Week	Topic	Reference
(1) 6 Jul 17	Introduction, Administrative Issues. Software Design, Tools (Compilers, IDEs, etc.), Java Review, Methods, expressions, control flow. Big O Notation, Classes, Packages, Parameters	Chapter 1, 2
(2) 7 Jul 16	Collection Classes, Linked Lists – Arrays, Methods, Static vs. Dynamic objects, Bag Abstract Data Type, Nodes, Node tools, and Linked List Tools	Chapters 3,4
(3) 11 Jul 16	Generics – Wrapper Classes, and Autoboxing. Generic Classes, Generic Nodes, Interfaces, and Iterators	Chapters 5
(4) 13 Jul 16	Stacks – Introduction, Applications, Abstract Data Types, Array Based, Linked List Based Stacks. Project 1 assigned.	Chapters 6
(5) 18 Jul 16	Queues – Introduction, Applications Abstract DataTypes. Linked Queue implementations, array based queue implementations, Review for Midterm	Chapters 7
(7) 20 Jul 16	Midterm Exam	
(6) 25 Jul 16	Recursive Thinking - Examples, theory implementations of recursion.	Chapters 8
(8) 27 Jul 16	Trees – Binary Trees, Linked and Array based representations Traversals, In-Order, Pre-Order, Post Order. Project 1 due. Project 2 assigned.	Chapter9
(9) 1 Aug 16	Searching – Serial searching, Binary searching, Open Address Hashing, Chained Hashing	Chapter11
(10) 3 Aug 16	Sorting – Quadratic Sorting Algorithms, Recursive Sorting Algorithms, Heaps	Chapter12
(11) 8 Aug 16	Graphs – Directed, and undirected Graphs, Dijkstra's Shortest Path Algorithm, Review for Final Exam.	Chapter14
(12) 10 Aug 16	Final Exam. Project 2 due.	

This syllabus is subject to change.