

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE:	Advanced Web Applications		
CODE NO. :	CSD223	SEMESTER:	Four
PROGRAM:	Computer Programmer/Analyst		
AUTHOR:	Willem deBruyne		
DATE:	January, 2015	PREVIOUS OUTLINE DATED:	New (NA)
APPROVED:	"Colin Kirkwood"		Jan/15
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TOTAL CREDITS:	4		
PREREQUISITE(S):	CSD212		
HOURS/WEEK:	16 WKS	Total Credit Hours: 80	

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For additional information, please contact Colin Kirkwood, Dean,
School of Environment, Technology and Business

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I. COURSE DESCRIPTION:

1. The Advanced Web Applications courses uses the content taught in previous courses that delivered the XHTML, as well as the introduction to JavaScript course as a foundation to the every expanding web application technology that fuels everything from personal computing, to corporate applications required to meet the world business needs. This course will focus on two popular areas of web application development: Advanced JavaScript, and JQuery. Students will be collaborating in small groups, as well as polish their presentation skills.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

1. Review Validating Form Data with JavaScript

Potential Elements of the Performance:

- Study form elements and objects
- Use JavaScript to manipulate and validate form elements
- Learn how to submit and reset forms
- Learn how to validate submitted form data

2. Using Object Oriented JavaScript

Potential Elements of the Performance:

- Study object-oriented programming
- Learn about the built-in JavaScript objects
- Work with the Date, Number, and Math objects
- Define custom JavaScript objects

3. Managing State and Information Security

Potential Elements of the Performance:

- Learn about state information
- Save state information with hidden form fields, query strings, and cookies
- Learn about security issues

4. Introduction to the Document Object Model (DOM)

Potential Elements of the Performance:

- Learn about dynamic Web pages
- Study the Document Object Model (DOM)
- Work with the Image object
- Create animation with the Image object
- Learn how to cache images

5. Creating Dynamic HTML (DHTML)

Potential Elements of the Performance:

- Use JavaScript to modify CSS styles
- Work with CSS positioning
- Create DHTML menus

6. Using JQuery

Potential Elements of the Performance:

- Select elements using jQuery syntax
- Use built-in jQuery functions

III. TOPICS:

- Review Validating Form Data with JavaScript
- Object Oriented JavaScript
- Cookies and Security
- Introduction to the Document Object Model (DOM)
- Creating Dynamic HTML (DHTML)
- JQuery

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

JavaScript: The Web Technologies Series 5th Edition
 Don Gosselin
 ISBN10: 0-538-74887-7, ISBN13: 978-0-538-74887-2

Students interested in the eBook, please go to:

<http://www.nelsonbrain.com/shop/isbn/9780538748872>

jQuery course material will be handed out to the students.

V. EVALUATION PROCESS/GRADING SYSTEM:

Quizzes	60%
Assignments & Presentations	<u>40%</u>
	100%

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course	

without academic penalty.

VI. OTHER EVALUATION CONSIDERATIONS

1. In order to pass this course the student must obtain an overall test/quiz average of **50%** or better, as well as, an overall assignment average of **50%** or better. A student who is not present to write a particular test/quiz, and does not notify the professor beforehand of their intended absence, may be subject to a zero grade on that test/quiz.
2. There will be **no** supplemental or make-up quizzes/tests in this course unless there are extenuating circumstances.
3. Assignments must be submitted by the due date according to the specifications of the professor. Late assignments will normally be given a mark of zero. Late assignments will only be marked at the discretion of the professor in cases where there were extenuating circumstances.
4. Any assignment/projects submissions, deemed to be copied, will result in a **zero** grade being assigned to **all** students involved in that particular incident.
5. It is the responsibility of the student to ask the professor to clarify any assignment requirements.
6. The professor reserves the right to modify the assessment process, and course content to meet any changing needs of the class.

VII. SPECIAL NOTES:

Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session. *It is the departmental policy that once the classroom door has been closed, the learning process has begun. Late arrivers may not be granted admission to the room.*

Absences due to medical or other unavoidable circumstances should be discussed with the professor, otherwise a penalty may be assessed. The penalty depends on course hours and will be applied as follows:

Course Hours	Deduction
5 hrs/week (75 hrs)	1.0% /hr
4 hrs/week (60 hrs)	1.5% /hr
3 hrs/week (45 hrs)	2.0% /hr
2 hrs/week (30 hrs)	3.0% /hr

Final penalties will be reviewed and assessed at the discretion of the professor.

VIII. COURSE OUTLINE ADDENDUM:

This document (**CourseOutlineAddendum.docx**) can be found along with the course outline on ***Desire2Learn (D2L)***.