

FA16 - MATH 408 - Schedule (rev 20 August 2016)

Week	Date		Topic / Classwork	Things You Need To Do / Study For
Week 1	Tuesday	8/23/2016	Intro, Syllabus, SageMath	
	Thursday	8/25/2016	Modular Arithmetic, Shift, Affine Ciphers (2.1, 2.2)	
Week 2	Tuesday	8/30/2016	Classical: Vigenere (2.3)	
	Thursday	9/1/2016	Classical: Substitution (2.4), Playfair (2.6)	Mission 01 Classical Ciphers I (2.1, 2.2, 2.3)
Week 3	Tuesday	9/6/2016	Classical: Block (2.7)	
	Thursday	9/8/2016	Classical: Bits, Random Number Generation (2.8, 2.10)	Mission 02 Classical Ciphers II (2.4, 2.6, 2.7)
Week 4	Tuesday	9/13/2016	Number Theory: General (3.1)	
	Thursday	9/15/2016	ESCAPE ROOM	(In-class) Mission 03: Classical Ciphers III
Week 5	Tuesday	9/20/2016	Number Theory: Congruences (3.3)	
	Thursday	9/22/2016	Number Theory: CRT (3.4)	Exam I assigned; Mission 04 NT I
Week 6	Tuesday	9/27/2016	Number Theory: Fermat's Little Theorem (3.6)	None - work on Exam I
	Thursday	9/29/2016	Number Theory: Primitive Roots (3.7)	Exam I due
Week 7	Tuesday	10/4/2016	Number Theory: Square Roots, Squares (3.9, 3.10)	
	Thursday	10/6/2016	CURRENT ISSUES DEBATE	Mission 04: NT II and current issues
Week 8	Tuesday	10/11/2016	Simplified DES (4.1, 4.2)	
	Thursday	10/13/2016	DES, Passwords (4.4, 4.8)	Mission 05: NT III
Week 9	Tuesday	10/18/2016	RSA (6.1)	
	Thursday	10/20/2016	Attacks on RSA (6.2)	Exam II assigned; Mission 06: DES
Week 10	Tuesday	10/25/2016	Primality Testing (6.3)	None - work on Exam II
	Thursday	10/27/2016	Factoring (6.4)	Exam II due
Week 11	Tuesday	11/1/2016	Discrete Logs (7.1, 7.2)	
	Thursday	11/3/2016	Discrete Logs and ElGamal (7.5)	Mission 07: RSA
Week 12	Tuesday	11/8/2016	NO CLASS - Go vote!	
	Thursday	11/10/2016	Digital Signatures (9.1, 9.2)	Mission 08: Discrete Log
Week 13	Tuesday	11/15/2016	Digital Signature Algorithm (9.4, 9.5)	
	Thursday	11/17/2016	Secret Sharing (12.1, 12.2)	Mission 09: Digital Signature
Week 14	Tuesday	11/22/2016	NO CLASS - Thanksgiving!	
	Thursday	11/24/2016		
Week 15	Tuesday	11/29/2016	Quantum Cryptography	
	Thursday	12/1/2016	Quantum Cryptography	Exam III assigned; Mission 10: Secrets
Week 16	Tuesday	12/6/2016	Quantum Cryptography	None - work on Exam III
Finals	Thursday	12/15/2016	Finals	Exam III due