



# COURSE OUTLINE

2014/2015

COURSE NAME: Software Development Tools

COURSE CODE: BAIS3150

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## COURSE DESCRIPTION

This course will examine technical topics that will provide the student with a main toolset for constructing Internet based systems and services. The focus of this course is the implementation of computerized design solutions concentrating on Object-Oriented Programming (OOP) and Internet techniques. The primary deliverables for this course will be weekly/biweekly activities that address specific development topics discussed in the class room.

Co-requisite: BAIS3130

Course Credits: 6

Co-requisites: BAIS3130

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## LEARNING OUTCOMES

OUTCOME	Upon successful completion of this course, you will be able to
1	<p>perform database design.</p> <p>The following concepts, skills, and issues are used to support this Outcome:</p> <ul style="list-style-type: none"><li>▪ Data and database management system (DBMS)</li><li>▪ Data design process</li><li>▪ Data model</li><li>▪ Data dictionary</li></ul>
2	<p>implement a database design.</p> <p>The following concepts, skills, and issues are used to support this Outcome:</p> <ul style="list-style-type: none"><li>▪ Data model</li><li>▪ Data dictionary</li><li>▪ DBMS - SQL Server</li></ul>
3	<p>develop Internet-based software applications.</p> <p>The following concepts, skills, and issues are used to support this Outcome:</p> <ul style="list-style-type: none"><li>▪ Web development - ASP .NET</li><li>▪ Data connectivity - ADO .NET</li></ul>

4	<p>implement software designs.</p> <p>The following concepts, skills, and issues are used to support this Outcome:</p> <ul style="list-style-type: none"> <li>• Object-oriented design</li> <li>• Object-oriented programming</li> <li>• Development platform/framework - .NET Framework</li> </ul>
5	<p>integrate software technologies into a solution.</p> <p>The following concepts, skills, and issues are used to support this Outcome:</p> <ul style="list-style-type: none"> <li>• Web client</li> <li>• Web server</li> <li>• Application server</li> <li>• Data server</li> <li>• Deployment</li> <li>• Installation</li> </ul>
6	<p>demonstrate specific software technologies as components of an overall solution.</p> <p>The following concepts, skills, and issues are used to support this Outcome:</p> <ul style="list-style-type: none"> <li>• SQL Server</li> <li>• ADO .NET</li> <li>• ASP .NET</li> <li>• Extensible markup language (XML)</li> <li>• Services</li> </ul>

## STUDENT EVALUATION

OUTCOME	ACTIVITY DESCRIPTION	MARK DISTRIBUTION
1	Data Design Assignment	10%
2	Data Design Implementation Assignment	10%
3	Web Site Project	30%
4	Software Design Implementation Assignment 1	15%
4	Software Design Implementation Assignment 2	15%
5	Integration/Installation Assignment	10%
6	Demonstrations	10%
TOTAL		100%

## COMPLETION REQUIREMENTS

Standard C- or no less than 60%.

## OPTIONAL LEARNING RESOURCES

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Bill Evjen, Scott Hanselman, Devin Rader. (2010). Professional ASP. NET 4 in C# and VB. (First). Hoboken : John Wiley & Sons, Inc., 2010. ISBN: 0470502207.

Joseph Sack. (2008). SQL Server 2008 Transact-SQL Recipes. (First). Apress. ISBN: 1590599802.

## STUDENT EQUIPMENT AND SUPPLIES

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No additional supplies are required.

## DELIVERY METHOD

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This course will be taught using a variety of delivery methods which may include face-to-face, online, or blended teaching platforms. Activities such as collaborative exercises/assignments, seminars, labs, discussion, audio/visual presentations, case studies, and practicums may be used to support learning.

## STUDENT RESPONSIBILITY

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Enrolment at NAIT assumes that the student will become a responsible citizen of the Institute. As such, each student will display a positive work ethic, assist in the preservation of Institute property, and assume responsibility for his/her education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

## EQUITY STATEMENT

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NAIT is committed to providing an environment of equality and respect for all people within the learning community, and to educating faculty, staff, and students in developing inclusive teaching and learning contexts that are welcoming to all.

Leadership Review Date: December 18, 2013

Curriculum Committee Review Date: February 18, 2013

Changes to This Course Outline: Every effort has been made to ensure that information in this course outline is accurate at the time of publication. The Institute reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.

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