

CS/IS263 : Database-Driven Web Page Creation

General Information

Author:	<ul style="list-style-type: none">Vladimir Paransky
Course Code (CB01) :	CS/IS263
Course Title (CB02) :	Database-Driven Web Page Creation
Department:	CSIS
Proposal Start:	Fall 2022
TOP Code (CB03) :	(0707.10) Computer Programming
CIP Code:	(11.0201) Computer Programming/Programmer, General.
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000620523
Curriculum Committee Approval Date:	Pending
Board of Trustees Approval Date:	Pending
Last Cyclical Review Date:	09/01/2020
Course Description and Course Note:	CS/IS 263 is a hands-on course designed to introduce the student to the latest techniques in database-driven Web page creation. This course focuses on the methods and techniques used to generate on-the-fly Web pages from Internet databases. Students will learn to write, debug, and test Extensible Markup Language (XML) data and then create Web pages using a style sheet language. XML and the XML Style sheet language (XSL) will be used in this course.
Justification:	New Course NT FR
Academic Career:	<ul style="list-style-type: none">Credit
Mode of Delivery:	No value
Author:	No value
Course Family:	No value

Academic Senate Discipline

Primary Discipline:	<ul style="list-style-type: none">Computer Information Systems (Computer network installation, microcomputer technology, computer applications)
Alternate Discipline:	No value
Alternate Discipline:	No value

Course Development

Basic Skill Status (CB08)

Course is not a basic skills course.

Allow Students to Gain Credit by Exam/Challenge

Course Special Class Status (CB13)

Course is not a special class.

Pre-Collegiate Level (CB21)

Not applicable.

Grading Basis

- Grade with Pass / No-Pass Option

Course Support Course Status (CB26)

Course is not a support course

General Education and C-ID

General Education Status (CB25)

Not Applicable

Transferability

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	3
Maximum Credit Units (CB06)	3
Total Course In-Class (Contact) Hours	54
Total Course Out-of-Class Hours	108
Total Student Learning Hours	162

Credit / Non-Credit Options

Course Type (CB04)

Credit - Degree Applicable

Noncredit Course Category (CB22)

Credit Course.

Noncredit Special Characteristics

No Value

Course Classification Code (CB11)

Credit Course.

Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	3	6
Laboratory Hours	0	0
Studio Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	0
Course In-Class (Contact) Hours	
Lecture	54

Laboratory	0
Studio	0
Total	54

Course Out-of-Class Hours

Lecture	108
Laboratory	0
Studio	0
Total	108

Time Commitment Notes for Students

No value

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

CS/IS260 - Introduction To Web Site Development

Entry Standards

Entry Standards	Description
Be able to create a web site.	No Value

Course Limitations

Cross Listed or Equivalent Course	Description
No value	No value

Learning Outcomes and Objectives

Course Objectives

Design schema and data type definitions (DTD) for use with XML databases;

create style sheets using XSL;

create Web pages using XML and XSL;

create Web pages with RSS (Really Simple Syndication) feeds.

SLOs

Explain ways to use XML databases

Expected Outcome Performance: 70.0

CS/S Information Technology Certificate	Demonstrate installing, configuring and maintaining computer and mobile devices, including diagnosing, resolving and documenting common hardware and software.
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CS/S Information Technology - A.S. Degree Major	Demonstrate installing, configuring, and maintaining computer and mobile devices, including diagnosing, resolving, and documenting common hardware and software.
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CS/S Computer Science - A.S. Degree Major	Prepare a software project to implement a single scientific, mathematical, business, or technical function.
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CS/S Computer Science - Certificate	Prepare a software project to implement a single scientific, mathematical, business, or technical function.
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ILOs Core ILOs	Recognize an information need and develop a research question or topic; strategically explore information in context using library and other resources; investigate the authority of information sources and the credibility of claims; locate, evaluate, and use information to create new knowledge in an ethical and legal manner.
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CS/S Computer Software Technician	demonstrate the ability to independently create, save, modify and print a document using a word processing program and appropriate assistive technology
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CS/S Web Development - Certificate	use industry standard tools and techniques to produce, publish and maintain Web sites and Web content.
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CS/S Web Development - A.S. Degree Major	use industry standard tools and techniques to produce, publish and maintain Web sites and Web content.
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Explain how XML and XSL are used to create Web pages

Expected Outcome Performance: 70.0

CS/S Information Technology Certificate	Demonstrate installing, configuring and maintaining computer and mobile devices, including diagnosing, resolving and documenting common hardware and software.
CS/S Information Technology - A.S. Degree Major	Demonstrate installing, configuring, and maintaining computer and mobile devices, including diagnosing, resolving, and documenting common hardware and software.
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CS/S Web Development - Certificate	use industry standard tools and techniques to produce, publish and maintain Web sites and Web content.

Course Content

Lecture Content

Course Introduction 5 hrs

Introduction to XML 5 hrs

Validation 9 hrs

- Document Type Definitions
- XML Schemas

Processing with XML Stylesheet Language Transformations (XSLT) 5 hrs

XML Document Object Model 4 hrs

Simple API (Applied Programming Interface) for XML 4 hrs

Communication 10 hrs

- Really Simple Syndication and Content
- Syndication
- Web Services

Display 12 hrs

- XHTML (Extensible Hypertext Markup Language)
- Cascading Style Sheets (CSS)
- Scalable Vector Graphics (SVG)

Total Hours - 54