

CIST 2550 - Web Development II (version 201003L)

Course Title	Course Development	Learning Support
Web Development II	Standard	No

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.

Pre-requisites

Pre-requisites: All Required

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

Co-requisites

Co-requisites: None

Course Length

	Minutes	Contact Hour	Semester Credit	WLU
Lecture:	1500	30		
Lab 2:	1500	30		
Lab 3:	0	0		
Total:	3000	60	3	
Semester Credit Hours:			3	105
Breakout Detail of Lab 3				
Practicum/Internship	0	0		
Clinical	0	0		

Competencies & Outcomes

Order	Description	Lecture	Lab 2	Lab 3	Total Min	Credit Hrs	Pract Intern	Clinical
1	Construct a Database	200	200	0	400	0	0	0
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	

2 **Implement a Relational Database Via Open Database Connectivity (ODBC)** 300 300 0 600 1 0 0

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

3 **Develop Forms and Applications to Interact with File Systems, Email, and Database Servers** 400 400 0 800 1 0 0

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

4 **Modify Data in a Database** 300 300 0 600 1 0 0

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

5 **Design Controls and Validation** 300 300 0 600 1 0 0

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

	Lecture	Lab 2	Lab 3	Total Min	Cred Hrs	Pract Intern	Clinical
Competency Totals:	1500	1500	0	3000	3	0	0