

Designing and Developing an Information System - I450/I451 Fall 2002 Course Syllabus

Course Description: System design and development present both technical and managerial problems with which students will be familiar from their undergraduate course work. This course puts these lessons into practice, as students work in teams to develop an information system. Examples of course projects include design and development of a database for a business or academic application, preparation and presentation of an interactive media performance or exhibit, or design and implementation of a simulated environment (virtual reality).

Instructor: Dennis Groth Email: dgroth@indiana.edu
Sycamore 036 Phone: 855-5886
Home: 331-2296
Office Hours: Monday 3-4, Tuesday 2-3, Thursday 2-3
and by appointment.

Associate Instructor: Sean Ellis Email: seeellis@indiana.edu
Memorial 401
Office Hours: TBA and by appointment.

Meeting Times: MW 1:00 – 2:15 Geology 143

Grading:

Project	
Requirements	15%
Design	15%
Implementation	15%
Process	10%
Examinations	25%
Homework	15%
Participation	5%

Textbooks:

- (1) *A Visual Introduction to SQL*, David Chappell and J. Harvey Trimble, John Wiley & Sons, 2002. **(Required)**
- (2) *Beginning ASP Databases*, John Kauffman, Kevin Spencer and Thearon Willis, Wrox Publishing, 2002. **(Recommended)**

Lecture Topics

Week	Date	Topic / Activity
1	Sep 2, 4	Course Introduction, Information Systems Components, Project Basics
2	Sep 9, 11	Database Systems, Data Models
3	Sep 16, 18	Data Models, Relational Design
4	Sep 23, 25	Relational Design, Normal Forms, Index Methods
5	Sep 30, Oct 2	Database Access Methods, Security and Users
6	Oct 7, 9	Database Queries
7	Oct 14, 16	Database Queries, Exam 1
8	Oct 21, 23	Database Queries, Views, Procedures
9	Oct 28, 30	Database Programming, Scary Projects
10	Nov 4, 6	Database Programming, Scripting, Applications
11	Nov 11, 13	Development Models – Waterfall, Cyclical / Iterative
12	Nov 18, 20	Requirements Analysis and Specification
13	Nov 25	Use Analysis, User Interface Design
14	Dec 2, 4	User Interface Design, Tool Selection, Exam 2
15	Dec 9, 11	Project Proposals – Student Presentations
16	Dec 18	Final Examination Period, 2:45 – 4:45