

## COURSE DESCRIPTION

Dept., Number	CSci 490	Course Title	Special Topics: Internet Programming, Spring 2007
Semester hours	3	Course Coordinators	H. Conrad Cunningham, Professor Jie Tang, Adjunct Instructor, staff member of Office of Information Technology

### Current Catalog Description

Study of topics in computer science according to the interests of the instructor and students.

### Textbook

Robert W. Sebesta. *Programming the World Wide Web*, 3<sup>rd</sup> edition, Addison Wesley, 2005.

### References

Web Standards reference Web site: <http://www.w3c.org>

MySQL reference Web site: <http://dev.mysql.com/>

Other reference Web site: <http://w3school.com>

### Course Outcomes

Upon successful completion of this course, the students:

1. know the concepts and terminology of Web programming,
2. can develop dynamic Web pages using contemporary client-side technologies,
3. can develop Web sites with dynamic content using contemporary server-side technologies,
4. know the basic database operations and how to access databases through the Web.

### Relationship between Course Outcomes and Program Outcomes

This is an elective course taken by undergraduate computer science students to enrich their programs. Outcomes 1 to 4 all contribute to program outcomes (c) and (k).

Prerequisites by Topic

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| <ol style="list-style-type: none"> <li>1. Basic data structures and algorithms (CSci 112, 211)</li> <li>2. Fundamental concepts of computer architecture (CSci 223)</li> </ol> |
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Major Topics Covered in the Course

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| <ol style="list-style-type: none"> <li>1. Fundamentals (3 hours)</li> <li>2. Introduction to XHTML (3 hours)</li> <li>3. Cascading Style Sheets (3 hours)</li> <li>4. Basics of JavaScript (4 hours)</li> <li>5. JavaScript and HTML documents (5 hours)</li> <li>6. Dynamic documents with JavaScript (4 hours)</li> <li>7. Basic UNIX and MySQL commands (4 hours)</li> <li>8. Servlets and Java Server Pages (6 hours)</li> <li>9. Introduction to PHP (5 hours)</li> <li>10. Database access through the Web (5 hours)</li> </ol> |
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Assessment Plan for the Course

<p>This is an elective course offered on this topic only once with the specified content. An offering typically has 4 examinations, 5 homework assignments, and 1 course project. Outcome 1 is assessed in exam 1 and programming assignment 1; outcome 2 is assessed in exams 1 and 2 and programming assignments 1, 2, 3 and 4; outcome 3 is assessed in exam 3 and programming assignment 5; and outcome 4 is assessed in exam 3 and programming assignment 5. All outcomes are assessed in the final exam and the course project. The course coordinator and instructor evaluate the student performance informally and make changes to the course content, organization, and pedagogy as appropriate for future offerings of the topic.</p>
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How Data in the Course are Used to Assess Program Outcomes (unless adequately covered already in the assessment discussion under Criterion 4)

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Estimate Curriculum Category Content (Semester hours)

Area	Core	Advanced	Area	Core	Advanced
Algorithms			Software design		2
Data structures			Concepts of programming languages		1