CIS 54.35 Course Outline as of Spring 2003

CATALOG INFORMATION

Dept and Nbr: CIS 54.35   Title: ACTIVE SERVER PAGES
Full Title: Active Server Pages for Web Databases
Last Reviewed: 7/15/2002

Units			Course Hours per Week		Nbr of Weeks	Course Hours Total		
Maximum	3.00		Lecture Scheduled	2.00	17.5	Lecture Scheduled		35.00
Minimum	3.00		Lab Scheduled	0	17	Lab Scheduled		0
			Contact DHR	3.50		Contact DHR		61.25
			Contact Total	5.50		Contact Total		96.25
			Non-contact DHR	0		Non-contact DHR		0

Total Out of Class Hours: 70.00   Total Student Learning Hours: 166.25

Title 5 Category: AA Degree Applicable
Grading: Grade or P/NP
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:
Formerly: CIS 84.25

Catalog Description:
An advanced course in the Microsoft technology of Active Server Pages. For students who wish to learn a state-of-the art server side scripting language and integrate the power of a relational database into a web site. This is an ideal language for building e-commerce sites. Students will create an ASP project. Visual Basic Script will be the scripting language in all programming assignments.

Prerequisites/Corequisites:
Completion of CIS 10A (formerly CIS 10, BDP 10) OR CIS 16A (formerly CIS 16, BDP 16, BDP 57) and CIS 58.51B and CIS 69.31 (formerly CIS 82.21) OR CIS 69.51.

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: An advanced course in the Microsoft technology of Active Server Pages. For students who wish to learn a state-of-the-art server side scripting language and integrate the power of a relational database into a web site. (Grade or P/NP)

Prerequisites/Corequisites: Completion of CIS 10A (formerly CIS 10, BDP 10) OR CIS 16A (formerly CIS 16, BDP 16, BDP 57) and CIS 58.51B and CIS 69.31 (formerly CIS 82.21) OR CIS 69.51.
Recommended: Eligibility for ENGL 100 or ESL 100
Limits on Enrollment:
Transfer Credit: CSU;
Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

			Effective:	Inactive:
AS Degree:	**Area**		Effective:	Inactive:
CSU GE:	**Transfer Area**		Effective:	Inactive:
IGETC:	**Transfer Area**		Effective:	Inactive:
CSU Transfer:	Transferable	Effective: Fall 2000	Inactive:	Summer 2010
UC Transfer:		Effective:	Inactive:	

CID:

Certificate/Major Applicable:
Certificate Applicable Course

COURSE CONTENT

Outcomes and Objectives:
The students will be able to:
1. Create an Active Server Pages project that includes the following items:
   a. Password protection.
   b. A connection to a back-end relational database with related tables via an Output Database Connection (ODBC).
   c. Input forms with validated fields.
   d. ASP scripts to process form data.
   e. Structured Query Language (SQL) queries using inserts, deletes, updates, selects, and multi-table join conditions.
   f. Cookie processing.
   g. Email messages sent automatically based on SQL query information.
   h. Full user-interface.
2. Analyze the site to ensure that it retains its functionality and aesthetics on multiple platforms and multiple browsers.
3. Optimize the design of the database for speed.

Topics and Scope:

1. Server side and client side scripting.
2. Input forms.
3. Processing input forms with scripts.
4. Visual Basic Script
   a. Variables, data types

    b. Assignment, comparisons
    c. Arithmetic calculations
    d. Conversion functions
    e. Naming conventions
    f. Scope
    g. Arrays
    h. Control Structures
        1) Branching
        2) Looping
        3) Conditional statements
5. Object orientation
    a. Properties
    b. Events
    c. Methods
6. ASP object model
    a. Request object
        1) QueryString collection
        2) Form collection
        3) ServerVairables collection
        4) Cookies collection
        5) ClientCertificate collection
        6) TotalBytes property
        7) BinaryRead method
    b. Response object
        1) Write method
        2) Flush method
        3) Clear method
        4) End method
        5) Redirect method
        6) Buffer property
        7) Expires property
        8) ExpiresAbsolute property
    c. Application object
        1) Contents collection
        2) StaticObjects collection
        3) Lock method
        4) Unlock method
        5) Application_OnStart event
        6) Application_OnEnd event
    d. Session object
        1) Contents collection
        2) StaticObjects collection
        3) SessionID property
        4) Timeout property
        5) CodePage property
        6) LCID property
        7) Abandon method
        8) Session_OnStart event
        9) Session_OnEnd event
7. Global ASA file
8. ASP components
    a. Server object

1) Content linker
2) Ad rotator
3) Browser capabilities
4) Database access (ADO)
b. Scripting object
1) Dictionary object
2) FileSystem object
3) TextStream object
9. Debugging in ASP
a. Personal Web Server
b. Response write commands
c. Option explicit
d. Err object
10. Databases with ASP
a. ODBC
b. Creating a Data source Name
c. Connection string/connection object
11. ADO object model
a. Recordset object
b. BOF/EOF
c. Fields collection
12. Structured Query Language (SQL)
a. SQL Insert
b. SQL Select
c. SQL Delete
d. SQL Update
e. Multi-table joins
f. Stored procedures
13. ASP Tutorial sites, news groups & forums

Assignment:

1. Create a web site which contains the following elements:
   a. Password protection via database lookup
   b. A connection to a back-end relational database with related
      table via an Open Database Connection (ODBC)
   c. Input forms with validated fields
   d. ASP scripts to process the for data
   e. Extract information from the database with Structured Query
      Language queries using inserts, selects, deletes and updates.
   f. Process cookies on client machines
   g. Email messages automatically as the result of queries
   h. Create a complete user interface
2. Research ASP resource sites and newsgroups for assistance with
   problems, and to exchange ideas
3. Present the web site to the class
4. Write a brief report analyzing the created web site
5. Take quizzes on the material

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing 0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, Lab reports

Problem solving 30 - 50%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Present web site to the class.

Skill Demonstrations 30 - 45%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion, SHORT ANSWER

Exams 20 - 40%

Other: Includes any assessment tools that do not logically fit into the above categories.

None

Other Category 0 - 0%

Representative Textbooks and Materials:
"Beginning Active Server Pages 3.0," by Francis, Kauffman, Llibre, Sussman and Ullman - Wrox Press Ltd. 1999