Appr 10/11/05

LSC Use Only No: LSC Action-Date:	UWUCC USE Only No. UWUCC Action-Date: Senate
	Action Date:
	05-106 Appr 12/6/05

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person LeAnn Wilkie	Email Address wilkie@iup.edu
Proposing Department/Unit Technology Support and Training	Phone 724.357.3003

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

---

BTST 402 Web Site Development & Administration

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 – Prerequisite

                                                 change

____New Minor Program   _____New Track

Current program name	_Proposed_ program name, if changing

4. **Approvals**		Date
Department Curriculum Committee Chair(s)	LeAnn Wilkie	3-16-05
	(signature)	3-16-05
Department Chair(s)	Linda Syul	3-16-05
College Curriculum Committee Chair	LeAnn Wilkie	4-11-05
College Dean	R Cam	4/18/05
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)		
UWUCC Co-Chairs	Gail S Sechrist	10/11/05

* where applicable

APR 25 2005

LIBERAL STUDIES

1

Course Revision: BTST 402 Web Site Development & Administration

Part II. Description of Curriculum Change

1. Syllabus of Record.

   The new syllabus of record for this revised course is attached in *Appendix A.*

2. Summary of proposed revisions:

   a. The prerequisite for this course was removed.

   b. A minor editorial correction was made in the course description.

   c. A minor editorial correction was made in the sentence preceding the objectives.

   d. An error in the course outline was corrected.

   e. The bibliography was updated.

   Old Course Description:

   Guides the student through a hands-on step by step process of creating an attractive, well-designed Web site for an enterprise. You 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 your Web site and content.

   New Course Description:

   Guides the student through a hands-on step by step process of creating a well-designed Web site for an enterprise. You 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 your Web site and content.

3. Justification/ Rationale for revisions:

   a. BTED 201 was listed as a prerequisite in the original syllabus of record. As part of the 2003 program revisions to meet the 120-hour mandate, BTST 401 – Web Design, a new course with no prerequisite, was approved and listed as a program elective. Also, program electives were reduced from 9 credits to 6 credits as part of the same program revision. The department is removing the course prerequisite to better serve the needs of our students and MIS students who often double-major in Business Technology Support by giving them greater flexibility of choice in program electives.

   b. A minor editorial correction was made in the course description to better reflect the content of the course.

   c. A minor editorial correction was made in the sentence preceding the objectives. Previously, the first sentence read, "at the conclusion of the class you will be able to." This sentence was changed to: "at the conclusion of the class, students will be able to."

   d. A correction to an error in the course outline was made by adding a mid-term exam, adjusting the outline by 1 hour accordingly, and correcting an error in the outline's letter sequencing.

   e. The bibliography has been updated to reflect technological changes since 1997.

4. Old Syllabus of Record

   The old syllabus of record is attached in *Appendix B.*

5. Liberal Studies course approval.

   These changes do not affect the Liberal Studies requirements.

Part III.   Letters of Support or Acknowledgment

   Not required.

BTST 402 Web Site Development & Administration

3 class hours
0 lab hours
3 credits
(3c-0l-3cr)

Prerequisite: None.

I.   Catalog Description

Guides the student through a hands-on step by step process of creating a well-designed Web site for an enterprise. You 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 your Web site and content.

II.   Course Objectives

At the conclusion of the class, students 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 your Web site.

4.   Market your 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

B.   Planning Your Internet/Intranet Site   (7 hrs)

    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 or Browsers
            (2)   Pros/Cons of Each
            (3)   System Requirements

C.   Setting Up and Configuring A Web Server on a Microcomputer   (7 hrs)

    1. Install and Configure Operating System

    2. Install and Configure Internet Software

        a. Open Database Connectivity Components
        b. Listserv, FTP, and WWW Services

Mid-term exam: (1 hr)

D. Developing Enterprise-wide Content   (12 hrs)

   1. The Nature of Business Information

   2. The Development Process

      a. Content Analysis
      b. Audience Analysis
      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

F. Final Exam: (2 hrs)

        Total Hours: 44 hrs

IV. Evaluation Methods

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

30%	Tests. Two tests (mid-term and final) consisting of multiple choice, true-false, and short essay.
60%	Performance Based. Several 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: DiNicolo, D. & McCann, B. (2005). *MCSE/MCSA Guide to*

Managing a Microsoft Windows Server 2003 Environment, Enhanced.

Boston, MA: Course Technology.

VI.   Special Resource Requirements

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

VII.   Bibliography

Addison, D. (2004). *Small Web Sites, Big Results*. Phoenix, AZ: Paraglyph Press, Inc.

Andres, C. & Herr, S. (2002). *Great Web Architecture*. Hoboken, NJ: John Wiley &

Sons, Incorporated.

Andrew, R. (2005). *Build Your Own Standards Compliant Website with Dreamweaver*.

Quartz Hill, CA: Sitepoint.

Cabrera, L., Kurt, C. (2005). *Web Services Architecture and Its Specifications: Essentials*

for Understanding WS-*. Redmond, WA: Microsoft Press.

Caputo, T. C. (2003). *Build your own server*. Emeryville, CA: McGraw-Hill Osborne

Media.

Crowder, D. & Crowder, R. (2004). *Building a Web Site for Dummies* (2nd ed.). Hoboken,

NJ: John Wiley & Sons.

Danseglio, M. (2004). *Securing* Windows Server 2003. Sebastopol, CA: O'Reilly Media.

Davies, J. & Lee, T. (2003). *Microsoft® Windows® Server 2003 TCP/IP Protocols and*

Services Technical Reference. Redmond, WA: Microsoft Press.

Duckett, J. (2005). Accessible XHTML and CSS Web Sites Problem Design Solution.

Hoboken, NJ: John Wiley & Sons.

Eccher, C., Hunley, E., Simmons, E. (2004). Professional Web Design: Techniques and

Templates. Hingham, MA: Hingham, MA: Charles River Media.

Edwards, J. (2003). *Leveraging Web Services: Planning, Building, and Integration for Maximum Impact.* New York, NY: AMACOM.

Gosselin, D., Guthrie, R, Lopez, L., Sklar, J., Slaybaugh, M., & Soe, L. (2003). *The Web Warrior Guide to Web Design Technologies.* Boston, MA: Course Technology.

Grannell, C. & Rycroft, S. (2004). *Web Designer's Reference: An Integrated Approach to Web Design with XHTML and CSS.* Berkeley, CA: APress.

Gray, N. (2003). *Web Server Programming.* Hoboken, NJ: John Wiley & Sons, Incorporated.

Hillier, S. (2005). *Advance Sharepoint Services Solutions.* Berkeley, CA: Apress.

Hunley, E. (2004). *Web Design with Macromedia Studio MX 2004.* Hingham, MA: Charles River Media.

Jablonski, S., Petrov, I., Meiler, C. & Mayer, U. (2004). *Guide to Web Application and Platform Architectures.* New York, NY: Springer-Verlag.

Kaye, D. (2003). *Loosely Coupled: The Missing Pieces of Web Services* (1ˢᵗ ed). Kentfield, CA: RDS Press.

King, A. B. (2003). *Speed Up Your Site: Web Site Optimization* (1ˢᵗ ed.). Indianapolis, IN: New Riders.

Larson, E. & Stephens, B. (2001). *WOW World Organization of Webmasters Web Server Training Course.* Upper Saddle River, NJ: Prentice Hall.

Menasce, D. A. & Virgilio, A. (2003). *Capacity Planning for Web Services: metrics, models, and methods.* Upper Saddle River, NJ: Prentice-Hall.

Meyer, E. (2004). *Cascading Style Sheets: The Definitive Guide* (2nd ed.). Sebastopol, CA: O'Reilly Media.

Murphy, N. & Malone, D. (2005). *IPv6 Network Administration*. Sebastopol, CA: O'Reilly Media.

Perkins, M. (2005). *The Practical Guide to Digital Imaging: Mastering the Terms, Technologies and Techniques*. Amherst Media.

Pfaffenberger, B., Karow, B., Schafer, S., White, C. (2004). *HTML, XHTML, and CSS Bible* (3rd ed.). Hoboken, NJ: John Wiley & Sons.

Ruse, K. (2005). *Web Standards Design Guide*. Hingham, MA: Charles River Media.

Sebesta, R. (2005). *Programming the World Wide Web* (3rd ed.). Addison-Wesley.

Silva, S. (2003). *Web Server Administration*. Course Technology.

Singh, N. & Pereira, A. (2005). *Culturally Customized Web Site: Customizing Web Sites for the Global Marketplace*. Butterworth-Heinemann.

Stanek, W.B. (2003). *Microsoft IIS 6.0 Administrator's Pocket Consultant*. Redmond, WA: Microsoft Press.

Sweeney, S. (2004). *101 Ways to Promote Your Web Site* (5th ed.). Maximum Press.

Teague, M. (2004). *DHTML and CSS for the World Wide Web: Visual QuickStart Guide* (3rd ed.). Berkeley, CA: Peachpit Press.

The Microsoft IIS Team. (2004). *Internet Information Services (IIS) 6 Resource Kit*. Redmond, WA: Microsoft Press.

Ware, M. (2003). *Internet Information Server (IIS) 6.0 Fundamentals: A Guide to Understanding and Implementing IIS 6.0 on Windows Server 2003*. CG Press, Ltd.

Ying, L., Ward, J., Gosner, S. (2004). *Building Websites with Microsoft Content Management Server*. Birmingham, UK: Packt Publishing.

Zhao, J. (2003). *Web Design and Development for E-Business*. Upper Saddle River, NJ: Prentice Hall.

Appendix B: Old Syllabus of Record

OS 402 Web Site Development & Administration   3 credits
                                                       3 lecture hours
                                                       (3c-0l-3 sh)

Prerequisites: BE/CMICOIIM/LB 201 Internet & Multimedia OR Instructor Permission

I.   Catalog Description

Guides the student through a hands-on step by step process of creating an attractive, well- designed Web site for an enterprise. You 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 your web site and content.

II.   Course Objectives:

At the conclusion of the class you 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 your Web site.

    4.   Market your 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

12

      6. Professional Consultant

B.   Planning Your Internet/Intranet Site   (7 hrs)

  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 or Browsers
         (2)   Pros/Cons of Each
         (3)   System Requirements

C.   Setting Up and Configuring A Web Server on a Microcomputer   (7 hrs)

  1. Install and Configure Operating System

  2. Install and Configure Internet Software

      a. Open Database Connectivity Components
      b. Gopher, FTP, and WWW Services

D. Developing Enterprise-wide Content   (13 hrs)

   1. The Nature of Business Information

   2. The Development Process

      a. Content Analysis
      b. Audience Analysis
      c. Functional Analysis
      d. Technical Design
      e. Defining Site Standards for Content and Organization

   3. Layout and Design

      a. Application of Development Process Concepts
      d. Adding Graphics
      e. 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   <u>(2 hrs)</u>

    Total Hours: 44 hrs

IV.   Evaluation Methods

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

30%	Tests. Two tests (mid-term and final) consisting of multiple choice, true-false, and short essay.
60%	Performance Based. Several 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: Wynkoop, S. 1996. <u>Running A Perfect Web Site</u>. Indianapolis, IN,

Que Publishing Company.

VI.   Special Resource Requirements

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

VII. Bibliography

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

Kidder, Gayle and Harris, Stuart. 1997. <u>Official HTML Publishing for Netscape</u>. Mountain View, CA: Ventana Publishing.

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

Peck, Susan B. and Arrants. S. 1996. <u>Building Your Own WebSite. Everything You Need To Reach Your Audience On The Web</u>. Sebastopol, CA: O'Reilly & Associates.

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

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

Schmeiser, Lisa. 1997. <u>Web Design Templates Sourcebook</u>. Indianapolis, IN: New Rider Publishing.

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

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