LIS 506 - Introduction to Information Technology
Fall 2013, Section A, Dr. Jianqiang Wang

Work Products and their Learning Objectives

Coursework Item	Learning Objectives	LIS Program Objectives[1]
HW1: Understanding Computer CPU, RAM, and Hard Disk	• Calculate the speed of RAM and hard disk in processing data • Compare the speed and storage capacity of RAM and hard disk • Define the storage hierarchy	2.4
HW2: Finding Authoritative Information on the Web	Master techniques for finding and verifying information on the Web: • Exploring hyperlinks contained in a Web page; • URL trimming • Domain name lookup • Traceroute	1.1 2.4 3.5
HW3: Creating a Simple Personal Web Page	• Master the basic syntax of HTML, including defining document structure (title, heading, paragraph, etc.), creating hyperlinks, embedding images, and creating lists. • Master the basic syntax of CSS, including setting different colors and fonts • Publish Web pages through a Web server (e.g., UBFS personal Web space)	2.4
HW4: Adding Images, Audio, and Video to your Web Pages	• Create and embed audio in Web pages • Embed video in Web pages • Create and add clickable images	2.4
HW5: Adopting a JavaScript	• Learn the basic syntax of JavaScript programming, including how to define variables, control structures, functions, and events • Make light modifications to other people's JavaScripts	2.4

---

[1] Refer to the LIS Objectives at:
http://gse.buffalo.edu/gsefiles/documents/departments/LISObjectivesShortCouncilApproved20111006.doc

HW6: Building a Simple Library Database	• Define basic concepts of relational databases, including entity, attribute, relationship, data model, data redundancy, and normalization • Identify key components of relational database management system (DBMS), including field, record, table, and query • Apply relational database approach to simple problems (i.e., problems that can be modeled with three tables or so) • Master the basic functions of Microsoft Access, including those for creating databases, tables, fields, and queries	2.1 2.4
Team Project	• Identify and define an information problem • Design (include prototype) a Web site to address that information problem • Apply and integrate key information technologies, including Web-based content delivery (i.e., HTML and CSS), programming, relational database, and Web 2.0 • Collect and create information, with an eye on the legal implications such as copyright and fair use • Organize and present information via Web pages and Web sites • Develop skills for technical writing, presentation, and demonstration • Develop teamwork skills, including collaboration, communication, task allocation, scheduling, and project management • Develop personal qualities, including initiative, self-motivation, creativity, dependability, adaptability, respectfulness, persistence, and integrity.	1.1 2.1 2.4 3.3 3.5 5