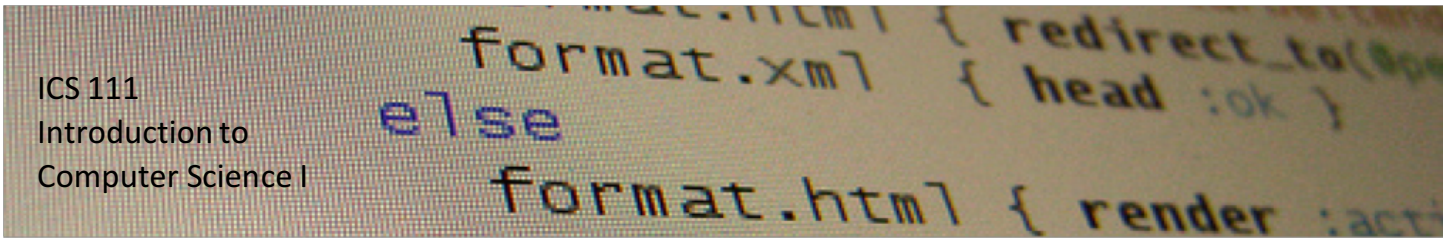

ICS 111 - Introduction to Computer Science I
Spring 2017 (CRN 64074)

Instructor Information

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Office hours: Online

Windward Community College Mission Statement

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai‘i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O‘ahu’s Ko‘olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

Catalog Description

Intended for Computer Science majors and all others interested in a first course in programming. An overview of the fundamentals of computer science emphasizing problem solving, algorithm development, implementation, and debugging/testing using an object-oriented programming language.

Student Learning Outcomes

The Student Learning Outcomes for this course are:

- Use an appropriate programming environment to design, code, compile, run and debug computer programs.
- Demonstrate basic problem solving skills: analyzing problems, modeling a problem as a system of objects, creating algorithms, and implementing models and algorithms in an object-oriented computer language (classes, objects, methods with parameters, abstract classes, interfaces, inheritance and polymorphism).
- Illustrate basic programming concepts such as program flow and syntax of a high-level general purpose language.
- Demonstrate working with primitive data types, strings and arrays.

Course Tasks

In this class, you must show mastery of each concept by completing a combination of quizzes and programming projects. Assignment quizzes are worth 4 points and programming projects are worth 6 points except for the final project which is worth 20 points.

There may be more than one quiz in an assignment. The grade is based upon the total grade for all quizzes in an assignment. For instance, if there are five quizzes in an assignment, each worth 3 points, and you get the maximum number of points for four of the quizzes (12 points) but only get 1 point on the fifth quiz then your score will be calculated by dividing the total points earned (13) by the total points possible (15) to find the percentage of correct answers (86.6%). That percentage will be used to determine the number of points toward your grade:

- 4 points: 90% - 100% correct
- 3 points: 80% - 89% correct
- 2 points: 70% - 79% correct
- 1 point: 10% - 69% correct
- 0 points: 0 - 9% correct

Points for programming projects are awarded as follows:

- 6 points - All aspects of the assignment are met. This not only includes the core concept from the lesson, but clear, well written code. Clear, well written code means code that is readable and includes comments and whitespace with no unused variables or instructions.
- 5 points - All aspects of the assignment are met and there is no unnecessary code, but prompts and messages are not user friendly or the code is not easy to read due to a lack of comments and/or whitespace..
- 3 - 4 points - The program compiles and the core concept from the lesson is used correctly, but the code is hard to read and/or includes unnecessary code. Some of the instructions for the assignment weren't followed.
- 1 - 2 points - The program compiles but the core concept from the lesson is only partially used or used incorrectly. Some of the instructions for the assignment weren't followed.
- 0 points - The program doesn't compile, there are runtime errors, or the core concept from the lesson wasn't used. Some or all of the instructions for the assignment weren't followed.

If there are error(s), then I will let you know and return the assignment to you. You should then correct the assignment and resubmit it.

Every assignment has a due date. To get full credit for the assignment it must be submitted by the due date. You may turn them in late but there will be a 1 point penalty for a late submission of quizzes and 1 point for a late submission of a project. You must get at least 1 point on the quizzes (using the grade scale above) and at least 1 point on a project to avoid the late penalty. You may retake quizzes and resubmit projects after they are returned to raise your grade (although you will not be able to recoup the point lost for turning it in late). There is no late penalty for resubmissions, only original submissions. The final deadline for all submissions and re-submissions is May 3, 2017. This is a hard deadline and no assignments will be accepted after that date.

Assignment Tasks and Grading

Your final grade will be determined by the number of assignments you complete. Each assignment is worth 10 points except for the Final Project, which is worth 20 points. There are 13 assignments and the Final Project for a total of 150 points. The grade scale for your letter grade is:

- A: 135 - 150 points
- B: 120 - 134 points
- C: 105 - 119 points
- D: 75 - 104 points
- F: 0 – 74 points

Learning Resources

Each assignment will have an assigned lesson in Laulima. You will need to read these lessons before attempting the quizzes or programming project.

We will also be using an online resource called Revel in this course. The Revel site has an electronic copy of the textbook as well as videos and "check your understanding" quizzes. It will be the main source of information about the Java programming language. This is also where the graded quizzes are located.

We will use Laulima for submitting and returning all projects. All grades will be posted in Laulima and you will be able to track your progress by utilizing the gradebook. You will be able to post and read questions and comments on the discussion boards. Use the private message tool in Laulima to contact the instructor.

We will be using the Java programming language to develop our programs. Go to the Java Download Page (http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html) to download the latest SE JDK. It is vital that you install it correctly, including setting the correct path environment
Although it isn't necessary, I also recommend you use an Integrated Development Environment such as jGrasp (http://jgrasp.org). I do not recommend using NetBeans or Eclipse at this time. Both insert code in your projects that could keep it from compiling from the command line.

As an alternative, you can use the uhunix (type ssh username@uhunix.hawaii.edu at the command line. Replace username with your UH username) or an online development site such as Cloud9 IDE (https://c9.io).

Other resources

Tutoring may be available from the TRIO office in the Library Learning Commons on the WCC campus.

Policies

Disabilities Accommodation Statement
If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed. Ann Lemke can be reached by phone at 235-7448, by email at lemke@hawaii.edu, or by stopping by her office in Hale ʻAkoakoa 213 for more information.

Academic Dishonesty - Cheating and Plagiarism
You are responsible for the content and integrity of all work you submit. The guiding principle of academic integrity will be that all files, work, reports, and projects that you submit are your own work.

You will be guilty of cheating if you:

- Represent the work of others as your own (plagiarism).
- User or obtain unauthorized assistance in any academic work.
- Give unauthorized assistance to other students.
- Modify, without instructor approval, an examination, paper, record, or report for the purpose of obtaining additional credit.
- Misrepresent the content of submitted work.

Netiquette
Whenever you post something to the discussion board or other online forums, you are expected to follow proper netiquette. Be respectful at all times. Do not use obscene language or make disparaging comments, even if it is meant as a joke. Remember that others cannot see your facial expression nor hear your tone of voice, so they will not know you are trying to be witty. Do not use all caps. Using all caps is normally interpreted to be shouting.

Discussion Boards
Discussion boards are to be used for class work only. Do not post political or other comments or statements, nor solicit sales for any type of product. Your instructor will be monitoring all communication in Laulima and will take appropriate action when necessary

A Final Thought

All programming languages use the same basic concepts. By learning the concepts and writing your initial program in pseudocode, you should be able to use any programming language to code your software. It is vital that you understand these concepts. You will use them throughout your studies in Computer Science and as a programmer or Software Engineer afterward. The best way to learn them is to use them. Try designing and creating programs that you will find useful. Good luck!