

**SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY**

**SAULT STE. MARIE, ONTARIO**



Sault College

**COURSE OUTLINE**

**COURSE TITLE:** Enterprise Web Applications  
**CODE NO. :** CSD308 **SEMESTER:** 6  
**PROGRAM:** Computer Studies  
**AUTHOR:** Fred Carella  
**DATE:** Jan 2005 **PREVIOUS OUTLINE DATED:** Jan 2004  
**APPROVED:**  

	_____	_____
	<b>DEAN</b>	<b>DATE</b>

  
**TOTAL CREDITS:** 5  
**PREREQUISITE(S):** CSD313  
**HOURS/WEEK:** 4

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*For additional information, please contact C. Kirkwood, Dean*  
*School of Technology, Skilled Trades & Natural Resources*  
*(705) 759-2554, Ext.688*

## I. COURSE DESCRIPTION:

This course continues the studies begun in CSD313 (Java II), with a heavy emphasis on Enterprise Level applications that utilize servlets, java server pages and java beans. The student write introductory level web applications and be able to discuss enterprise level technologies and the issues surrounding their development and deployment.

## II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Write Java Applications demonstrating Java Servlets and java Server Pages

### Potential Elements of the Performance:

- execute servlets within the Apache Tomcat Server Environment available in Netbeans.
- Write code that responds to http requests.
- Write code that implements session data.
- Write code that accesses a database from a servlet.
- Create and deploy Java Server Pages.
- Create dynamic web pages.
- Manipulate javabeans in a jsp.

2. Writing Java Applications demonstrating Java Beans

### Potential Elements of the Performance:

- understand how Java Beans enable the creation of component oriented software.
- Study a Java Bean
- create a Java Bean

3. Modify a Java Application demonstrating Java in the Enterprise

### Potential Elements of the Performance:

- understand the role of Java services in an Enterprise application by studying the Enterprise Java Case Study.
- Understand the following
  - MVC in an Enterprise Java applications
  - how XML and XSLT can generate content for various client types.
  - Multi tier applications
  - The role of presentation logic in a multi tier app.
  - The use of servlets in the middle tier
  - EJB's in an enterprise app.

- Deploying enterprise apps.
4. Understand and discuss security issues and write programs demonstrating that understanding.

Potential Elements of the Performance:

- understand the basic concepts of security
- understand public/private key infrastructure.
- Understand digital signatures, digital certificates and certification authorities
- learn how java provides solutions to security problems.
- Understand declarative and programmatic security.
- Write a program implementing programmatic security

### **III. TOPICS:**

1. Java servlets and Java Server Pages
2. Java Beans
3. Elements of an Enterprise Application
4. Security

### **IV. REQUIRED RESOURCES/TEXTS/MATERIALS:**

Text Book:

Core Servlets and Java Server Pages,  
Marty Hall,  
Prentice Hall  
ISBN 0-13-089340-4

### **V. EVALUATION PROCESS/GRADING SYSTEM:**

*Tests:*

*Outcomes 1 & 2 30%*

*Outcomes 3 & 4 30%*

*Labs:*

*40%*

The following semester grades will be assigned to students:

*Grade Point*

<b>Grade</b>	<b>Definition</b>	<i>Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
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. SPECIAL NOTES:

### Special Needs:

If you are a student with special needs (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Special Needs office. Visit Room E1101 or call Extension 703 so that support services can be arranged for you.

### Retention of Course Outlines:

It is the responsibility of the student to retain all course outlines for possible future use in acquiring advanced standing at other postsecondary institutions.

### Plagiarism:

Students should refer to the definition of “academic dishonesty” in *Student Rights and Responsibilities*. Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course/program, as may be decided by the professor/dean. In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced, and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Course Outline Amendments:

The professor reserves the right to change the information contained in this course outline depending on the needs of the learner and the availability of resources.

Substitute course information is available in the Registrar's office.

**VII. PRIOR LEARNING ASSESSMENT:**

Students who wish to apply for advanced credit in the course should consult the professor. Credit for prior learning will be given upon successful completion of a challenge exam or portfolio.

**VIII. DIRECT CREDIT TRANSFERS:**

Students who wish to apply for direct credit transfer (advanced standing) should obtain a direct credit transfer form from the Dean's secretary. Students will be required to provide a transcript and course outline related to the course in question.