

INET 2005: WEB APPLICATION PROGRAMMING I

History

1. Nov 24, 2021 by Amy Blagden (amy.blagden)
2. Dec 17, 2021 by Amy Blagden (amy.blagden)
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4. Aug 9, 2022 by Natalie Wentzell (natalie.wentzell)

Viewing: INET 2005 : Web Application Programming I

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Change Type

Minor

Effective Term

Fall 2022 (Term 1228)

Subject Area

INET - Internet

Catalog Nbr

2005

Course ID

008374

Academic Organization

ITDATANALT - IT and Data Analytics

Academic Group

TEEN - School of Technology and Environment

Curriculum Consultant

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Other Course Development Team Members

Career

Credit

Title (Short)

Web Application Programming I

Title (Long)

Web Application Programming I

Course Description

This course focuses on the planning, design and development of dynamic (data-aware) web pages using server-side scripting and database connectivity.

Credits

1.5

Hours

90

Grading Basis

60% (GRD)

Pre-Requisite(s)

DBAS 1100 or DBAS 1007, PROG 1400, WEBD 1000

Instruction Mode / Course Delivery Method

In person

Attendance Type

Class Meeting

Components

Components	Final Exam	Primary
Independent Study (IND)	No	No
Discussion (DIS)	No	No
Computer Lab (CMP)	Yes	Yes

Course Attributes

Attribute

Category for ConEd course (CAT1)

Primary Cat for ConEd/Mari crs (CAT0)

Value

Creative Industries (APPA&NW)

Computer (COMPUTER)

Post-Secondary Student Information System (PSIS) Course Data Requirements (Used by Institutional Research)

Delivered Under Contract

No

Retraining/Skills Upgrade

No

Brokered Course

No

Cost Recovery

No

Course Rationale

Dynamically interacting with users is essential to personalize the user's experience on a web site. To create this interactivity, a familiarity with web scripting languages and database scripting fundamentals is essential for learners that seek work in this field. The purpose of this course is to provide learners with the programming and database skills necessary to implement server-side programming that stores, retrieves and processes user data.

Course Outcomes and Objectives

In keeping with NSCC's approach to portfolio learning, learners will have demonstrated the ability to:

Outcome

1. Analyze a client request for a web application and design and develop a programming solution.

Objectives

1. Document and present information using effective communication skills and tools (modelling, dictionaries, manuals, client presentations).
2. Apply sound programming practices in the development of robust, flexible and maintainable web applications.

In keeping with NSCC's approach to portfolio learning, learners will have demonstrated the ability to:

Outcome

2. Implement client side programming for form validation in order to maintain data integrity and site usability.

In keeping with NSCC's approach to portfolio learning, learners will have demonstrated the ability to:

Outcome

3. Develop user friendly data-aware web applications using a server-side scripting technology.

Objectives

1. Build graphical user interfaces that supports programming requirements.
2. Develop web forms including a variety of controls.
3. Implement Model View Controller (MVC) design pattern into a web app solution.

In keeping with NSCC's approach to portfolio learning, learners will have demonstrated the ability to:

Outcome

4. Manipulate and retrieve remote data using server-side scripting.

Objectives

1. Execute basic SQL queries (CREATE, ALTER, DROP, INSERT, DELETE, UPDATE, SELECT) to maintain data in a relational database.

In keeping with NSCC's approach to portfolio learning, learners will have demonstrated the ability to:

Outcome

5. Test and debug software using standard troubleshooting techniques.

Objectives

1. Incorporate embedded error trapping.

Learning Outcomes Display (show only)

109: IT Programming (<https://www.nsc.ca/programadmin/?key=109>)

PLO 1: Use problem-solving techniques and systematic procedures to implement IT programming solutions.

PLO 2: Produce software to meet a technical specification.

PLO 3: Produce technical documentation to meet the steps of a software development process (requirements, design, implementation, testing).

PLO 4: Work within a programming development process such as Waterfall or Agile development.

PLO 5: Work within development platforms such as mobile, windows, and Web.

PLO 6: Work with programming languages such as Java, C++, Python, C#, PHP, JavaScript, and others.

PLO 7: Combine software programming with SQL databases, non-SQL databases, or object-oriented databases to create software solutions.

PLO 8: Create software in specific application areas making use of the appropriate Software Development Kits (SDKs) and software libraries.

PLO 9: Employ a version control tool (such as git) to manage software configurations.

PLO 10: Solve business problems by developing new software or extending off-the-shelf applications, within a software development process such as Waterfall or Agile

111: IT Web Programming (<https://www.nsc.ca/programadmin/?key=111>)

PLO 3: Develop secure data-centric web applications using Integrated Development Environments (IDEs) and frameworks.

PLO 4: Create functional, engaging user interfaces for various user experiences.

PLO 5: Deploy, test, and maintain software applications on the web using various tools and techniques.

Other Course Notes:

It is the responsibility of the student to review and understand all Nova Scotia Community College policies, most specifically the Student Community Standards, Academic Integrity, Student Appeals, Use of Copyright Materials, and Academic Accommodation policies. Policies directly applicable to students are referenced in the student handbook. The policies and procedures can be found on the College website: <https://nsc.ca/policies> (<https://nsc.ca/policies/>)

If you have questions about policies and/or procedures, you are encouraged to ask Faculty, your Academic Chair or Staff at Student Services.

Workplan

A workplan for this course is attached and will be reviewed by your faculty member(s) within the first week of class study.

Key: 2977