ed., Boyd & Fraser, 1995.

Shelly, Gary B. & Thomas J. Cashman & Steven G. Forsythe. Windows 95: Complete Concepts and Techniques, Boyd & Fraser, 1997.

Stallings, William & Richard Van Slyke. Business Data Communications, 3rd ed., Prentice Hall, 1998.

Stern, Nancy & Robert A. Stern. Structured COBOL Programming, 8th ed., Year 2000 Update Version, John Wiley & Sons, Inc., 1998

2. **A summary of the proposed revisions.**

Prerequisites are changing to AG 201 and IM 205.

3. **Justification for the revision.**

(a) IM 241 is no longer being offered. Its deletion was submitted in 1997.

(b) A 300 level course should not be a prerequisite for a 200 level course.

(c) IM 205 is the appropriate prerequisite to replace IM 241 or IM 300.

(d) AG 201 ensures students have had some exposure to business accounting systems.

4. **The old syllabus of record.**

IM 251 Business Systems Analysis and Design

Prerequisite: IM 241 Management Information Systems

Catalog Description:

This course involves teaching the tools and techniques required for the analysis and the design of business systems. Along with the in class discussions of the principles and techniques for analyzing, designing, and constructing the system, the students will also formulate system teams in order to analyze a business information system, and to design an improved system.

Pre-requisites: IM 241 (Intro to MIS)

Course Objectives

1. To teach the student to utilize methods by which systems may be analyzed and developed.
2. To teach the student the functional subsystem of a firm together with procedures for designing and controlling the implementation of such systems.
3. To develop the student's ability to analyze the problems of a business information system and to design an improved system.
4. To teach the student the role of a systems analyst in business problems solving procedures.

Course Outline

I. Overview of Systems Concepts
   Business Systems and Information Systems
   The Systems Approach
   Systems Analysis
   System Life Cycle
   The Process of Systems Analysis
   Review Functional Sub-Systems of Organizations

II. The Investigation Phase
   Problem Recognition
   Initial Investigation
   Information Gathering
   Feasibility Study
   The Process and Products of Analysis
   Cost/Benefit Analysis
   Communication

III. Analysis and General Design Phase
   Existing System Review
   System Modeling Tools
   New System Requirements
   Output Design
   Input Design
   Logical Data Analysis
   New System Design
   File Design
   Control and Reliability Design
   Implementation and Installation Planning

IV. Implementation, Installation, and Review Phases
   Detailed Design and Implementation Phase
   Installation
   Project Management

V. System Analysis Project
   Formation of System Teams
   Existing System Review
   New System Requirements
   New System Design
   System Presentation

VI. The Importance of MIS to Business Organizations
Transaction Processing
Data Base Management
Systems Security
Decision Support Systems
Communications

Evaluations: Evaluations will consist of quizzes, examinations, and a term project.

Text: Computer Information Systems Development: Design and Implementation by Adams, Powers, and Owles; Southwestern Publishing

5. Liberal Studies course approval form and checklist (if appropriate).

Not applicable.