



UNIVERSITY OF NICOSIA ΠΑΝΕΠΙΣΤΗΜΙΟ ΛΕΥΚΩΣΙΑΣ

University of Nicosia, Cyprus

Course Code MIS-256	Course Title WEB BASED APPLICATION DEVELOPMENT	ECTS Credits 6
Department Management and MIS	Semester Fall, Spring	Prerequisites COMP-152 or COMP-153
Type of Course Elective	Field MIS	Language of Instruction English
Level of Course 1 st Cycle	Year of Study 4th	Lecturer(s) Dr. Dimosthenis Georgiadis
Mode of Delivery face-to-face	Work Placement N/A	Co-requisites None

Objectives of the Course:

The main objectives of the course are to:

- introduce a concept of WWW, WEB servers and clients, development environment and WEB development tools
- introduce Microsoft .Net and ASP.Net as a web application development platform
- define WEB based data driven applications
- introduce ADO.NET and integration of ASP.NET application with the database
- introduce ASP.NET State Management
- introduce eXtensible Markup Language (XML)
- introduce Cascaded Style Sheets (CSS)
- introduce eXtensible Stylesheet Language (XSL)
- define WEB application server, introduce SOA (Service oriented architecture) and its components (UDDI, WSDL and SOAP).
- introduce web services and web service development using ASP.NET
- introduce XML Databases and XQuery
- define WWW security threats, introduce SSL and SSL certificates, configuration of WEB server for secure communication
- obtain knowledge and practical experience in design and configuration of WEB development, testing and production environments
- obtain knowledge and practical experience of ASP.NET programming
- obtain knowledge and practical experience of database (ADO.NET) programming

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Applying the concepts and principles of WWW
2. Construct and maintain a well designed web site
3. Configure and manage Internet Information Services (IIS) for production, testing and development.
4. Develop data-driven web based applications using a formal design method.

5. Use the state-of-the-art web application development tools and programming languages including HTML, ASP.NET, XML and XSL

Course Contents:

1. Introduction to the WWW. WEB servers and clients (browsers). FPE. WEBDAV. Configuring WEB site for development
2. Introducing Microsoft .Net. .Net vs J2EE. ASP.NET
3. ASP.NET Data Access. ADO.NET
4. ASP.NET State Management
5. XML Introduction.
6. Cascaded Style Sheets.
7. eXtensible Stylesheet Language (XSL)
8. WEB application server. Web services. SOAP. WSDL. Developing web services with ASP.NET
9. XML Databases and XQuery
10. WEB security. SSL. Configuring WEB site for secure communication. SSL certificate. Payment systems and shopping carts.
11. Designing for Scalability

Learning Activities and Teaching Methods:

Lectures, lab presentations, lab tutorials, practical exercises, assignments

Assessment Methods:

Attendance and Participation, Tests/Quizzes/Projects, Mid-Term, Final Exam

Required Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Anne Boehm	Murach's ASP.NET 3.5 Web Programming	Mike Murach & Associates, Inc.	2008	978-1-890774-9

Recommended Textbooks/Reading:

Authors	Title	Publisher	Year	ISBN
Stephen Walther	ASP.NET 3.5 Unleashed	Sams	2008	0672330113