Lecture	Date	Lecture Topic	Reading from Textbook
1	1/17	Computation	
2	1/19	Vector States	Chapter 2
3	1/24	Operators	3.1 - 3.6
4	1/26	Measurement	3.7 - 3.12
5	1/31	Operations on Qubits	4.1, 4.4
6	2/2	Single Qubit Gates	Chapter 7
7	2/7	Multiple Qubits	
8	2/9	Entanglement	4.2, 4.3
9	2/14	Bell's Inequality	Chapter 6
10	2/16	Quantum Teleportation	Chapter 8
11	2/21	Quantum Measurements	
12	2/23	Universality	
13	2/28	Midterm I	
14	3/2	Quantum Parallelism / Deutsch's Algorithm	Chapters 9 and 10
15	3/7	Hadamard Transform	
16	3/9	Simon's and Bernstein-Vazirani Algorithms	Chapters 11 and 12
17	3/21	Quantum Fourier Transform	Chapter 15 and 16
18	3/23	Shor's Algorithm	Chapter 17
19	3/38	Quantum Phase Estimation	
20	3/30	Grover's Algorithm	Chapter 20
24	4/4	Density Matrices	Chapter 5
22	4/6	Quantum Walks	

21	4/11	Midterm II	
23	4/13	Quantum Error Correction	Chapter 19
25	4/18	Variational Quantum Eigensolver	
26	4/20		
27	4/25	Superconducting Qubits	
28	4/27	Quantum Information & Black Holes	