

CS 2336 – Computer Science II

Course Information

<i>Course Number/Section</i>	CS2336
<i>Course Title</i>	Computer Science II
<i>Term</i>	Fall 2014
<i>Days & Times</i>	Th Th 4:00 – 5:15pm
<i>Location</i>	ECSS 2.410

Professor Contact Information

<i>Instructor</i>	Dr Mehra Nouroz Borazjany
<i>E-Mail</i>	mehra.nourozborazjany@utdallas.edu
<i>Office hours</i>	MW 02:30 – 03:30 pm, ECSS 4.203
<i>Phone</i>	TBA
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Course Pre-requisites, Co-requisites, and/or Other Restrictions

Prerequisite: CS1337: Programming Language 101

Course Description

Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis. Includes comprehensive programming projects. Programming language of choice is Java.

Student Learning Objectives/Outcomes

- 1) Ability to implement different data structures using the Java programming language.*
 - 2) Ability to use different data structures to program solutions to solve real problems.*
 - 3) Ability to understand algorithmic analysis and complexities.*
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Required Textbooks and Materials

Text: “Introduction to JAVA Programming, 9th Edition, Y. Daniel Liang, Prentice Hall, 2012. ISBN 978-0132936521.

Assignments & Academic Calendar: *These descriptions and timelines are subject to change at the discretion of the Professor.*

Date	Topic
Week 1	Java overview
Week 2-3	Introduction to data structures, Algorithm Analysis
Week 4	Arrays and Linked List
Week 5-6	Stack, Queue and Heaps
Week 7-8	Searching and Sorting
Week 9	Recursion
Week 10-11	Graphs, Breadth and Depth-First-Search
Week 12	Binary Trees and Binary Search Trees
Week 13-14	Advanced Data Structures: Hashing, Dynamic Programming
Week 15	Java Generics
Week 16	Introduction to Design Patterns

Grading Policy

- The individual homework assignments 30%, respectively. Identical or highly similar solutions could result in zero point and academic discipline.
- One midterm exam 25%.
- One final exam 25%.
- Pop quiz 20%. There are number of pop quizzes, equal weight, whichever is lower. The exact number of pop quiz is nondeterministic. Pop quiz can take place any time during the class and on any class day. No make-up if missed unless you inform the instructor beforehand of any event that prevents you from attending the class. In case of sickness, the student is required to present a doctor letter as a proof. In these cases, a make-up pop quiz will be provided.

The base grading scale given below may be adjusted based upon the performance of the class as a whole:

Total Score	≥ 85	≥ 70	≥ 60	≥ 50	< 50
Grade	A	B	C	D	F

Even if you get 84.99 your grade will be a “B”, not an “A” though it is so close to 85.

For detailed information about University policies and procedures related to this syllabus, please refer to <http://go.utdallas.edu/syllabus-policies>.