

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Web DBMS

CODE NO. : CSD320 **SEMESTER:** 5

PROGRAM: COMPUTER PROGRAMMER/PROGRAMMER ANALYST

AUTHOR: Dennis Ochoski

DATE: Sept/ 2013 **PREVIOUS OUTLINE DATED:** Sept/ 2011

APPROVED: "Colin Kirkwood" May 15/13

DEAN **DATE**

TOTAL CREDITS: 5

PREREQUISITE(S): CSD220

HOURS/WEEK: 3

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I. COURSE DESCRIPTION:

This course will broaden the student's knowledge of database implementations. The focus will be to use their previous database skills and experiences and apply them to database driven web sites. A combination of technologies will be examined and used throughout the course to expose students to the alternatives that exist in web-based database applications.

The course covers the concepts and practical aspects of creating a web site and web database processing. It will also reacquaint students with relational database concepts, SQL, HTML and more importantly how they relate to creating a database driven web site. Students will be expected to create and manage a web server (Apache). They will be required to code and work with the scripting language, PHP(the "PHP Hypertext Preprocessor"), in the creation of server-side scripts.

The ultimate goal of the course is the creation and implementation of a soundly designed database that is integrated in a realistic and well-designed web site. The students will be expected to work together as team members in developing a fully integrated website.

II. TOPICS:

1. Overview of web based database processing environments and general constructs of PHP programming.
2. Understanding and Using PHP variables, operators, conditions, loops, and functions.
3. Creating web forms and developing scripts using PHP, HTML/XHTML, and SQL.
4. Designing and implementing a web-based database using MySQL.
5. Managing "state" information.
6. Designing, coding and implementing a fully integrated database driven web site in the PHP/MySQL environment.

III. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

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

1. Understand the web based database processing environment s and general constructs of PHP programming.

This learning outcome will comprise approximately **20%** of the course.

Elements of the performance:

- describe the difference between static and dynamic web pages
- describe the environment with respect to HTML/XHTML, PHP and MySQL
- describe the role each server product plays in creating and maintaining an appropriate web site
- create basic PHP scripts and code blocks that include variables, constants, data types, arrays, and, mathematical and logical operators
- define and call functions
- incorporate conditions and looping structures
- manipulate strings

2. Create web forms for user input.

This learning outcome will comprise approximately **20%** of the course.

Elements of the performance:

- add action and method attributes
- retrieve and validate submitted data
- redisplay a web form
- understand file types and permissions
- read from and write to files from PHP
- understand and apply the different methods that HTML forms can use to encapsulate data, such as: text fields, checkboxes, radio buttons, listboxes, hidden form fields, password fields, and Submit and Reset buttons
- implement various array concepts into scripts

3. Combine HTML/XHTML, PHP and MySQL to create a data-driven website.

This learning outcome will comprise approximately **50%** of the course.

Elements of the performance:

- understand and apply PHP functions that will allow connectivity to a database
- understand and apply the various ways of retrieving and manipulating data stored in a MySQL database
- use various PHP functions to process database data
- properly report MySQL errors
- insert, update and delete records in a database table using PHP
- create a fully functional dynamic data-driven web site

4. Manage “state” information.

This learning outcome will comprise approximately **10%** of the course.

Elements of the performance:

- understand “state” information
- use hidden form fields, query strings and cookies to save state information
- use sessions to save state information
- insert, update and delete records in a database table using PHP
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*****NOTE: The topics specified above will overlap in several areas of skill development and are not necessarily intended to be explored in isolated learning units or in the order specified.**

WEB DBMS
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IV. REQUIRED RESOURCES / TEXTS / MATERIALS:

The specific material references for this course can be found at the following link:

<http://www.w3schools.com/php/default.asp>

Other References

1. <http://php.net/> PHP Documentation
2. <http://dev.mysql.com/doc/refman/5.5/en/index.html> MySQL Documentation

V. EVALUATION METHODS:

Tests/Assignments	Weight
Assignments	20%
Tests	60%
Project	<u>20%</u>
	100%

The following semester grades will be assigned to students in postsecondary courses:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 - 89%	4.00
B	70 - 79%	3.00
C	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	below 50%	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.
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 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 enclosed, 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. Students are required to be in class on time and attendance will be taken within the first five minutes of class. A missed class will result in a penalty in your marks unless you have discussed your absence with the professor as described above. 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

VIII. COURSE OUTLINE ADDENDUM

1. 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.

2. 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.

3. Prior Learning Assessment:

Students who wish to apply for advance credit transfer (advanced standing) should obtain an Application for Advance Credit from the program coordinator (or the course coordinator regarding a general education transfer request) or academic assistant. Students will be required to provide an unofficial transcript and course outline related to the course in question. Please refer to the Student Academic Calendar of Events for the deadline date by which application must be made for advance standing.

Credit for prior learning will also be given upon successful completion of a challenge exam or portfolio.

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

4. Accessibility Services:

If you are a student with a disability (e.g. physical limitations, visual impairments, hearing impairments, or learning disabilities), you are encouraged to discuss required accommodations with your professor and/or the Accessibility Services office. Visit Room E1101 or call Extension 2703 so that support services can be arranged for you.

5. Communication:

The College considers ***Desire2Learn (D2L)*** as the primary channel of communication for each course. Regularly checking this software platform is critical as it will keep you directly connected with faculty and current course information. Success in this course may be directly related to your willingness to take advantage of this Learning Management System (LMS) communication tool.

6. Plagiarism:
Students should refer to the definition of “academic dishonesty” in *Student Code of Conduct*. 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.

7. Tuition Default:
Students who have defaulted on the payment of tuition (tuition has not been paid in full, payments were not deferred or payment plan not honoured) as of the first week of *November* will be removed from placement and clinical activities due to liability issues. This may result in loss of mandatory hours or incomplete course work. Sault College will not be responsible for incomplete hours or outcomes that are not achieved or any other academic requirement not met as of the result of tuition default. Students are encouraged to communicate with Financial Services with regard to the status of their tuition prior to this deadline to ensure that their financial status does not interfere with academic progress.

8. Student Portal:
The Sault College portal allows you to view all your student information in one place. **mysaultcollege** gives you personalized access to online resources seven days a week from your home or school computer. Single log-in access allows you to see your personal and financial information, timetable, grades, records of achievement, unofficial transcript, and outstanding obligations, in addition to announcements, news, academic calendar of events, class cancellations, your learning management system (LMS), and much more. Go to <https://my.saultcollege.ca>.

9. Electronic Devices in the Classroom:
Students who wish to use electronic devices in the classroom will seek permission of the faculty member before proceeding to record instruction. With the exception of issues related to accommodations of disability, the decision to approve or refuse the request is the responsibility of the faculty member. Recorded classroom instruction will be used only for personal use and will not be used for any other purpose. Recorded classroom instruction will be destroyed at the end of the course. To ensure this, the student is required to return all copies of recorded material to the faculty member by the last day of class in the semester. Where the use of an electronic device has been approved, the student agrees that materials recorded are for his/her use only, are not for distribution, and are the sole property of the College.