

## **School of Information Sciences**

Course Profile: Website Development

Course Number: LIS 7420

Credits: 3

MLIS Prerequisite(s): LIS 6080

MSIM Co-requisite(s): LIS 6000

## **Rationale for Inclusion in Curriculum:**

Students will be employed by organizations competing in the Information Age which is characterized by rapid change, voluminous data, and complex dynamics. Student will create and manage websites and utilize application tools as well as help improve the efficiency of the organization's operations. This course advances the web design and development skills of the library and information science student.

LIS 7420 requires the graduate student to use web design and development tools for website creation and maintenance. The course focuses on the fundamentals of mark-up, style, and scripting used in website design. This course does not require any technical knowledge beyond the content covered in LIS 6080.

## **Learning Outcomes:**

By the end of the course, students will be able to:

- 1. articulate the fundamentals of standards based website design;
- 2. incorporate functionality to websites using client-side scripting languages;
- 3. demonstrate the various methods for and benefits of keeping content, presentation and interactivity separate on a web page;
- 4. demonstrate the various usages and benefits of bringing in dynamic data and mobile development tools;
- 5. integrate advanced markup features to make an effective user interface for library websites;
- 6. effectively use tools and techniques to troubleshoot, find, and fix errors;
- 7. develop an avenue for research investigation of WWW resources;
- 8. expand their ability to think and reason rigorously;
- 9. apply and integrate multimedia into their website;
- 10. competently utilize web authoring design and development tools;
- 11. describe the impacts and implications of standards based Web design;
- 12. recommend strategies for library and information centers regarding the construction of usable and accessible Web sites;

**Content:** Websites will be developed in a Library and Information Science setting. The following topics, at a minimum, will be covered in this course:

- 1. <u>Structure</u>: utilize standard mark-up elements in order to structure content for display on the Web.
- 2. Presentation: work with external and internal style sheets to control the presentation.
- 3. Scripting: integrate a layer of interactivity to Web sites through the use of client-side scripting.
- 4. <u>Content</u>: leverage other standards, like XML, to share content on the Web.
- 5. <u>Design</u>: utilize best practices to ensure usability and accessibility of Web sites.
- 6. <u>Multimedia</u>: create and subsequently embed multimedia into a Web page and provide an adequate, accessible alternative.

**Course Methodology:** The course delivery methodology will include:

- 1. Lectures
- 2. Discussion boards
- 3. Demonstrations
- 4. Supplemental Material
- 5. Additional Readings
- 6. Projects

**Evaluation of Student Performance:** The student's performance will be evaluated using:

- 1. Creation of a usable, accessible, standards compliant Web site.
- 2. Completion of class assignments.
- 3. Quizzes / Exams

Students will have access to web design and development software tools to complete assignments.

**Text:** To be determined

**Approved in Principle: 1/12** 

Updated: 3/16