# CMPS 2010

Programming Fundamentals
JAY MANIBO



#### CONTACT INFORMATION

Instructor Jay Manibo

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Email <u>jayta@cs.csubak.edu</u> (labs/homework submission)

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#### COURSE DESCRIPTION

Introduces the fundamentals of procedural programming and object-oriented programming.

Topics include: data types, control structures, functions, arrays, I/O, pointers and dynamic memory allocation, and features of object-oriented programming.

The mechanics of compiling, linking, running, debugging and testing within a particular programming environment are covered.

Ethical issues and a historical perspective of programming within the context of computer science as a discipline are given.

Each week lecture meets for 150 minutes and lab meets for 150 minutes.

Prerequisite: (1) MATH 0930; or (2) other satisfaction of the Entry Level Mathematics requirement.



## ATTENDANCE

You are responsible for your own attendance One missed class can really affect your semester



#### ACADEMIC INTEGRITY POLICY

Cheating is not the way to pass the class

Maintain integrity and professionalism

Know when to work together, how to work together



# SERVICES FOR STUDENTS WITH DISABILITIES

You know your rights. I know your rights.

Don't forget to leave me a copy of your accommodations letter

Office 661-654-3360

TDD 661-654-6288



#### TUTORING CENTER / COMPUTER LAB

The walk-in computer lab in Sci III 324 is available for use by students in this course outside of class time on a first come, first serve basis.

A tutoring schedule will be posted on the department website by the end of the first week of classes.

Students in this course may ask the tutors for assistance on assignments.

The tutors are not allowed to solve the assignment for you, but they can assist with problems like cryptic compiler errors.



#### LABS

Lab assignments are posted on Blackboard.

Labs are usually worth 10 points and usually involving writing 1-2 short programs.

The labs will be assigned every assigned lab schedule and will be due by 11.59PM on Saturday of the same week.

Partial credit will be given for incomplete labs.

Late labs can be penalized 25% of the maximum score possible. Special concessions may apply at my discretion.

The lowest lab grade will not be counted towards the overall lab grade.



#### HOMEWORK

Homework assignments are posted on Blackboard.

Homework assignments are usually worth 10 points and can consist of multiple small programs.

Homework assignments will be assigned after the relevant lecture material has been covered. This usually occurs later in the week.

Homework will typically be due 11.59PM one week after it is assigned.

Late homework can be penalized at 25% of the maximum score possible. Special concessions may apply at my discretion.



#### EXTRA CREDIT

Numerous opportunities to get more points

Take every opportunity possible

More programs. More code. More points. More better.



#### WORK SUBMISSION

All labs, homework, extra credit must be emailed (using Alpine) to:

jayta@cs.csub.edu

Some exam problems will also be emailed to the above address



# CURRICULUM SCHEDULE

PHASE 1 (Weeks 1 – 4)	Intro to Linux, vi, g++, C++ Syntax, Variables, Expressions, Console Input/Output, Decision Making (IF, SWITCH), Loops (WHILE, DO-WHILE, FOR), Scope, Nested Structures
MIDTERM 1	Week 5 or so
PHASE 2 (Weeks 6 - 8)	Functions (Basic, Parameter Passing, Overloaded, Default Parameters), Files (Reading/Writing), Arrays, Character Arrays
MIDTERM 2	Week 9 or so
PHASE 3	Pointers, Structures, Classes, Constructors, Destructors, Friend Functions/Classes, Operator Overloading, Separate Compilation, Make Files, Inheritance
FINAL EXAM	

Makeup exams will not be given without a compelling or valid reason. Failure to take a midterm without prior notification will result in an automatic score of zero



#### GRADING/RUBRIC

Minimum Score	0	60	64	67	70	74	77	80	84	87	90	94	97
Letter Grade	F	D-	D	D+	C-	С	C+	B-	В	B+	A-	A	A+

Labs/Homework 35%

Midterm 1 20%

Midterm 2 20%

Final 20%

Comprehensive Assignment 5% Class Participation Bonus 2%



#### CLASS PARTICIPATION BONUS

At the end of the semester:

I will award—at my discretion—points for class participation. When your total percentage points have been tallied up for the quarter, you can earn:

- 0 For no class participation
- 1 Some participation
- 2 Active, constant participation

For example, if you have an 88% as your final score, and I know you have been actively participating in class discussion, I will award you 2 additional points to bring your grade score to 90% for the quarter.



## THE 3 COMMANDMENTS TO WIN

The ones who write the most code wins

The ones who get the most errors wins

