

/SI335/Spring AY20 - Calendar

January 2020						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7 <u>Class 1</u> Introduction Week 1 Monday Schedule	8 <u>Class 2</u> Expressing Running Time	9	10 <u>Class 3</u> Analyzing simple iterative algorithms	11
12	13 <u>Class 4</u> Proving Correctness for Iterative Algs Week 2	14	15 Loop invariants (continued) <u>Homework</u>	16	17 <u>Class 5</u> Analysis & Correctness for Simple Recursive Algorithms	18
19	20 MLK Day	21 Week 3	22 <u>Class 6</u> Analyzing and improving iterative algorithms I	23	24 <u>Class 7</u> Analyzing and improving iterative algorithms II	25
26	27 <u>Class 8</u> Basic iterative sorting Week 4	28	29 <u>Class 9</u> Finishing selection & insertion sort; Divide & Conquer	30	31 <u>Class 10</u> All about Merge Sort	

February 2020						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3 <u>Class 11</u> Master Theorem for recurrence relations Week 5	4	5 <u>Class 12</u> Lower bounds on sorting	6	7 <u>Class 13</u> Graph Algorithms (intro) & analysis revisited	8

9	10 <u>Class 14</u> Graph Algorithms - Search Week 6	11	12 <u>6Week Exam</u>	13	14 <u>Exam Debrief</u>	15
16	17 <u>Presidents Day</u>	18 <u>Week 7</u>	19 <u>Class 15</u> Graph Algorithms - Depth First Search revisited 6Wk Grades Due	20	21 <u>Class 16</u> Graph Algorithms - digraphs and topological sort	22
23	24 <u>Class 17</u> Optimization and Greedy Algorithms Week 8	25	26 <u>Class 18</u> Prim's MST Algorithm (get greedy!)	27	28 <u>Class 19</u> Analyzing Prim's MST Algorithm	29

March 2020						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2 <u>Class 20</u> Intro to memoization and dynamic programming (LCS) Week 9	3	4 <u>Class 21</u> Dynamic programming LCS	5	6 <u>Class 22</u> 0/1 Knapsack	7
8	9 <u>Spring Break</u>	10 <u>Spring Break</u>	11 <u>Spring Break</u>	12 <u>Spring Break</u>	13 <u>Spring Break</u>	14
15	16 <u>Class 23</u> Introduction to P and NP Week 10	17	18 <u>Class 24</u> Introduction to P and NP	19	20 <u>Class 25</u> Nondeterministic Computing & Polynomial Time Reduction	21
22	23 <u>Class 26</u> A Non-Trivial Reduction Problem Week 11	24	25 <u>Class 27</u> CIRCUIT-SAT and NP- COMPLETENESS	26	27 <u>Class 28</u> 3CNF-SAT & INDEPENDENT- SET	28
29	30 <u>Class 29</u> I've got an NP- Hard Problem ... What do I do?	31				

April 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 12Week Exam	2	3 Exam Debrief	4
5	6 <u>Class 30</u> Integer Multiplication Week 13	7 12Wk Grades Due	8 <u>Class 31</u> Matrix Multiplication	9	10 <u>Class 32</u> Number theoretic computations (intro)	11
12	13 <u>Class 33</u> Number theoretic computations (the Euclidean Algorithm) Week 14	14	15 <u>Class 34</u> Number theoretic computations (more Euclidean)	16	17 <u>Class 35</u> RSA	18
19	20 <u>Class 36</u> Number theoretic computations (RSA Example) Week 15	21	22 Course wrap-up / SOFs	23	24	25
26	27 Week 16	28	29 Reading Day	30		