

# **CSCI 1411: Fundamentals of Computing**

## **Course Syllabus**

### **Fall, 2017**

**Instructor:** Hawkar Oagaz

**Email:** [hawkar.oagaz@ucdenver.edu](mailto:hawkar.oagaz@ucdenver.edu)

**Phone:** (513) 806-5912

**Office:** LW-820

**Class Times:** Thursdays 12:30pm – 1:45pm

**Office Hours:** Fridays 11:00am – 12:00pm

**Catalog Data:** This laboratory is taken with CSCI 1410 and will provide students with additional help with problem solving and computer exercises to complement the course material covered in CSCI 1410.

**Co-requisites:** CSCI 1410 (Note this is graded separately with its own assignments)

**Prerequisites:** None

**Note:** *Each student must sign the Prerequisites Agreement form to receive any credit for any assignment or exam. If this form is not returned by the 1<sup>st</sup> week, the student will be administratively dropped from the course.*

**Expected Knowledge at the Start of the Course:** Basic Math, including algebra and trigonometry. How to use a computer and associated peripherals such as printers and other I/O devices. How to use software programs, such as word processors and text editors.

#### **Expected Knowledge Gained at the end of the Course:**

Skills in problem solving.

Skills in computer programming using C++.

Skills using an operating system such as Linux/Unix.

Skills using a shell that interacts with a kernel.

Skills using a basic editor and compiler

**ABET Assessment Criteria:** (b) An ability to analyze a problem, and identify and define the computing requirements to its solution (PEO #1)

**Course Objectives:** This is a first course in a series of three that will teach the student how to program using the C++ Programming Language. This course also has a co-requisite lab that will provide hands-on instruction in programming.

**Textbook:** Starting out with C++ From Control Structures through Objects, Eighth Edition, Brief, Tony Gaddis, 978-0-13-4037325

**Topics:**  
**Course Outline:**

Serial #	Date	Topic	Reading	Assignment (ABET Requirement)
1	8/24	Lab 01 – Hello World (csegrid)		
2	8/31	Lab 02 – Variables, input, output and operators (csegrid)	3.1 – 3.11	Lab 01
	9/04	<b>Labor Day Holiday</b>		
3	9/7	Lab 03 -Control Statements (if – else), logical operators, switch (csegrid)	4.1 – 4.15	Lab 02
4	9/14	Lab 04 - Loops, using files, increment/decrement	5.1 – 5.12	Lab 03
5	9/21	Lab 05 – Functions and multiple files (csegrid)	6.1 – 6.16	Lab 04
6	9/28	Lab 06 – PA2 Outline and concepts (Visual Studios)	7.1 – 7.11	Lab 05
7	10/05	Lab 07 - Arrays/Typedefs/Structs (Visual Studios)	11.1 – 11.12	Lab 06
8	10/12	Lab 08 - Searching and Sorting Arrays (Visual Studios)	8.1 – 8.5	Lab 07
9	10/19	Lab 09 – Pointers (Visual Studios)	9.1 – 9.10	Lab 08
10	10/26	Lab 10 - Characters, C-Strings, String Class (Visual Studios)	10.1-10.8	Lab 09
11	11/02	Lab 11- PA3 Outline and concepts (Eclipse)		Lab 10
12	11/09	Lab 12 – Objects with classes and structs (Eclipse)	13.1 – 13.16	Lab 11
13	11/16	Lab 13 – Vectors of Objects with pointers/ Multiple Compile Spaces/Namespaces (Eclipse)	Appendix F 14.1 – 14.	Lab 12
	11/20 11/24	<b>Fall Break</b>		
14	11/30	Review of Course Concepts		Lab 13

**Grading Policy:**

Course grades are a weighted average of the grades earned on all graded material. The weights for the different categories are:

- Participation..... 05%
- Attendance..... 05%
- Lab Assignments ..... 90%

Letter Grades are as follows:

- 94% – 100% ..... A
- 90% – 93.9% ..... A-
- 87% – 89.9% ..... B+
- 84% – 86.9% ..... B
- 80% – 83.9% ..... B-
- 77% – 79.9% ..... C+
- 74% – 76.9% ..... C
- 70% – 73.9% ..... C-
- 67% – 69.9% ..... D+
- 64% – 66.9% ..... D

- 60% – 63.9% ..... D-
- 00% – 59.9% ..... F

**Labs:** You will work on labs during class with a lab partner. If you don't finish by the end of class, you will complete the rest of the lab on your own. Each of you will submit the lab, due one week after the lab class.

**Attendance** is required. **If you do not attend class, you may not hand in the lab for credit without prior approval of your instructor.** If you are ill, or do not have prior notice, you must contact your instructor as soon as you are able and make arrangements at your instructor's discretion. The labs for this course will be submitted on Canvas. Please be on time for all lab classes.

**Participation** Your participation grade will include: working on the assigned lab during class, and working well with a lab partner. If you have an unexcused absence

#### **Course Procedures:**

**Attendance:** Attendance is required. As with all science courses, you will have easier time learning the material if you attend the lectures and participate in class.

**Late Work Policy:** All programming assignments and homework are due at the beginning of class on the due date. Submissions will be made via Canvas. I do not allow late work to be submitted unless there is **prior approval** by me based on **special circumstances**.

**Grades of "Incomplete":** The current university policy concerning incomplete grades will be followed in this course.

**Email Policy:** I will be using both the University email system and the Canvas email system. Please email via Canvas for all class related questions.

**Canvas:** I will be using Canvas in this course to assign all of the course work and for you to submit your solutions. I will also be using it to communicate with you and to provide you with your current grade. You should check it frequently.

**Classroom Recording:** Out of respect for everyone in the classroom, if you would like to record the lectures you must first receive my approval. I generally will approve the request, but I first would like to speak with you concerning the scope of the recording.

#### **Student Expectations:**

- I. **Civility:** My commitment is to create a climate for learning characterized by respect for each other and the contributions each person makes to class. I ask that you make a similar commitment.
- II. **Professionalism:** Since mobile devices can be a distraction during class, I ask that all devices be put into "silent" mode and not utilized during class; this includes checking Facebook, sending a Tweet, or checking email. If I feel that your mobile device is becoming a distraction for either other students, you, or myself I will ask you to leave the classroom.
- III. **Religious Observations:** I understand that an individual's religion plays a large part in their lives and I do not want this course to interfere with that aspect of their lives. If you find that your religion's holiday(s) falls on a class day and you can not attend due to this, please notify me within two weeks of that date by email (or Canvas mail) and we will work together to come to a mutually acceptable solution.

#### **Collaboration and Cheating:**

I encourage you to review material and discuss ideas together for labs and CSCI 1410 assignments, but **make sure you then create your own work**. It's important that you go through the program design, coding, and debugging processes yourself, or you will not be developing your own programming skills and understanding. "Working together" does not mean that one student does the majority of the work and other students put their names on it! If you have any questions about what this means, please see me. While there will be some lab components of the lab that tell you to work with a lab partner, **every student must create their own work!**

Any instances of cheating will result in either a zero for the assignment, a grade of zero in the course, or sanctions determined by the college (including suspension and expulsion).