

Course Outline

EN.605.621: Foundations of Algorithms Spring 2021

This outline provides an overview of the course and assignments by week. Please remember to check the Calendar in Blackboard for specific due dates. Each course module runs for a period of seven (7) days, i.e., one week, starting on the day of the classroom session.. Due dates for assignments are referred to by the day of the module week in which they are due. For example, if an Assignment is to be completed by Day 7, then the Assignment should be completed by the 7th day of the module.

Module	Dates	Module Title	Assignments
Module 1	Mon 01/25/21	Introduction to Algorithms	<ul style="list-style-type: none">Assignment 1 dueTextbook Ch1, 2, 3
Module 2	Mon 02/01/21	The Divide-and-conquer Heuristic	<ul style="list-style-type: none">Quiz 1 dueProject Selection dueTextbook Ch4
Module 3	Mon 02/08/21	Partition, Selection, and Order Statistics	<ul style="list-style-type: none">Assignment 2 dueTextbook Ch7, 9
Module 4	Mon 02/15/21	Further Examples of Divide-and-conquer	<ul style="list-style-type: none">Quiz 2 due
Module 5	Mon 02/22/21	Data Structures, A Survey	<ul style="list-style-type: none">Assignment 3 dueTextbook 10, 11, 12, 13
Module 6	Mon 03/01/21	Amortized Analysis	<ul style="list-style-type: none">Quiz 3 dueTextbook Ch17
Module 7	Mon 03/08/21	Dynamic Programming	<ul style="list-style-type: none">Assignment 4 dueProject Mid-report dueTextbook Ch15.1, 15.3
Module 8	Mon 03/15/21	Dynamic Programming II	<ul style="list-style-type: none">Quiz 4 dueTextbook Ch15.4
Module 9	Mon 03/29/21	Greedy Heuristic	<ul style="list-style-type: none">Assignment 5 dueTextbook Ch16
Midterm Examination (TBD)			
Module 10	Mon 04/05/21	Analysis of Greedy Heuristic Algorithms	<ul style="list-style-type: none">Quiz 5 due
Module 11	Mon 04/12/21	Graph Algorithms	<ul style="list-style-type: none">Assignment 6 dueTextbook Ch22
Module 12	Mon 04/19/21	Bridge and Articulation Points in Graphs	<ul style="list-style-type: none">Quiz 6 due
Module 13	Mon 04/26/21	Optimization in Graphs	<ul style="list-style-type: none">Assignment 7 dueTextbook Ch23
Module 14	Mon 05/03/21	Computational Complexity	<ul style="list-style-type: none">Quiz 7 dueProject Report dueTextbook Ch34

