THE COLLEGE OF THE BAHAMAS
Course Outline

Title: Web Application Programming
Abbreviation and Number: CISB400 AB Paper No.: 13-134
School: Business
Department: Computer Information Systems
Credits: 3
Course Sequence: ( ) Fall ( X ) Spring ( ) Fall and Spring
Hours Per Week: ( 3 ) Lecture ( ) Seminar ( ) Laboratory ( ) Studio ( ) Kitchen
( ) Other (Specify)
Pre-requisite(s): CISB310 or CIS308
Co-requisite(s): None

COURSE DESCRIPTION
Students create web applications in an Active Server Pages.NET (ASP.NET) environment where data integration with web application technologies are studied in depth.

SPECIFIC OBJECTIVES
Upon successful completion of this course, students will be able to
1) apply the principles of web programming in general and the client-server data exchange process;
2) develop Active Server Pages eXtended (ASPX) files and the reasons and methods of script insertion with Extensible Hyper-Text Markup Language (XHTML) and Extensible Markup Language (XML);
3) design and implement web page-database integration;
4) implement session and application variables to maintain a “state” in web programming; and
5) manage deployment and web application maintenance.

COURSE CONTENT
I. ASP Technology
   A. Evolution of web technologies and web servers
   B. Client/server interaction
   C. Web server-client data exchange

II. XHTML and XML
   A. Fundamentals of ASP.NET server programming
   B. Dynamic webpage creation

III. Website Design
   A. Requirements
   B. Navigation tools
   C. Master page
   D. Content page

IV. Server Controls
   A. Rotator and basic
      i. List boxes
      ii. Text input
   B. Form
      i. Processing by the server
      ii. Validation by the client
V. Advanced Web Controls
   A. Interactive calendar
   B. Treeview
   C. Reports

VI. States And Sessions
   A. Manage state between pages
   B. Implement
      i. Cookies
      ii. Sessions

VII. Database Connectivity
   A. Data access components
   B. The ADO.NET Model
   C. Retrieve data using the .NET Framework

VIII. Binding Data To Web Controls
   A. GridView
   B. Others
   C. Dynamic table generation from database

IX. Managing Data from the Web
   A. Methods used to bind data to web controls manually and automatically
   B. Call stored procedures from web pages
   C. Filter datasets of retrieved data from server

ASSESSMENT
Tests............................................... 30%
Projects.......................................... 20%
Assignments...................................... 20%
Final Examination................................ 30%
Total............................................. 100%

REQUIRED TEXT

SUPPLEMENTARY READINGS/MATERIALS


**JOURNALS**

*Journal of the American Society for information Science and Technology*

*TechMetrix Research*

**WEBSITES**

http://www.Asp.net (ASP net)

http://www.perlprogramming.co.uk/ (Perl Programming)

http://www.webreference.com/programming/java/news.html (Webreference)

http://webdevelopersjournal.com/ (Web Developers Journal)