

CSPC 3200: Practical Problem Solving in Computer Science

All slides are in the Portable Document Format (PDF). Use Adobe Acrobat Reader to read these files.

NOTE: The schedule below is **very tentative** and subject to change.

Week	Topics	Material	Exercises
Jan 6 - 8, 2020	Course introduction, basics: handling input/output, reading the problem, complexity estimates, debugging tips, etc.	Slides	
Jan 13 - 15, 2020	Basics, ad hoc problems	Slides	305 , 409 , 10055 , 10420
Jan 20 - 22, 2020	Data structures and libraries	Slides	10189 10415 11947
Jan 27 - 29, 2020	Complete search, backtracking, divide and conquer	Slides	501 793 11136
Feb 3 - 5, 2020	Greedy algorithms, dynamic programming	Slides	296 11195 11516
Feb 10 - 12, 2020	Dynamic programming		10026 10656
Feb 24 - 26, 2020	Graphs, minimum spanning trees	Slides	116 497 674 10684
Mar 2 - Mar 4, 2020	Shortest path, maximum flow	Slides	10004 10047 11228
Mar 9 - 11, 2020	Combinatorics, number theory	Slides	
Mar 16 - 18, 2020	String processing, dynamic programming problems	Slides	10511 11367
Mar 23 - 25, 2020	Suffix arrays, computational geometry		384 10192
Mar 30 - Apr 1, 2020	Computational geometry	Slides	719 11512

howard.cheng@uleth.ca