

Tentative Course Schedule
 (subject to change)

Date	Topic		HW due	Project
Jan 10, 2023	Class introduction	} week 1		
Jan 12, 2023	GPAC			
Jan 17, 2023	GPAC	} week 2		
Jan 19, 2023	GPAC, Chaos			
Jan 24, 2023	—missed class—	} week 3	HW 1	
Jan 26, 2023	CRNs			
Jan 31, 2023	LTUs	} week 4		
Feb 2, 2023	—missed class—			
Feb 7, 2023	LTUs	} week 5	HW 2	
Feb 9, 2023	Turing universality			
Feb 14, 2023	Counter machines	} week 6		Presentation 1 (on Friday)
Feb 16, 2023	CAs			
Feb 21, 2023	CAs	} week 7	HW 3	
Feb 23, 2023	Kolmogorov complexity			
Feb 28, 2023	Uncomputability	} week 8	HW 4	
Mar 2, 2023	Entropy			
Mar 7, 2023	Keeping history	} week 9	HW 5	
Mar 9, 2023	Erasing input			
SPRING BREAK				
Mar 21, 2023	Pebble game	} week 10		Presentation 2 (on Friday)
Mar 23, 2023	Reversible circuits			
Mar 28, 2023	Billiard ball model	} week 11	HW 6	
Mar 30, 2023	Analogy to stochastic			
Apr 4, 2023	Cancellation	} week 12		
Apr 6, 2023	Cancellation			
Apr 11, 2023	Phase query	} week 13	HW 7	
Apr 13, 2023	Deutsch-Jozsa algorithm			
Apr 18, 2023	Shor's algorithm	} week 14	HW 8	
Apr 20, 2023	Shor's algorithm			

- Analog Computation
- Almost anything can compute everything
- Reversible Computation
- Quantum Computation