

CATALOG INFORMATION

=====

Dept & Nbr: CSC 134 Title: DEVELOPING WEB APPS
Full Title: Developing Web Applications

Units	Course Hours	Per Week	Nbr of Weeks	Course Hours	Total
Max: 3.0	Lecture	2.5	17	Lecture	42.5
Min: 3.0	Lab	1.5		Lab	25.5
	Contact DHR	0.0		Contact DHR	0.0
	Contact Total	4.0		Contact Total	68.0
	Non-contact DHR	0.0		Non-contact DHR	0.0

Title 5 Category: 01 AA Degree Applic
Grading: GC Credit course for grade or CR/NC
Repeatability: 01 2 ENROLLMENTS
Also listed as:

CATALOG DESCRIPTION:

Introductory course in developing interactive web pages using programming and other advanced technologies. Topics include client-side and server-side scripting, and/or use of a server-side Application Programming Interface (API) to achieve web database access and dynamic web page creation. User interface creation, response validation, and security issues will also be addressed. Students will understand and experience what is required for a fully-functioning, dynamic web site that interacts with a database.

PREREQUISITES:

COREQUISITES:

RECOMMENDED PREPARATION:

CSC 130 and a programming class (CSC 130 and CSC 203) or (CSC 130 and CSC 213) or (CSC 130 and CSC 221).

LIMITS ON ENROLLMENT:

SCHEDULE OF CLASSES INFORMATION:

Recommended: CSC 130 and a programming class (CSC 130 and CSC 203) or (CSC 130 and CSC 213) or (CSC 130 and CSC 221).

Learn how to develop interactive web pages using programming and other advanced technologies. Topics include client-side and server-side scripting, and/or use of a server-side Application Programming Interface (API) to achieve web database access and dynamic web page creation. User interface creation, response validation, and security issues will also be addressed. Students will understand and experience what is required for a fully-functioning, dynamic web site that interacts with a database. (Grade or CR/NC) (Repeat Code 1)

Transfer Credit: CSU.

ARTICULATION and CERTIFICATE INFORMATION

=====

ASSOCIATE DEGREE: Effective: FALL 2004 Inactive:
Area: D2 COMMUNICATIONS & ANALYTICAL THINKING

CSU GE: Effective: Inactive:
Transfer area:

IGETC: Effective: Inactive:
Transfer area:

CSU TRANSFER: TRANSFERABLE Effective: FALL 1981 Inactive:

UC TRANSFER: Effective: Inactive:

CAN:

CERTIFICATE APPLICABLE: N NOT CERTIFICATE/MAJOR APPLICABLE

APPROVAL AND DATES

=====

Version 03 Submitted by: JON DEGALLIER Date: 03/01/2004
Department approved: Date:
Curriculum approved: 06/01/1981 Version approved: 02/20/2004
Prerequisites approved: 06/01/1981 Last reviewed: 02/20/2004
Term effective: FALL 2004 Last taught: FALL 2008 Inactive:

COURSE CONTENT

=====

OUTCOME AND OBJECTIVES:

1. Utilize programming concepts such as variables, loops, conditional, statements, and code modules in the creation of web interactive pages.
2. Demonstrate understanding of core interactive web technologies, such as CGI, Perl, JavaScript, and CSS.
3. Demonstrate the ability to write web programs such as client-side and server-side scripts, including validation scripts.
4. Demonstrate the ability to use and understand alternatives to server-side scripting including use of Application Programming Interfaces (API's).
5. Demonstrate the ability to connect a web page form to a database, and to include appropriate database queries in interactive web pages.
6. Demonstrate the ability to create web pages dynamically, using content retrieved in response to a database query.
7. Demonstrate the ability to design user interfaces that will enhance user interaction.
8. Exercise programming practices that will minimize the potential for security breaches.

TOPICS AND SCOPE:

1. Review of web design and construction.
2. Review of beginning programming concepts.
3. Core web programming technologies.
4. Writing client-side scripts for web pages.
5. Writing server-side scripts for web pages.
6. Forms processing and validation of user input.
7. Web-database interaction using interactive web technologies.
8. User interface design for dynamic web page creation.
9. Security considerations for web programmers.
10. Platform independent technologies.

ASSIGNMENTS:

READING ASSIGNMENTS:

Students are required to read and study the assigned materials.

Examples of appropriate reading are:

Internet Programming with VBScript and JavaScript by Kathleen Kalata, published by Course Technology or WebMaster in a Nutshell, 3rd Edition by S. Spainhour, R. Eckstein O'Reilly or Core Web Programming, 2nd Edition by M. Hall, L. Brown published by Prentice-Hall Publishing.

WRITING ASSIGNMENTS:

Students are required to submit several programming assignments, web page and documentation materials as appropriate. Substantial writing is inappropriate because the course primarily involves the application of skills.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of two hours of independent work out of class for each unit of lecture credit by doing the following:

1. Create programs and web pages utilizing the techniques and concepts discussed in class.
2. Reading assignments as assigned.
3. Completion of assigned exercises for each unit of instruction.

E. ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING:

1. Translate a verbal assignment in the logical steps needed to create computer programs.
2. State the logic used in a program.
3. Analyze the processes involved in many of the topics covered.

METHOD OF INSTRUCTION:

Lectures, demonstrations, group activities, handouts, reading assignments, class discussion.

The content of this course may also be delivered using some form or forms of distance technology such as television, videotape, audiotape or the internet. For telecourses, no less than 11 hours of personal contact between instructor and students shall be included through group or individual meetings, orientation and review sessions, supplemental seminars or study sessions, field trips, library workshops, or other in-person activities.

For online courses, instructor/student contact may take place in a face-to-face setting and/or through email or other electronic means. Students may interact with each other through in-person study groups, electronic message boards, or other means.

METHODS OF EVALUATION:

1. Skill demonstration will constitute at least 50% of the grade.
2. Quizzes, tests, online evaluations.
3. Comprehensive final exam and/or project.

BASIS FOR GRADING:

The assignment of a grade is based on the level of achievement of the outcomes and objectives of the course outline and is reflected in quantifiable terms in the course syllabus.

REPRESENTATIVE TEXTBOOKS:

Examples of required text include: Internet Programming with VBScript and JavaScript by Kathleen Kalata, published by Course Technology or WebMaster in a Nutshell, 3rd Edition by S. Spainhour, R. Eckstein published by O'Reilly or Core Web Programming, 2nd Edition by M. Hall, L. Brown published by Prentice-Hall Publishing.