

Welcome to CPSC 320: the number one course to beat brute force!

We'll be using this Canvas page to host course materials (located under [Modules](https://canvas.ubc.ca/courses/153809/modules) (<https://canvas.ubc.ca/courses/153809/modules>)).

We will also be using [Piazza](https://piazza.com/class/m0ctg610tyw5jh/) (<https://piazza.com/class/m0ctg610tyw5jh/>) for discussion and Gradescope for grading of quizzes, assignments, and exams. We will email you invitations to the course Gradescope page in the third week of the term.

Here is a tentative schedule for the term, subject to change as needed:

Week	Coverage topic(s)	Readings	Tests/Dea
09/01-09/07	Intro; stable matching	stable-matching.pdf (https://canvas.ubc.ca/courses/153809/files/34034269)	
09/08-09/14	SMP; reductions	KT chapter 2	
09/15-09/21	Asymptotic analysis	KT 3.1-3.6	A1 due 09
09/22-09/28	Graphs	KT 4.1-4.2	
09/29-10/05	Greedy algorithms	KT 4.4-4.5	A2 due 10
10/06-10/12	Greedy algorithms	KT 5.1-5.3 + Master Theorem (Wikipedia) (https://en.wikipedia.org/wiki/Master_theorem_(analysis_of_algorithms))	MT1 in cla 10/09
10/13-10/19	Divide and conquer	KT 5.4	
10/20-10/26	Divide and conquer	KT 6.1-6.3	A3 due 10
10/27-11/02	Dynamic programming	KT 6.4, 6.6	
11/03-11/09	Dynamic programming		MT2 in cla 11/06
11/10-11/16	Dynamic programming	KT 8.1, 8.3, 8.4, + quick skim of KT 8.10	A4 due 11

9/5/24, 9:07 AM

CPSC_V 320 101/102 2024W1 Intermediate Algorithm Design and Analysis

11/17-11/23	Dynamic programming; NP-completeness		
11/24-11/30	NP-completeness	KT 8.5, 8.10	
12/01-12/07	NP-completeness		A5 due 12