

Course Number & Name: LIS 455 - Applied Information Systems

Description: Applied information systems design is the continuation of Systems Analysis and Design. In this course, students review the range of information systems used in many information environments and will build a complete information system based on the analysis in the other course or another project of their own choosing. The course goes into much greater depth about the technical and implementation issues, types of commercial information systems, technical white papers, SQL, client-server architecture, applied human-computer interaction. Students should have intermediate-level experience in at least one of the following: Java, Perl, PHP, SQL, JavaScript, ASP, JSP, C++, Macromedia Flash, ActionScript, or GIS and be proficient in at least one of the following: Mac OSX, WindowsXP, Unix or Linux. Code samples are provided in Java and demonstrated as servlets or applets, or asp applications, on the class's web server running Apache Tomcat, MySQL, with perl and php modules.

- **Prerequisites:** LIS 488
- **Audience (level, environment/setting):** Any student interesting in systems librarianship, web-based retrieval, multimedia, programming, information retrieval, digital library construction, digital archives; Students having taken LIS486 should be encouraged to take this class.
- **Student Learning Outcomes** [by number]: 1, 2, 3, 5, 6, 10
- **Topics/List of Lectures:**
 - Systems Analysis and Information Architecture
 - Data Types
 - SQL
 - Document Type Definitions and XML schema
 - SAX, DOM, JDOM and other xml parsing techniques
 - White papers
 - Client/Server Architecture
 - HCI factors in applied info systems
 - Storyboarding, data modeling
- **Suggested Textbooks/Readings**
 - Series of online readings available on the course homepage
 - Selected readings for individual student projects
- **Course History:**

October 2004: discussed at curriculum retreat; new description (voted in at 10/04 Faculty Meeting)

- **Document prepared by:** Gerry Benoit, 10/04