| SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY |  |
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| SAULT STE. MARIE, ONTARIO |  |
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|  | SAULT COLLEGE |
| CICE COURSE OUTLINE |  |
| COURSE TITLE: | Advanced Web Application |
| CODE NO. : | CSD223 SEMESTER: Winter |
| MODIFIED CODE: | CSD0223 |
| PROGRAM: | Computer Programmer/Analyst |
| AUTHOR: | Fred Carella (Willem deBruyne) |
| MODIFIED BY: | Anthea Fazi, Learning Specialist CICE Program |
| DATE: | Jan 2017 PREVIOUS OUTLINE DATED: 2016 |
| APPROVED: | "Martha Irwin" Jan 2017 |
|  | CHAIR DATE |
| TOTAL CREDITS: | Four |
| PREREQUISITE(S): | CSD0212 |
| HOURS/WEEK: | Four |
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## I. COURSE DESCRIPTION:

The CICE student, with assistance from a learning specialist, will work on Advanced Web Applications courses which 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:

Upon successful completion of this course, the CICE student, with the help of a Learning Specialist, will demonstrate the basic ability to

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:

1. Review Validating Form Data with JavaScript
2. Object Oriented JavaScript
3. Cookies and Security
4. Introduction to the Document Object Model (DOM)
5. Creating Dynamic HTML (DHTML)
6. 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
V. EVALUATION PROCESS/GRADING SYSTEM:

Quizzes 60\%
Assignments \& Presentations 40\%
All tests and assignments will be completed with the assistance of the Learning Specialist. Any modifications to the tests and assignments will be proposed by the Learning Specialist and are subject to approval from the professor

The following semester grades will be assigned to students:

Grade
Definition Grade Point Equivalent
A+ $90-100 \% \quad 4.00$
A $80-89 \%$
B $\quad 70-79 \% \quad 3.00$
C $\quad 60-69 \% \quad 2.00$
D $50-59 \% \quad 1.00$
F (Fail) 49\% and below 0.00
CR (Credit) Credit for diploma requirements has been awarded.
S Satisfactory achievement in field/clinical placement or nongraded subject area.

U Unsatisfactory achievement in field/clinical placement or nongraded 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.

If a faculty member determines that a student is at risk of not being successful in their academic pursuits and has exhausted all strategies available to faculty, student contact information may be confidentially provided to Student Services in an effort to offer even more assistance with options for success. Any student wishing to restrict the sharing of such information should make their wishes known to the coordinator or faculty member.

## VI. 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.


#### Abstract

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 ) $\quad 1.0 \% / \mathrm{hr}$ 4 hrs/week (60 hrs) 1.5\% /hr 3 hrs/week (45 hrs) 2.0\% /hr $2 \mathrm{hrs} /$ week ( 30 hrs ) $\quad 3.0 \% / \mathrm{hr}$


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

Addendum:
Further modifications may be required as needed as the semester progresses based on individual student(s) abilities and agreed upon by the instructor.

## VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located in D2L and on the portal form part of this course outline.

## CICE Modifications:

## Preparation and Participation

1. A Learning Specialist will attend class with the student(s) to assist with inclusion in the class and to take notes.
2. Students will receive support in and outside of the classroom (i.e. tutoring, assistance with homework and assignments, preparation for exams, tests and quizzes.)
3. Study notes will be geared to test content and style which will match with modified learning outcomes.
4. Although the Learning Specialist may not attend all classes with the student(s), support will always be available. When the Learning Specialist does attend classes he/she will remain as inconspicuous as possible.

## A. Tests may be modified in the following ways:

1. Tests, which require essay answers, may be modified to short answers.
2. Short answer questions may be changed to multiple choice or the question may be simplified so the answer will reflect a basic understanding.
3. Tests, which use fill in the blank format, may be modified to include a few choices for each question, or a list of choices for all questions. This will allow the student to match or use visual clues.
4. Tests in the T/F or multiple choice format may be modified by rewording or clarifying statements into layman's or simplified terms. Multiple choice questions may have a reduced number of choices.

## B. Tests will be written in CICE office with assistance from a Learning Specialist.

## The Learning Specialist may:

1. Read the test question to the student.
2. Paraphrase the test question without revealing any key words or definitions.
3. Transcribe the student's verbal answer.
4. Test length may be reduced and time allowed to complete test may be increased.
C. Assignments may be modified in the following ways:
5. Assignments may be modified by reducing the amount of information required while maintaining general concepts.
6. Some assignments may be eliminated depending on the number of assignments required in the particular course.

## The Learning Specialist may:

1. Use a question/answer format instead of essay/research format
2. Propose a reduction in the number of references required for an assignment
3. Assist with groups to ensure that student comprehends his/her role within the group
4. Require an extension on due dates due to the fact that some students may require additional time to process information
5. Formally summarize articles and assigned readings to isolate main points for the student
6. Use questioning techniques and paraphrasing to assist in student comprehension of an assignment

## D. Evaluation:

Is reflective of modified learning outcomes.

