DEC 07 1987

TO B-2 87/88-17

Approved UWUCC 2/9/88

Approved Senate 4/6/88

TO: Earl Roberts, Chairman
College of Business Curriculum Committee

FROM: John C. Shepherd, Chairman
Finance/MIS Department Curriculum Committee

DATE: November 24, 1986

Earl, please have the College of Business curriculum committee vote to approve (or disapprove!) the attached course description. A letter is being drafted to send to Computer Science informing them about the course. Please respond to me when you've discussed this matter.

cc: Kenneth L. Shildt

INDIANA UNIVERSITY OF PENNSYLVANIA
SENATE CURRICULUM COMMITTEE B-2

NEW COURSE PROPOSAL

Department: Finance/MIS

Person to Contact for Further Information: Dr. John Shepherd, ext. 4631

Course Affected: ~~IS~~ IM 372 ~~Advanced~~ Microcomputing Applications

Desired Effective Semester for Change: Fall 1987

Approvals:

Department Undergraduate Committee Chairperson John C. Shepherd

Department Chairperson Kenneth L. Smith

College of Business Undergraduate Committee Chairperson H E Roberts for 87-88 HKR

College Dean

A. DESCRIPTION AND ACADEMIC NEED

A1. Catalog Description (attached)

A2. Course Syllabus (attached)

A3. Need Fulfilled

Since 90% or more of large businesses use microcomputers, the College of Business must address this need. It is a natural progression for MIS students who will already have several main-frame oriented courses. MIS minors could also take the course. The course is not intended for the General Education course list.

A4. Effect on Other Courses

No existing courses are affected.

A5. Does this course follow traditional offerings in the department?

The course will be lecture/project oriented. There will be one exam and several projects.

A6. Has this course been offered at IUP on a trial basis?

The course has been offered as a special topics course (Spring '83, Spring '85 and Fall '86). The course was filled to capacity every time.

A7. Is this a dual level course?

The course is not to be dual listed.

A8. Do other universities offer this course?

Other universities offer such a course, in fact we are one of the few who do not.

A9. Is this course recommended or required by a professional society?

The DPMA (Data Processing Management Association) suggests such a course in their model curriculum.

B. INTERDISCIPLINARY IMPLICATIONS

B1. Will the course be offered by one instructor or will there be a team?

One instructor per section will teach the course.

B2. Are additional or corollary courses needed?

The student taking the course will have taken the prerequisite hardware course (FS 350), and introductory BASIC course (FS 241) as well as a COBOL course (CO 220).

B3. What is the relationship of the content of this course to the content of courses offered by other departments?

No such regular course is presently offered but the Finance/MIS and Computer Science Departments have offered similar special topics courses.

B4. Is this course applicable in a program of the School of Continuing Education directed at other than fulltime students?

It is not recommended that the course be offered in the School of Continuing Education.

C. EVALUATION

C1. What procedures are expected to be used to evaluate student progress?

Evaluation will be based on one exam and several projects.

C2. Variable credit?

The course is restricted to three credit hours.

D. IMPLEMENTATION

D1. What resources are needed to teach this course?

The course can be taught using existing faculty, but will require the utilization of microcomputer labs already in place within the College of Business and the Computer Science Department.

D2. How many sections?

One or two sections would be offered each semester.

D3. How often will the course be offered?

The course would be offered Fall, Spring, and Summer.

D4. How many students will be accomodated?

The enrollment would be limited to 20 students per section.

INDIANA UNIVERSITY OF PENNSYLVANIA
SENATE CURRICULUM COMMITTEE B-2

COURSE SYLLABUS

Course Syllabus: IM ~~IS~~ 372, ~~Advanced~~ Microcomputing Applications

Date Submitted:

Submitted by: Dr. John C. Shepherd

Department: Finance/MIS

I. Course Identification

IM ~~IS~~ 372; ~~Advanced~~ Microcomputing Applications; 3 credits.

II. Catalog Description (attached)

III. Course Objectives

The primary objective is to show how microcomputers are being integrated into a main-frame busines environment. Specific emphasis will include:

1. A review of microcomputer hardware
2. Microcomputer operating systems
3. Data communications
4. Word processing
5. Spreadsheet programming
6. Relational data base manipulation
7. Graphics
8. Integrated software

IV. Course Outline:

	Approximate Number of Hours
A. Review of Micro Hardware	3 - 5
1. Microprocessor units	
8 bit	
16 bit	
32 bit	
2. Memory and addressing	
3. CRTS (including attributes) and keyboards (including soft keys)	
4. Printers (including "escape" characters)	
5. Disk drives	
6. Micro systems	
B. Operating Systems	2 - 3
1. Single user operating systems	
2. Multi-user operating systems	

C. File Concepts 2 - 3
   1. File types
   2. Viewing the directory
   3. Copying files
   4. Dumping files in ASCII
   5. Examining file status
   6. Setting up and using sub-directories

D. Data Communications 2 - 3
   1. Asynchronous, Synchronous
   2. Downloading data from mainframes

E. Word Processing 6 - 10
   1. Intro, moving the cursor, entering text, deleting text
   2. Modifying text: insert and delete
   3. Creating table of contents and creating an index

F. Spread Sheet programming 12 - 14
   1. Intro, moving cursor, entering titles, entering/editing data
   2. Computations
   3. Logic
   4. Printing
   5. Interfacing with word processor
   6. Macros
   7. Graphics
   8. Database capabilities
   9. Business Applications

G. Relational Data Base Programming 15 - 18
   1. Intro, creating a data base, using a data base
   2. Screen generation
   3. Report generation
   4. Data manipulation
   5. Programming/procedures
   6. Interfacing with other languages
   7. Up-loading to mainframe
   8. Business applications

V. Text

There are many texts in these areas. Because the course will explore the subjects in depth, we suggest that 2 or 3 books each of which covers a specific package be used, rather than a general purpose text which only gives a cursory look at each topic. Since new books are published each year we choose not to make a specific recommendation at this time.

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SENATE CURRICULUM COMMITTEE B-2

CATALOG DESCRIPTION

IM
~~BS~~ 372 ~~Advanced~~ Microcomputing Applications

Prerequisites: IM ~~BB~~ 350, CO 220, AG 201, or by permission

This course demonstrates how to utilize the microcomputer in business and how to provide technical assistance to users. Emphasis will be placed on intergrating software and interfacing with a main-frame computer. Topics will include hardware, operating systems, data communications, word processing, spreadsheets and database systems.