

ICS 211
Introduction to
Computer Science II

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ICS 211 - Introduction to Computer Science II 3 Credits (CRN 60063) Spring 2019 Online

Instructor Information

Instructor: David Maxson Contact:

David.Maxson@hawaii.edu

Office hours: Online only. As a minimum I will be available on Tuesdays and Thursdays from noon – 1pm, HST. Please send all questions to me as a Private Message in Laulima.

Term: Spring 2019

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

Reinforce and strengthen problem-solving skills using abstract data types and introduce software development practices. Emphasize the use of searching and sorting algorithms and their complexity, recursion, object-oriented programming, and data structures. (3 hours lecture)

Pre-Requisite(s): A grade of C or better in ICS 111 or consent of instructor.

Other Requirements

Each student will be required to use Laulima. A Laulima account from UH Manoa has been created for you.

Student Learning Outcomes

As a result of taking this course, students can expect to attain the following outcomes:

- Use and implement abstract data types such as lists, stacks, queues, and trees.
- Select the appropriate searching or sorting algorithm based on the algorithm's behavior.
- Develop recursive algorithms and programs.
- Use standard libraries or packages as well as advanced object-oriented programming techniques (polymorphism, inheritance, and encapsulation).
- Produce robust and secure programs using exception handling and extensive program testing.

Course Tasks

In this class, you must show mastery of each concept through a series of projects. Every assignment is worth 3 points except the final project, which is worth 9 points.

To get the full 3 points, your work must not contain any errors. If there are errors, then I will specify what it is and return it to you. Note that I will not tell you how to correct the error, only what it is. You should then correct the assignment and resubmit it.

The deadline for all assignments is April 28, 2019 at 11:55pm HST. You may turn in re-submissions until May 2, 2019 at 11:55pm HST. No work will be accepted after that date. This is a firm deadline.

Assessment Tasks and Grading

Your letter grade will be determined by the number of assignments you complete. There are 13 assignments and the final project for a total of 48 points:

- A: 43 - 48 points
- B: 38 - 42 points
- C: 33 - 37 points
- D: 24 - 32 points
- F: 0 -23 points

Learning Resources

We will be using *Introduction to Java Programming, Comprehensive Version, 10th Edition* by Y. Daniel Liang as our textbook. Rather than the print version of the book we will be using the eBook found at the [Revel](#) website.

We will be using the [Revel](#) site for online, interactive videos, quizzes, programming exercises, and simulations. This is a powerful tool where you can practice your programming before submitting assignments. You can purchase access to the [Revel](#) at the bookstore or at the website.

You need to be comfortable with using the documentation for the Java and JavaFX API's. You will be referring to the API's to become familiar with the libraries available through the JDK's.

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

We will be using the Java 8 programming language to develop our programs. Go to the [Java Download Page](http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html) (<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>) to download the 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) (<http://jgrasp.org>). As an alternative, you can use an online development site.

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 'Akoakoa 213 for more information.

Title IX

Title IX prohibits discrimination on the basis of sex in education programs and activities that receive federal financial assistance. Specifically, Title IX prohibits sex discrimination; sexual harassment and gender-based harassment, including harassment based on actual or perceived sex, gender, sexual orientation, gender identity, or gender expression; sexual assault; sexual exploitation; domestic violence; dating violence; and stalking. For more information regarding your rights under Title IX, please visit: https://windward.hawaii.edu/Title_IX/.

Windward Community College is committed to the pursuit of equal education. If you or someone you know has experienced sex discrimination or gender-based violence, Windward CC has resources to support you. To speak with someone confidentially, contact Karla Silva-Park, Mental Health Counselor, at 808-235- 7468 or karlas@hawaii.edu or Kaahu Alo, Designated Confidential Advocate for Students, at 808-235- 7354 or kaahualo@hawaii.edu. To make a formal report, contact the Title IX Coordinator at 808-235-7393 or wcctix@hawaii.edu.

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.

In this class, students who commit academic dishonesty, cheating or plagiarism will have the following consequence(s):

- Students will receive a failing grade for plagiarized assignments.
- All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

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

Alternate Contact Information

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

Location: Alakai 121
Phone: 808-235-7422
Email: wccaa@hawaii.edu

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 the concepts taught in this class. 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!