

MONTH	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Week	
JANUARY		13	Lecture: Introduction, algorithm analysis and the selection problem		Lecture: Concrete models and lower bounds Homework 1 out	Recitation: Lower bounds		1	
		20 MLK DAY	Lecture: Integer sorting	Homework 1 due	Lecture: Hashing, universal and perfect hashing Homework 2 out	Recitation: Integer sorting and hashing		2	
		27	Lecture: Fingerprinting Programming Problem 1 out	Homework 2 due	Lecture: Streaming Algorithms Homework 3 out	Recitation: Streaming and fingerprinting		3	
FEBRUARY		3	Lecture: Amortized analysis		Lecture: Union-Find Homework 3 orals	Recitation: Amortized Analysis and Union Find Programming Problem 1 Due		4	
		10	MIDTERM ONE (7:00PM)		Lecture: Range query data structures Homework 4 out	Recitation: Range queries		5	
		17	Lecture: Dynamic Programming Programming Problem 2 out	Homework 4 due	Lecture: Dynamic Programming II Homework 5 out	Recitation: Dynamic programming		6	
		24	Lecture: Network Flows I: Flows, Cuts, and Matchings	Homework 5 due	Lecture: Network Flows II: Polynomial-time and Min-cost Flow	Recitation: Network flows Programming Problem 2 Due		7	
MARCH		3	SPRING BREAK						
		10	Lecture: Game Theory Programming Problem 3 out		Lecture: Linear Programming I: Fundamentals and Modeling Homework 6 out	Recitation: Game theory & Linear programming		8	
		17	Lecture: Linear Programming II: Duality Homework 6 orals		Lecture: Linear Programming III: Seidel's Algorithm Programming Problem 3 Due	Recitation: More linear programming		9	
		24	MIDTERM TWO (7:00PM)		Lecture: Online Learning & Multiplicative Weights Alg Homework 7 out	Recitation: Online learning and multiplicative weights algorithm		10	
		31	Lecture: Approximation Algorithms Homework 7 due		SPRING CARNIVAL			11	
APRIL		7	Lecture: Online Algorithms Programming Problem 4 out		Lecture: Computational Geometry I Homework 8 out	Recitation: Approximation and online algorithms		12	
		14	Lecture: Computational Geometry II: Randomized Incremental Homework 8 due		Lecture: Polynomials Homework 9 out	Recitation: Computational geometry Programming Problem 4 Due		13	
		21	Lecture: The Fast Fourier Transform Homework 9 orals		Lecture: Gradient Descent	Recitation: Polynomials, FFT, Gradient Descent		14	
		28	FINAL EXAM WEEK						15