

Brief Course Description

(50-words or less)

Client-side and server-side techniques for use on the World Wide Web. Interactive, dynamically-generated, and database-enabled web pages are discussed. Course content changes frequently to incorporate new Internet technologies.

Extended Course Description / Comments

Not open to students with credit in CSCI 4350/6350.

Important technologies that have been covered in recent course offerings: Model-View-Control architectural pattern, persistence providers such as Hibernate, Service-Oriented Architecture, Web Services Ajax, and JavaScript toolkits.

Pre-Requisites and/or Co- Requisites

CSCI 1302
Software Development in Java

Required, Elective or Selected Elective

Selected Elective Course

Approved Textbooks
(if more than one listed, the textbook used is up to the instructor's discretion)

Author(s): Andrea Steelman and Joel Murach
Title: *Murach's Java Servlets and JSPs* Edition:
2nd
ISBN-13: 978-1890774448

Specific Learning Outcomes (Performance Indicators)

At the end of the semester, all students will be able to do the following:

1. Define and use terms relevant to Web development.
2. Recognize and interpret HTTP response codes.
3. Author HTML documents conforming to language standards promulgated by the World-Wide Web Consortium
4. Design and develop Web applications incorporating multiple dynamically generated pages and role-based permissions.
5. Design and develop database-enabled Web applications.
6. Handle error conditions in Web applications.
7. Create HTML documents that change structure in response to user events
8. Create HTML documents that change structure in response to asynchronous events.

Relationship Between Student Outcomes and Learning Outcomes

		Student Outcomes										
		a	b	c	d	e	f	g	h	i	j	k
Learning Outcomes	1						●					
	2	●										
	3		●							●		
	4		●	●	●		●			●	●	●
	5	●	●	●	●		●			●	●	●
	6	●	●	●						●		●
	7	●	●	●						●		●
	8	●	●	●								●

Major Topics Covered

(Approximate Course Hours)

3 credit hours = 37.5 contact hours

4 credit hours = 50 contact hours

Note: Exams count as a major topic covered

HTTP and the TCP-IP protocols (2 hrs)

HTML and Cascading Stylesheets (2 hrs)

Test-driven development (3 hrs)

Java Server Pages (3 hrs)

JavaBeans (4 hrs)

Expression language (2 hrs)

Java Standard Tag Library (3 hrs)

Java Servlets (2 hrs)

Model-View-Controller development (3 hrs)

Database design and Web application (2 hrs)

Database programming (2 hrs)

Web application development on servers (4 hrs)

Logging and Filtering (3 hrs)

Web services and Service-Oriented Architecture (3 hrs)

Exception handling (3 hrs)

Client-side scripting (6 hrs)

Tests (3 hrs)

Course Master

Dr. Dan Everett