



# WEBER STATE UNIVERSITY

## CONTINUING EDUCATION CONCURRENT ENROLLMENT

### Syllabus

**WSU Department Name**  
Computer Science

**WSU Course Listing & Number**  
CS 1410: Object-Oriented Programming (4 Credit Hrs.)

**WSU Concurrent Adjunct Instructor: Kim Murphy**  
Weber High School  
Computer Programming 2  
2008-2009

**(Attention:** Contact the College or University you wish to attend to make sure that these Concurrent Enrollment courses will meet your goals for fulfilling General Education requirements or will count toward your chosen major).

**Concurrent Adjunct Instructor's Office Hours**  
EO Hour Thursdays 7:30 – 8:20

**Concurrent Adjunct Instructor's phone and email**  
[kmurphy@weber.k12.ut.us](mailto:kmurphy@weber.k12.ut.us)  
476-3700

**WSU Course Description:**  
An introduction to the C++ language. Topics will include data types, control structures, functions, pointers, arrays, I/O streams, classes, objects, encapsulation, overloading, inheritance and use of these concepts in problem solving.

**WSU Course Objectives:**

At the conclusion of the course you will:

Outcomes: 1. Understand and be able to use the fundamental concepts of the ANSI C++ language

- a. variables
- b. expressions
- c. statements
- d. flow-of-control statements (sequential, branching, looping)
- e. functions (definitions and calls), friend functions, virtual functions
- f. structures and unions
- g. pointers, references, and the associated operators and syntax
- h. C++ i/o streams
- i. templates and exception
- j. the STL

2. Understand the Object-Oriented model and its relationship to and implementation in the C++ programming language; specifically, you will understand and be able to use:

- a. classes, objects, instantiation (both static and dynamic) and object deal location
- b. relationships: inheritance, association, aggregation, composition, and dependency
- c. attributes and functions, and their relationship to encapsulation and abstraction
- d. member access and the associated operators and syntax
- e. virtual or abstract classes
- f. polymorphism

3. Understand the physical organization of C++ programs including the organization of multiclass programs

4. Have gained experience solving problems and then expressing the solution to those problems as computer programs

**WSU Required Textbook & Materials:**

*Object-Oriented Programming in C++, 4th Edition*

Robert LaFore

ISBN: 0672323087

Publisher: Sams Publishing

Pub. Date: Dec 19, 2001 (Copyright 2002)

**WSU Course Requirements:**

[WSU Course Requirements]

**WSU Grading:**

93 - 100 % = A	90-92.9% = A-	87-89.9% = B+
83 - 86.9 % = B	80-82.9% = B-	77-79.9% = C+
73 - 76.9 % = C	70-72.9% = C-	67-69.9% = D+
63 - 66.9 % = D	60-62.9% = D-	below 60% = E

**Calendar of Course Content:**

Week 1-3: Variables

Week 4-6: Control Statements

Week 7-10: Object Oriented Programming

Week 11-15: Interfaces

Week 15-20: Arrays ArrayLists

Week 21-23: Searching Sorting

Week 24-28: Inheritance

Week 29-30: Recursion

Week 30-35: Data Structures

Week 25-40: Final Projects

**Evaluation:**

At the end of each concurrent course, students are given the opportunity to evaluate that course. This is an anonymous evaluation that allows the student to express their opinions on this course.

**WSU Student Code of Conduct**

Download the WSU Student Code of Conduct at:

[www.weber.edu/concurrent/students/CodeOfConduct.asp](http://www.weber.edu/concurrent/students/CodeOfConduct.asp)

**Make Up Work**

Students will be called in for direct intervention during EO hour or another scheduled time for missing assignments and low test scores. All missing tests and assignments need to be made up during EO hour or by scheduled appointment. Work not made up from excused or school excused absences will result in a loss of those points.

**Citizenship**

Students earn citizenship grades by demonstrating appropriate behavior in class and by following the classroom and school rules, attendance policy and citizenship policy as outlined in the student handbook.

Due Process will be followed for any behavior problems.

1. A verbal warning will be made to the student
2. A student/teacher conference will be held
3. The teacher will call the guardian/parent
4. A parent/teacher/student conference will be held
5. The student will be referred to the administrator

**Classroom Rules**

- A water bottle with a pop-top cap is the only food or drink allowed in class
- Treat computer equipment with care
- Be courteous to your classmates and teacher

**Cheating**

Student collaboration of ideas and methodology on projects is encouraged and expected. But students must do their own work. Copying of any files from student to student for purposes of class work is forbidden and will result in failing scores on shared assignments for all parties involved and automatic “U” citizenship grades.