

BDPA Web Programming Course
for the SITES High School Computer Competition (HSCC)
Instructor: Mr. Michael Work, RSIS, 937.681.5113

Prerequisite(s): None **Lab Hours:** Saturdays, 0900 – 1400 (scheduled attached) **Cost:** \$50
Location: Sinclair Community College (Building 5, RM 041)

A. Course Description

This program provides an excellent environment where students have an opportunity to compete on an academic level; utilize their technical skills; and display their creative talents. The student must be able to design, code, document, test, and present a finished project to a team of judges. **Out-of-class Lab Work is required! No Exceptions!**

B. Related Course Outcomes:

- Design and program a computer solution using procedural and non-procedural methods given detailed specifications of a problem.
- Apply program development techniques that demonstrate a process for decision making and problem solving.
- Exhibit professional behavior and work habits. **I.E.** Submitting homework/projects on time; Attendance; Notifying instructors of absence; and Appearance (clothing, etc.); and Team Work
- Exhibit oral and written communication skills.

C. Course Objectives:

After completing this course, the student will be able to:

- * Discuss programming as a problem-solving process and describe and document the steps in the development of a program to solve a stated problem.
- * Define and describe file, record, and field structures as they apply to the support of business applications.
- * Design, code and test, with specifications and guidance from the instructor, programs which include input and output, data validation, etc.
- * Write computer programs using the ASP programming language.

D. Course Outline:

- **HTML** – everything about forms and tables and other basics such as lists, paragraphs, etc.
- **SQL** – create/drop tables; insert/delete/update data; perform joins
- **ASP** – establish a connection to a data source; formulate/execute SQL queries; deal with result sets; dynamically build HTML documents based on result set; inter-ASP communication (i.e. pages sharing information between them); display information back to the browser
- **Application Design** – GUI (user friendly), web, and reports
- **Database Architecture** – primary/foreign keys and database relationships
- **VB script** – error checking and mathematical computations

Class Date	Subject Matter	Required Reading	Instructor
20 January 2007	Kickoff/Registration 10 AM – Noon		All Instructors/ Chapter President
27 January 2007	Intro to Computer Science (0900 – 1400)	None	Mrs. Meeks-Harshaw
3 February 2007	Basic HTML		Mr. Work/Mrs. Meeks-Harshaw
10 February 2007	Basic HTML		Mr. Work/Mrs. Meeks-Harshaw
17 February 2007	Intermediate HTML (forms)		Mr. Work/Mrs. Meeks-Harshaw
24 February 2007	Intermediate HTML (tables)		Mr. Work/ Mrs. Meeks-Harshaw
3 March 2007	SQL Intro/Select		Mr. Work/Mrs. Meeks-Harshaw
10 March 2007	Select/Insert		Mr. Work/Mrs. Meeks-Harshaw
17 March 2007	Update/Delete		Mr. Work/Mrs. Meeks-Harshaw
24 March 2007	Setting up mysql db		Mr. Work
31 March 2007	Introduction to ASP		Mr. Work/Mrs. Meeks-Harshaw
7 April 2007	Intro to asp II		Mr. Work/Mrs. Meeks-Harshaw
14 April 2007	Using ASP to connect to/query a database		Mr. Work/ Mrs. Meeks-Harshaw
21 April 2007	Using asp to query a database		Mr. Work/ Mrs. Meeks-Harshaw
28 April 2007	VB Script		Mr. Work/Mrs. Meeks-Harshaw
5 May 2007	Review HTML		Mr. Work/ Mrs. Meeks-Harshaw
12 May 2007	Review ASP		Mr. Work/ Mrs. Meeks-Harshaw
19 May 2007	Data Organization		Mr. Work/ Mrs. Meeks-Harshaw
2 June 2007	Midwest Regional		Mr. Work/Mrs. Meeks-Harshaw
9 June 2007	Review Regionals/Answer Questions	Starting on this date, only the Top Students will attend	Mr. Work/ Mrs. Meeks-Harshaw
16 June 2007	Advanced HTML		Mr. Work/ Mrs. Meeks-Harshaw
23 June 2007	Intermediate SQL		Mr. Work/ Mrs. Meeks-Harshaw
30 July 2007	Review		Mr. Work/ Mrs. Meeks-Harshaw
14 July 2007	3 Hour problem – Presentation/Review		Mr. Work/ Mrs. Meeks-Harshaw
21 July 2007	3 Hour problem – Presentation/Review		Mr. Work/ Mrs. Meeks-Harshaw
28 July 2007	Review		Mr. Work/Mrs. Meeks-Harshaw
4 August 2007	Review		Mr. Work/Mrs. Meeks-Harshaw
11 August 2007	Final Saturday		Mr. Work/Mrs. Meeks-Harshaw

