Course Description
This course introduces the fundamentals of procedural programming. Topics include data types, control structures, functions, arrays, console I/O, and file I/O. The mechanics of compiling, linking, running, debugging, and testing within the Linux programming environment are covered. Historical perspective and ethical issues of programming and software development will be discussed.

Prerequisite
Passing score on ELM OR satisfaction of the ELM exemptions AND a passing score on the Pre-Calculus Readiness Test (see Class Schedule for details) OR completion of math remediation.

ACM/IEEE Body of Knowledge Topics
(CS-PF1/CE-PRF1,2) Fundamental programming constructs and paradigms
(CS-PF2/CE-PRF3) Algorithms and problem solving
(CS-PF3/CE-PRF4) Data structures (Introduction: basic types, strings and arrays)
(CS-SP1/CE-PRF0) History of computing

Textbook
Starting Out with C++: From Control Structures through Objects Author: Tony Gaddis
Publisher: Pearson 2014
Edition: 8th (you may use 6th or 7th edition)
ISBN-10: 0133769399

Material Covered
Chapter 1 Introduction to Computers and Programming
Chapter 2 Introduction to C++
Chapter 3 Expressions and Interactivity
Chapter 4 Making Decisions
Chapter 5 Loops and Files (6th edition: Looping)
Chapter 6 Functions
Chapter 7 Arrays
Chapter 8 Searching and Sorting Arrays
Chapter 9 Pointers
Chapter 10 Characters, Strings and More About the String Class
Chapter 11 Structured Data
Chapter 13 Introduction to Classes (If time permits)
**Attendance**

It is recommended that you attend every class session and that you are not late to class. Lectures will begin at the class start time. I may randomly take attendance for records but it does not count for points.

**Academic Integrity Policy**

Do your own work.

Violations are determined in accordance with the Department's policy on academic honesty.

**Open Computer Lab and Tutoring**

The walk-in computer lab in Science III 324 is available for use by students in this course outside of class time on a first come, first served basis. Priority in the lab is given to students who are completing assignments for Computer Science and Computer Engineering courses.

Tutoring is also provided on a limited basis in the walk-in lab. The tutors are not allowed to solve the assignment for you, but they can assist with problems like compiler errors.

**Grading**

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Labs</td>
<td>25%</td>
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<tr>
<td>Homework</td>
<td>25%</td>
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<tr>
<td>Midterm</td>
<td>25%</td>
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<tr>
<td>Final</td>
<td>25%</td>
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All Labs, homework assignments, and exams are given equal weight unless stated otherwise. This is subject to changes based on assessment of the class's academic progress and needs.

**Homework and Labs**

50% of your grade will be based on homework and labs (assignments). Late assignments will be accepted with a penalty of 25% per each 24 hrs the assignment is late. Extensions will be given for extreme circumstances on an individual basis.

**Homework**

Each homework assignment will be worth 10 points and will consist of multiple questions and programming assignments. Programs which do not compile may be given partial credit depending on the severity of the error. Homework will be assigned each Monday and due by Wednesday of the following week.

**Labs**

Lab assignments will be posted on the course website. Labs will be worth 10 points and usually involve writing 1-2 programs. One lab will be assigned every week and will be due before the following lab day. You may work on the labs in groups of two to three students, however this is not a requirement.

**Assignment Submission**

All assignment files will be submitted by e-mail using the following format:

```
proyer-hw1-cmps221.cpp
```

The e-mail subject line should also contain the following information:

```
Lab 1 Submission - Paul Royer and Frank Madrid - CMPS221
```

All program submissions should be written in c++ source code ready to compile, so compiling and testing directly before submission is highly recommended.

Answers to homework questions must be submitted in PDF format.
Exams
There are no quizzes. There will be a single midterm and a final exam. The midterm will be given during week 4 or 5, and the final date is yet to be determined. Make up exams will only be given in extreme circumstances and must be approved in advance by the instructor.

Statement Regarding Accommodations for Students with Disabilities
To request academic accommodations due to a disability, please contact the Office of Services for Students with Disabilities (SSD) as soon as possible. They may be reached at 661-654-3360 (voice), or 661-654-6288 (TDD). If you have an accommodations letter from the SSD Office, please present it to me during my office hours as soon as possible so we can discuss the specific accommodations that you might need in this class.

This syllabus is subject to change.
Latest Revision: March 29, 2015