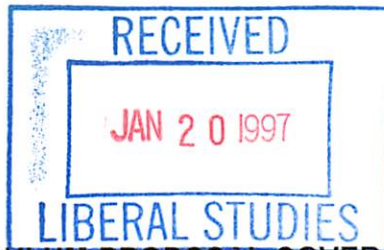


LSC Use Only
Number: _____
Submission Date: _____
Action-Date: _____



UWUCC USE Only
Number: 96-47
Submission Date: _____
Action-Date: App 3/25/97
Senate App 4/29/97

CURRICULUM PROPOSAL COVER SHEET
University-Wide Undergraduate Curriculum Committee

I. CONTACT

Contact Person Elizabeth M. Pierce Phone 2929

Department MIS & Decision Sciences

II. PROPOSAL TYPE (Check All Appropriate Lines)

COURSE Foundations of MIS
Suggested 20 character title

New Course* IM 205 Foundations of MIS
Course Number and Full Title

Course Revision _____
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)

Hevise B. Beatty *Kenneth L. Sheldt*
Department Curriculum Committee Department Chair
Robert C. Cony
College Curriculum Committee 12/18/96 College Dean

+ Director of Liberal Studies (where applicable)

*Provost (where applicable)

Syllabus of Record Format: IM 205 Foundations of MIS

I. Catalog Description

IM 205 Foundations of MIS

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

Prerequisite: BE/CO/IM101 Microbased Computer Literacy

An introductory course designed to provide students with a fundamental understanding of MIS. Systems theory, quality, decision making and the organizational role of information systems are introduced. Information technology including basic programming skills are stressed. Concepts of organization, information system growth, telecommunications and re-engineering are introduced.

II. Course Objectives

- Provide an understanding of algorithm development, programming, computer concepts and the design and application of data and file structures.
- Introduce information systems and quality concepts.
- Provide an introduction to the organizational uses of information to improve overall quality.
- Present hardware, software and related information technology concepts.
- Provide concepts and skills for the specification and design or the re-engineering of organizationally related systems of limited scope using information technology.
- Show how MIS can be used to support an organization's mission, goals and objectives.
- Explain how MIS can be used to support an individual's decision making, goal setting, trustworthiness and empowerment.
- Show career paths in Information Systems.
- Present and discuss the professional and ethical responsibilities of the IS practitioner.

III. Detailed Course Outline

A. Organization and Information

(3 hours)

1. Data, Information & Business Decision Making
2. Computers
3. End User Computing & Office Automation

- B. Programming Concepts (24 hours)
1. Basic Language Statements
 2. Loop Structures
 3. Branching Structures
 4. Sequential Files
 5. Data Structures
 6. Planning, Writing & Debugging an Application
- C. Information Systems: The Operational Level (3 hours)
1. Data and Databases
 2. Networks and Telecommunications
 3. Planning & What-If Analysis
- D. Information Systems: The Tactical Level (6 hours)
1. Problem Recognition & Definition
 2. System Analysis
 3. System Design & Project Management
 4. Development, Testing & Maintenance
- E. Information Systems: The Strategic Level (3 hours)
1. Executive Decisions and Strategic Information
 2. Long Range Planning
- F. Evaluation & Exams (3 hours)

IV. Evaluation Methods

- 50% Exams (2 mid-terms & final). Exams will emphasize the application of concepts and techniques.
- 40% Lab exercises, assignments and projects. Primarily programming exercises using a language such as Visual Basic.
- 10% Students will write a term paper on a MIS topic of their choice.

Note: Scores will be recorded in points and letter grade equivalents will be computed at the end of the semester. Assignment of letter grades will be based on the percentage of correct points accumulated where: A = 90% and above, B = 80% - 89%, C = 70% - 79%, D = 60% - 69%, and F = less than 60%.

V. Required Textbook(s)

Davis, William S. In Introduction to Business Information Systems, West Publishing Co., 1995.

Barron, Jonathan C. Understanding and Using Microsoft Visual Basic, West Publishing Co., 1996.

VI. Special Resource Requirements

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

VII. Bibliography

Cornell, Gary. The Visual Basic 4 for Windows 95, Osborne McGraw-Hill, 1996.

Laudon, Kenneth C. and Laudon, Jane P., Management Information Systems, Prentice Hall, 1996.

Lin, Forest. The Visual Basic Coursebook, Scott/Jones Inc., 1997.

McKelvy, Michael. Using Visual Basic 4, Que Corporation, 1995.

Shortt, Joseph and Wilson, Thomas G., Problem Solving and the Computer. Addison-Wesley Publishing Co., 1976.

Simkin, Mark. Visual Basic with Applications, Scott/Jones Inc., 1996.

Stair, Ralph M. Principles of Information Systems, Boyd & Fraser Publishing Co., 1996.

Course Analysis Questionnaire

Section A: Details of the Course

- A1 This course will be a prerequisite for MIS majors and minors. In addition, it will replace IM 241 as a required course for the Computer & Office Information Systems (COIS) associate program. Business Education majors can enroll in this course as an alternative to IM 255. This course can also be used as a free elective for Eberly College of Business majors. The paperwork for these program revisions are currently underway. The paperwork for the deletion of IM 241 is also underway.
- A2 This course is best taught by a 50-50 split between presenting lectures in the class room and hands-on practice in the lab. Students are expected to use the computer outside of class to complete their homework. The lab time during class is meant to help demonstrate points made during the lecture and to give students time to explore Visual Basic and to ask questions about the assignments. The reason for the split is that while the lab is excellent for demonstrating the features of the software, it is far too distracting for delivering a lecture. Students have difficulty seeing over the PCs and many students cannot resist the temptation to tinker with the machines which then interferes with their ability to pay attention to the lecture.
- A3 This course does not require changes in the content of existing courses.
- A4 This course is currently being offered as special topic, IM 281, for the Fall and Spring 1996 semesters. Over 50 students registered for the initial offering in the Fall so provisions were made to offer two sections for Fall 1996 to accommodate the demand. 35 students registered for the Spring semester.
- A5 This course is not intended to be dual level.
- A6 This course is not intended to be taken for variable credit.
- A7 This course is inspired by a similar course recommended by the Model Curriculum and Guidelines for Undergraduate Degree Programs in Information Systems. These guidelines were developed by a Joint Task Force representing the major professional groups in IS. These groups include: AIS, ACM, DPMA, IACIS, IAIM, IFIP, INFORMS, NSF, SEI, and SIM.
- A8 This course, although not specifically required to meet the standards of any professional society or accrediting authority, comes with the highest recommendation from the Model Curriculum and Guidelines for Undergraduate Degree Programs in Information Systems. These guidelines have endorsements from 10 major professional groups in IS.

Section B: Interdisciplinary Implications

- B1 This course may be team-taught.
- B2 This course does not overlap with any other courses at the University.
- B3 Seats will be made available to Continuing Education students meeting the prerequisite.

Section C: Implementation

- C1 Faculty resources are adequate for teaching this course at the present time. In terms of future resources, a search has been approved and is currently in progress for an additional full-time faculty member to be added to our department. In addition, we anticipate that we will scale back our offering of IM 101 in the future since a growing number of our incoming students have had coursework similar to IM 101 in high school.
- C2 Other Resources
1. Current space allocations are adequate for this course.
 2. The course will utilize existing ECOB PC labs.
 3. Laboratory supplies/consumable goods are not required.
 4. Library holdings are adequate.
 5. Travel funds are not required.
- C3 No resources are funded by grant sources.
- C4 This course will be offered in the Fall and Spring semesters each year.
- C5 One to two sections of this course will be offered each semester depending on demand for the course.
- C6 For this course, the lab that we use for Visual Basic instruction has 28 PCs. To ensure that each student can work on their own while in lab, we prefer to restrict each section of this course to a maximum enrollment of 28 students. However, if demand exceeds 28 students, we will make adjustments to the schedule to try to accommodate the extra students.
- C7 This course is recommended by IS'95: Guideline for Undergraduate IS curriculum. It is designed to fulfill IS'95.1-Fundamentals of Information Systems. An overview report of the first joint curriculum effort for undergraduate programs in information systems is attached.

Section D: Miscellaneous

Include any additional information valuable to those reviewing this new course proposal.

Description of IS'95.1 -- Foundations of IS

IS'95: Guideline for Undergraduate IS curriculum

Letters of Support from Business Education and Computer Science

Course: Foundations of MIS

Spring 1997

Prerequisite: IM 101 (Microbased Computer Literacy) 3c-01-3sh

Instructor: Dr. Elizabeth Pierce

Office: 207-H ECB

Phone: 357-5773 (office)

Hours: Mon & Wed 9:30-11:30;

Email: EMPIERCE@IUP.EDU

Tues & Thurs 8:00-9:00

Text: Management, Information, and Systems: An Introduction to Business Information Systems by Davis, published by West, 1995.

Understanding Visual Basic by Barron, published by West, 1996.

Additional Materials: HD/DD 3.5" Diskettes (approx. 2)

Course Description:

This is an introductory course designed to provide students with a fundamental understanding of MIS. Particular emphasis will be placed on fundamental programming skills. Additional topics will include system concepts, system components & relationships, cost/value & quality of information, specification, design & reengineering of information systems, databases, project management, telecommunications, characteristics of IS professionals & IS career paths.

Course Objective:

There are two objectives to this course. The first goal is to give students an exposure to programming and application development using Visual Basic. The second goal is to give students an overview of the many topics and management issues that comprise MIS.

Course Methodology:

The course will be taught using a combination of lectures, discussion, and hands-on microcomputer labs. Assignments are used to develop students' skills in understanding computer programming and information systems.

Attendance:

Attendance is strongly encouraged. Attendance at all class sessions is necessary for full assimilation of course content. Should you miss a session, you should obtain the notes from a responsible classmate.

Course Grade Determination:

Students will be evaluated based on:

Computer Projects & Homework

40%

3 Equally Weighted Exams

50%

Term Paper

10%

Assignments must be handed in when due. Each class period that the assignment is late, an additional 10% late penalty will be assessed. I will not accept assignments that are more than 2 weeks late.

The exams will test your knowledge of the material covered in the book and lectures. Questions may be multiple choice, short answers, problems, or essay. Exams will be open book.

Please make every effort to take the exam as scheduled. If you miss an exam because of illness, you will be given an opportunity to make up that exam within one week. It will be your job to schedule the make-up; otherwise, you will receive a zero for the exam.

Your course grade will be based on the total number of points that you earn during the semester. Scores will be recorded in points and letter grade equivalents computed only at the end of the course. Assignment of letter grade will be made as follows:

- A: 90% and above
- B: 80% - 89%
- C: 70% - 79%
- D: 60% - 69%
- F: Less than 60%

Term Paper:

The term paper for this course will be due at the end of the semester. You may choose any topic that relates to the field of MIS. The paper will be judged on the following criteria:

- Content: 60% The paper should be approximately 1,000 words.
- Sources: 20% Choose at least 5 sources. Make sure one or more of the sources come from the Internet.
- Presentation: 10% Use a word processor to type the paper. Use 1" margins, page numbers and double spacing. Be sure to include a title page, table of contents, bibliography, and whatever else you feel is necessary to give a professional appearance to the document.
- Spelling & Grammar: 10% I will take off for each spelling and grammatical error I find so proofread carefully.

Tentative Course Syllabus:

Week Beginning	Topic
Jan. 13	Davis Book - Chapters 1, 2, 3 and 4 Organization & Information: This topic will include such sub-topics as data, information, computers, end user computing and office automation
Jan. 20	Davis Book - Chapters 5, 6, 7 and 8 Information Systems: The Operation Level. This topic will include such topics as data, databases, networks, telecommunications, and What-If Analysis
Jan. 27	Barron Book - Chapters 1 and 2. Introduction to Basic Language Statements.
Feb. 3	Barron Book - Chapter 3. Loop Structures
Feb. 10	Loop Structures Continued
Feb. 17	Barron Book - Chapter 4. Sequential Files
Feb. 20	Exam I
Feb. 24	Sequential Files Continued
Mar. 10	Barron Book - Chapter 5. Branching Structures
Mar. 17	Barron Book - Chapter 6. Data Structures
Mar. 24	Data Structures Continued
Mar. 27	Exam II
Mar. 31	Barron Book - Chapter 7 Planning, Writing & Debugging an Application
Apr. 7	Davis Book - Chapters 9 & 10 Information Systems: The Tactical Level. This topic will include such sub-topics as problem recognition and definition, and system analysis.
Apr. 14	Davis Book - Chapters 11 & 12 Information Systems: The Tactical Level. This topic will include such sub-topics as system design and project management, development, testing and maintenance of code.
Apr. 21	Davis Book - Chapters 13, 14 & 15 Information Systems: The Strategic Level. This topic will include such sub-topics as executive decisions and strategic information and long range planning.
Apr. 28	Review

Final Exam as Determined by University Final Exam Schedule

Appendix 1: Description of IS'95.1

IM 205 is based on the course IS'95.1 -- Fundamentals of Information Systems, part of the IS'95 Guidelines for Undergraduate IS curriculum. The description for this course is as follows:

Prerequisite: IS'95.0 (A course nearly identical to IM 101)

Scope of IS'95.1: This course provides an introduction to systems concepts, information technology, and application software. It also introduces students to how information is used in organizations and how IT enables improvement in quality and timeliness of information.

Topics for IS'95.1: Systems concepts; system components and relationships; cost/value and quality of information; specification, design and reengineering of information systems; application versus system software; procedural versus non-procedural programming languages; database features, functions, architecture; telecommunication systems and applications; and characteristics of IS professionals and IS career paths.

TO: Ken Shildt, Chair
Management Information Systems

FROM: Wayne Moore, Chair *wjmoore*
Office Systems and Business Education

DATE: December 2, 1996

RE: CURRICULUM PROPOSALS

The faculty of the Office Systems and Business Education Department has reviewed your two course proposals: IM205 Foundations of MIS and IM261 Micro Database Systems. The faculty agree that the course proposals reflect the necessary changes in technology based programs. We will be moving forward the changes to the Associate of Arts in Business program with IM205 as a required course and IM261 as a major area elective.

Concerns of the faculty members include the IM205 course with the use of terminology. The three terms used in the course outline are end-user computing, office automation and telecommunications. We do however understand that this is a "survey" course and that an introduction to this information is necessary.

You may consider this memo as the Office Systems and Business Education Department's letter of support as requested in your memo.

**Request from Computer Science
has been solicited**

5 February 1997

To: Ken Shildt, Chairperson
MIS and Decision Sciences Department

From: Jim Wolfe, Chairperson *JW*
Computer Science Department Curriculum Committee

William Oblitey, Chairperson *WJO*
Computer Science Department

Subject: Proposal for IM 205, Foundations of MIS

Thank you for giving us the opportunity to review and respond to your proposal for IM 205. The Curriculum Committee of the Computer Science Department has discussed the proposed course and has no objections to the creation of it. The Computer Science Department has no intention of offering a course similar to IM 205; and, although we offer a beginning programming course (CO 110), we can understand that you want your students to have a focus and approach that is different from the one we provide. Much of IM 205 seems to be directed at programming concepts which should be essentially the same across many programming languages; however, you seem to feel that the environment provided by Visual BASIC suits your students - that is your prerogative.

We are somewhat puzzled by the rationale for IM 205, especially its association with IS '95.1 in the IS '95 Guidelines for Undergraduate IS Curriculum. From the Guidelines, IS '95.1 does seem to be similar to our CO 105 in overall concept - both courses are overviews and include NO programming. The proposed IM 205 is nearly 60% programming concepts. The other 40% does seem to be taken almost directly from IS '95.1; however, 40% coverage does not make IM 205 equivalent to IS '95.1 as the questionnaire answers suggest.

The cover letter makes reference to IM 241 and its history. When IM 241 was proposed, we regarded it as equivalent to CO 110 to satisfy the prerequisite for CO 220. However, practice showed that IM 241 (as taught) was not sufficient background for MIS students to be successful in CO 220. We do not foresee IM 205 as being sufficient to be regarded as equivalent to CO 110 in terms of meeting the prerequisites for our courses, e.g. CO 220 or CO 310. In fact, we see no essential difference between IM 241 with its use of QBASIC and IM 205 with its use of Visual BASIC in terms of preparing students to program.

Finally, because of the introductory nature of IM 205, we do not see any overlap between it and our CO 444 course (currently at the UWUCC) which also uses Visual BASIC. We think that MIS students would benefit by taking CO 444 as an elective after obtaining sufficient programming maturity.

TO: Ken Schildt, Chair
Management Information Systems

FROM: Wayne Moore, Chair *wmoore*
Office Systems and Business Education

DATE: December 2, 1996

RE: CURRICULUM PROPOSALS

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