LSC Use Only UWUCC USE Only Number: Number. Submission Date: Submission Date: Action-Date: Action-Date: CURRICULUM PROPOSAL COVER SHEET University-Wide Undergraduate Curriculum Committee 1. CONTACT Contact Person Dr. Richard Rowell Phone X 7 5747 Department Office Systems and Business Education PROPOSAL TYPE (Check All Appropriate Lines) X COURSE Web Site Dev. & Admin Suggested 20 character title X_ New Course* OS 402 Web Site Development & Administration 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_____ New Number and/or Full New Title ____ Course or Catalog Description Change Course Number and Full Title PROGRAM: Major Minor Track _ New Program* Program Revision* Program Deletion* Title Change ____ Approvals (signatures and date) III.

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

Part II. Description of Curriculum Change

- 1. New Syllabus of record is attached.
- 2. Course Analysis Questionnaire is attached.

Part III. Letters of Support

See attached correspondence with MIS and Computer Science departments.

New Course

I. Catalog Description

OS 402 Web Site Development & Administration

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

Prerequisites: BE/CM/CO/IM/LB 201 Internet & Multimedia or instructor permission

Guides the student through a hands-on step by step process of creating an attractive, well-designed web site for an enterprise. The student will learn how to install and configure a WWW server, publish web pages using the latest tools and set up mechanisms to manage and update a web site and content.

II. Course Objectives:

At the conclusion of the class the student will be able to:

- 1. install, configure and maintain an internet or intranet server.
- 2. develop and publish web pages using tools to generate HyperText Markup Language (HTML) and other software tools.
- 3. add multimedia effects to a web site.
- 4. market a web site.
- 5. manage the web site on an ongoing basis.

III. Course Outline

A. Introduction—The Webmaster

(3 hrs)

- 1. Internet Specialist
- 2. Information Design Specialist
- 3. Media Designer
- 4. Technical Designer
- 5. Technical Manager
- 6. Professional Consultant

(7 hrs)

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|----|---|--|----------|
| | 1. | Differences Between Internets and Intranets | |
| | 2. | Organizational Requirements | |
| | | a. Establishing Web Site Objectives | |
| | | b. Identifying Resource Needs | |
| | | | |
| | 3. | Technical Requirements | |
| | | a. Selecting An Appropriate Operating System | |
| | | (1) Identify Major Systems | |
| | | (2) Pros/Cons of Each | |
| | | (3) System Requirements | |
| | | b. Selecting Internet Software | |
| | | (1) Identify Major Programs | |
| | | (2) Pros/Cons of Each | |
| | | (3) System Requirements | |
| | | c. Selecting A Web Browser | |
| | | (1) Identify Major Browsers | |
| | | (2) Pros/Cons of Each | |
| | | (3) System Requirements | |
| C. | Setting Up and Configuring A Web Server on a Microcomputer, | | |
| | i.e | . Windows NT | (7 hrs) |
| | 1. | Install and Configure Operating System | |
| | 2. | Install and Configure Internet Software | |
| D. | De | eveloping Enterprise-wide Content | (13 hrs) |
| | 1. | The Nature of Business Information | |
| | 2. | The Development Process | |
| | | a. Content Analysisb. Audience Analysis | |

Planning the Internet/Intranet Site

В.

- c. Functional Analysis
- d. Technical Design
- e. Defining Site Standards for Content and Organization
- 3. Layout and Design
 - a. Application of Development Process Concepts
 - b. Adding Graphics
 - c. Adding Sound
 - d. Adding Animation and Full Motion Video

E. Web Site Administration

(12 hrs)

- 1. Testing and Troubleshooting Web Site
- 2. Audit and Logging Options
 - a. Configuring Service Options
 - b. Configuring the Directories
 - c. Configuring the Logging Options
 - d. Configuring Other Options
- 3. Managing Web Site Content
 - a. Identify and Repair Broken Links
 - b. Identify and Repair Duplicate Links
 - c. Identify and Repair Orphan Files
 - d. Procedures for Reviewing Content
- 4. Using Firewalls
 - a. Examine Potential Solutions
 - b. Pros and Cons of Various Solutions
- 5. Using Data Encryption and Digital Signatures Features
 - a. Obtaining Certificates
 - b. Installing Certificates
- 6. Collecting and Analyzing Usage Statistics
 - a. NCSA/CERN and IIS Designs
 - b. Log Formats

c. Determining Required Information

G. Final Activity

(2 hrs)

Total Hours:

44 hrs

IV. Evaluation Methods

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The final grade for the course will be determined as follows:

Tests. Two tests (mid-term and final) consisting of multiple choice, true-false, and short essay.

60% Performance Based. A minimum of 14 hands-on assignments will be given throughout the semester measuring understanding of critical concepts. The weight of each assignment will vary.

10% Quizzes. Periodic unannounced quizzes will be given on the textbook and lecture material.

A = 90-100% B = 80-89% C = 70-79% D = 60-69% F = 59% and below

V. Required Textbook

Textbook: Stein, L. 1997. How to Set Up and Maintain a Web Site. Addison-Wesley.

VI. Special Resource Requirements

Other than the required text no additional resources will be required of each student.

VII. Bibliography

Barker & Barker. 1999. <u>The World Wide Web featuring Netscape Navigator 5.</u>

Cambridge, MA: Course Technology.

Corel Corporation. 1997. <u>Corel WebMaster Suite</u>. Ottawa, Ontario, Canada.

Navarro. 1999. <u>Dynamic HTML</u>. Cambridge, MA: Course Technology.

Lozano, Jose. 1997. <u>Multimedia: Sound & Video</u>. Indianapolis, IN:

Que Publishing Company.

Mholer, James L. 1997. <u>How to Become A Webmaster in 14 Days</u>. Indianapolis, IN: Sams.net Publishing.

Schmeiser, Lisa. 1997. Web Design Templates Sourcebook. Indianapolis, IN: New Rider Publishing.

Siegel, David. 1997. <u>Secrets of Successful Web Sites</u>. Indianapolis, IN: Hayden Books

Smith, Bud. 1999. Creating Web Pages for Dummies. Indianapolic, IN: IDG Books.

Simpson, Ron. 1998. <u>Cutting Edge Web Audio</u>. Upper Saddle River, NJ: Prentice Hall Computer Books.

Szeto, Gong et al. 1997. <u>Designing Interactive Web Sites</u>. Indianapolis, IN: Hayden Books.

Webster, Timothy. 1997. Web Designer's Guide to Graphics: PNG, GIF, & JPG. Indianapolis, IN: Hayden Books.

OS 402 – COURSE ANALYSIS QUESTIONNAIRE

Section A: Details of the Course

- Al This course can be taken as a controlled elective by students in the bachelor of science in Office Systems (Title change proposal: Business Technology Support) program. Students in other majors may elect this course if they meet the prerequisites. The course is not intended for inclusion in the liberal studies program.
- A2 This course does not require changes in existing courses or requirements for a program.
- A3 This course was offered as a Special Topics course during the Spring 1998 term.
- A4 This course is intended to be dual level. Rationale for this dual listing is to meet the needs of the students enrolled in the MBA and M. Ed. in Business programs.
- A5 This course is not to be taken for variable credit.
- A6 This course represents leading-edge technology delivery component. No other universities offering this course have been identified via a search of the OSRA listserve and catalogs available at the IUP library.
- A7 Private companies offer professional certification programs that include the content and skills included in this course. Two examples include Microsoft Internet Certification, and USWEB Certified Web Specialist. The scope and depth of this course is impossible to incorporate into already packed existing courses.
- B1 This course will be taught by one instructor.
- This course does overlap somewhat with departments currently offering BE/ CM/ CO/IM/ LB 201 Internet and Multimedia. However, the 201 class serves as a computer literacy and liberal studies class with a very different focus. It concentrates on the microcomputer for personal use. This course concentrates on developing and administrating a web site for a business enterprise. Computer Science and Management Information Systems departments have been sent copies of this course and their response is included.
- B3 Seats will be made available for the School of Continuing Education.
- C1 Current faculty resources are adequate.

C2 Other Resources

- (a) A computer lab will be needed and is available in the Eberly College of Business.
- (b) Two web servers are currently available. Adequate software is currently available to run this course.
- (c) No additional laboratory supplies or consumable goods are required.
- (d) No library materials are required. Information provided by the internet and journals housed in the departmental resource library are adequate.
- (e) No travel funds are required.
- C3 No grant funds are associated with this course.
- C4 This course will be offered in the Fall and Spring semesters.
- C5 One section of this course will be offered each semester.
- C6 Twenty-five students will be accommodated in this course. The availability of computer work stations and nature of subject matter restricts enrollment to this number.
- C7 No professional society recommends enrollment limits for a course of this nature.

Section D: Miscellaneous

Currently, one of the fastest growing areas in the information technology support field is the need for web site managers. This course provides an important set of concepts and skills to help meet this demand.