CIST 2550 - Web Development II (version 201003L)

☑ Standard ☐ Institutionally Developed College: N/A

EDGE Compatible: No

Pre-requisites: All Required

CIST 1220 - Structured Query Language (SQL) (201003L)
CIST 1510 - Web Development I (201003L)
CIST 1520 - Scripting Technologies (201003L)

Co-requisites: None

Course Description

Web Development II teaches students how to manipulate data in a database using the Open Database Connectivity (ODBC) model. Students will learn to retrieve, update, and display database information with a web application. Database access may be accomplished using a web programming language (such as PHP, Microsoft VB, Microsoft C#, or Sun Java). Topics include manipulating data in a database, working with a relational database via Open Database Connectivity (ODBC), working with different database systems, developing forms and applications to interact with a database server(s), modifying data in a database, and controls and validation.

Course Length

	Minutes	Contact Hour	Semester Credit
Lecture:	1500	30	
Lab 2:	1500	30	
Lab 3:	0	0	
Practicum/Internship:	0	0	
Clinical:	0	0	
Total:	3000	60	3

Semester Credit Hours: 3

Competencies

Order	Description	Lecture	Lab2	Lab3	Practicum/Internship	Clinical	Total Minutes	Semester Credit Hrs
1	Construct a Database	200	200	0	0	0	400	

2	Implement a Relational Database Via Open Database Connectivity (ODBC)	300	300	0	0	0	600	
3	Develop Forms and Applications to Interact with File Systems, Email, and Database Servers	400	400	0	0	0	800	
4	Modify Data in a Database	300	300	0	0	0	600	
5	Design Controls and Validation	300	300	0	0	0	600	
	Totals for Course CIST 2550 - Web Development II (version 201003L):	**1500**	**1500**	**0**	**0**	**0**	**3000**	**3**

Learning Outcomes

Construct a Database

Order	Description	Learning Domain	Level of Learning
1	Discuss benefits of database interaction.	Cognitive	Comprehension
2	Assess data from and existing database.	Cognitive	Application
3	Create data entry boxes.	Cognitive	Synthesis
4	Utilize proper syntax to build queries.	Cognitive	Application
5	Demonstrate deletion of existing records from a database.	Cognitive	Application

Implement a Relational Database Via Open Database Connectivity (ODBC)

Order	Description	Learning Domain	Level of Learning
1	Compare and contrast primary keys and foreign keys.	Cognitive	Comprehension
2	Utilize Structured Query Language (SQL).	Psychomotor	Guided Response
3	Utilize active data objects.	Psychomotor	Guided Response
4	Demonstrate publishing data.	Psychomotor	Guided Response
5	Utilize external data sources.	Psychomotor	Guided Response
6	Develop a website that will connect to a database.	Psychomotor	Guided Response
7	Use the database connectivity wizard.	Psychomotor	Guided Response
8	Create a ODBC data source name.	Cognitive	Application

Develop Forms and Applications to Interact with File Systems, Email, and Database Servers

Order	Description	Learning Domain	Level of Learning
1	Create , manipulate, and pass variables.	Cognitive	Synthesis
2	Demonstrate an understanding of and how to use function and arrays.	Psychomotor	Mechanism

3	Demonstrate an understanding of and how to use Microsoft Internet Information Server (IIS) and Internet.	Psychomotor	Mechanism
4	Demonstrate an understanding of and how to use Scripting Languages and Engines.	Psychomotor	Mechanism
5	Develop select queries and display the result.	Psychomotor	Mechanism

Modify Data in a Database

Order	Description	Learning Domain	Level of Learning
1	Develop objects to add, insert, update, and delete data.	Cognitive	Application

Design Controls and Validation

Order	Description	Learning Domain	Level of Learning
1	Design web forms using form validation controls.	Psychomotor	Guided Response
2	Design web forms that will maintain database integrity.	Psychomotor	Guided Response

References

Order	Reference Type	Description
1	Book with Author(s) Listed	Meyer, Jeanine and River,Charles. (2003). Creating DataBases Web Applications with PHP and ASP. (1st). Independenc, KY: Cengage. www.cengage.com
2	Book with Author(s) Listed	Davis, Michele and Phillips, Jon. (2007). Learning PHP and MySQL: Step-by-Step Guide for Creating Database Driven Web Sites. (2nd). Sebastopol: O'Reilly Media. www.oreilly.com
3	Book with Author(s) Listed	Gosselin, Ben. (2006). PHP Programming with MySQL. (1st). Boston: Cengage. www.cengage.com
4	Book with Author(s) Listed	Leasure, Bob and Leasure, James. (2004). The Web Warrior Guide to Web Database Technologies. (1st). Boston: Cengage. www.cengage.com
5	Book with Author(s) Listed	Forta, Ben and Camden, Raymond with Archart, Charlie. (2007). ColdFusion8 Web Application Construction Kit Volume1: Getting Started. (1st). Berkeley,CA: Peachpit. www.peachpit.com

| 6 | Book with Author(s) Listed | Bardzell, Jeffrey and Flynn, Bob. (2007). Adobe Dreamweaver CS3 with ASP, Coldfusion, and PHP . (1st). Berkeley, CA: Peachpit. www.peachpit.com |