CSE2100: Data Structures and Introduction to Algorithms
Section 001 – Spring 2016
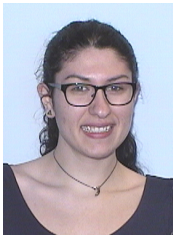
Lecture: TuTh 11:00am–12:15pm, Rowe 122

Instructor:

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Tu/W/Th 12:30pm-1:30pm or by appt.

Teaching Assistants:

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Course Description: Fundamental concepts of data structures and the algorithms that proceed from them. Implementation and use of linked lists, stacks, queues, trees, priority queues, heaps and graphs. Emphasis on recursion, abstract data types, object oriented design, and associated algorithms and complexity issues. Design using specifications and requirements. Basic computer organizations, including memory organizations and allocations issues. Programming assignments.

Prerequisite: CSE 1102 Object Oriented Design and Programming.

Textbook: Michael T. Goodrich, Roberto Tamassia, and Michael H. Goldwasser, Data Structures and Algorithms in Java, 6th edition, John Wiley and Sons, 2014.

List of topics:

- Basics of algorithm analysis
- Recursion
- Arrays and linked lists
- Stacks and queues
- Lists and iterators
- Trees
- Priority queues
- Maps and dictionaries
- Search trees
- Graphs
- Memory management

Course sites:

HuskyCT We have a HuskyCT site for the class; you can access it by logging in with your NetID and password at http://huskyct.uconn.edu/. Please check this site regularly for lecture materials, assignments and solutions, grades, etc.

Piazza For electronic class discussions we will be using Piazza. Rather than sending your questions to the instructor or TAs by e-mail, you are strongly encouraged to post them on Piazza at https://piazza.com/uconn/spring2016/cse2100/home. The Piazza system is highly catered to getting you help fast and efficiently from the instructor, TAs, and classmates. Please observe basic etiquette by keeping your postings polite, concise, and on-topic. Before posting do take a look at previous postings–it is possible that your question has already been answered. Appropriate questions are general questions about the material and clarifications on the assignments. For questions that are specific to your own work you should use private Piazza messages to the instructor or the TAs.

Mimir Programming assignments must be submitted electronically via the Mimir platform at https://app.mimirplatform.io/. Upon submission, Mimir will automatically compile and execute your program against a batch of test datasets, providing detailed feedback on the correctness and efficiency of your program and allowing you to fix potential problems before the due date. To join the course on Mimir use course code `ae729bd910`.

Grade breakdown:

Bi-weekly theoretical homework assignments	20%
Bi-weekly programming assignments	20%
Three exams (two midterms and one final)	20% each

The lowest theoretical homework assignment score and the lowest programming assignment score will be dropped from the overall grade calculation.

Assignment submission: Unless otherwise specified, all assignments are due on the specified due date at midnight. Homework assignments must be submitted electronically via HuskyCT. Programming assignments must be completed in Java and submitted electronically via Mimir.

Late policy: Late submissions are allowed for *up to three days* after the original submission deadline, with 10% of the grade subtracted for each late day.

Collaboration policy: Unless otherwise specified, you are not allowed to collaborate for the assignments and exams. All programs and submitted documents must be your own work. For homework assignments and programming projects you may discuss ideas and concepts with others, but *must not share written solutions or code*. Use of published materials (including web resources) is allowed, but *all sources must be explicitly acknowledged in your submissions*. If you need additional clarifications regarding the collaboration policy, please contact the instructor. If you have any doubts about what is appropriate to discuss, ask.

Students with disabilities: If you have a documented disability for which you are or may be requesting an accommodation, you are encouraged to contact the instructor and the Center for Students with Disabilities or the University Program for College Students with Learning Disabilities as soon as possible to better ensure that such accommodations are implemented in a timely fashion.