Week	Date	Meeting Number	Calendar for 2022-23 Fall Semester MATH 3070/5070 Number Theory (Barsamian)	QX
1	Mon Aug 22	1	Section 1.1 Variables	
	Wed Aug 24	2	2.1 Logical form and Logical Equivalence	
	Fri Aug 26	3	2.2 Conditional Statements	
2	Mon Aug 29	4	2.3 Valid and Invalid Arguments	**Q01**
	Wed Aug 31	5	3.1 Predicates and Quantified Statements I	
	Fri Sep 2	6	3.2 Predicates and Quantified Statements II	
3	Mon Sep 5		Labor Day Holiday: No Class	
	Wed Sep 7	7	3.3 Statements Containing Multiple Quantifiers	**Q02**
	Fri Sep 9	8	3.4 Arguments with Quantified Statements	
4	Mon Sep 12	9	**Exam 1 Covering Chapters 2,3**	**X1**
	Wed Sep 14	10	4th Edition Section 4.1 Direct Proof and Counterexample I: Introduction	
	Fri Sep 16	11	4th Edition Section 4.1 Direct Proof and Counterexample I: Introduction	
5	MonSep 19	12	4th Edition Section 4.1 Direct Proof and Counterexample I: Introduction	
	Wed Sep 21	13	4th Edition Section 4.2 Direct Proof and Counterexample II: Rational Numbers	**Q03**
	Fri Sep 23	14	4th Edition Section 4.2 Direct Proof and Counterexample II: Rational Numbers	
6	Mon Sep 26	15	4th Edition Section 4.3 Direct Proof and Counterexample III: Divisibility	
	Wed Sep 28	16	4th Edition Section 4.3 Direct Proof and Counterexample III: Divisibility	**Q04**
	Fri Sep 30		Fall Break: No Class	
7	Mon Oct 3	17	4th Edition Section 4.4 Direct Proof and Counterexample IV: Division into Cases	
	Wed Oct 5	18	4th Edition Section 4.4 Direct Proof and Counterexample IV: Division into Cases	**Q05**
	Fri Oct 7	19	4th Edition Section 4.6 Indirect Argument	
8	Mon Oct 10	20	4th Edition Section 4.6 Indirect Argument	
	Wed Oct 12	21	4th Edition Section 4.7 Indirect Argument: Two Famous Theorems needed for infinitude of primes	**Q06**
	Fri Oct 14	22	4th Edition Section 4.8 Application: Algorithms for Division Algorithm, GCD, Euclidean Algorithm	
9	Mon Oct 17	23	4th Edition Section 4.8 Application: Algorithms for Division Algorithm, GCD, Euclidean Algorithm	
	Wed Oct 19	24	**Exam 2 Covering Chapter 4**	**X2**
	Fri Oct 21	25	5.1 Sequences and Summation Notation	
10	Mon Oct 24	26	5.1 Product Notation, Factorial, n choose r	
	Wed Oct 26	27	5.2 Mathematical Induction I	**Q07**
	Fri Oct 28	28	5.2 Mathematical Induction I	
11	Mon Oct 31	29	5.3 Mathematical Induction II	
	Wed Nov 2	30	5.3 Mathematical Induction II	**Q08**
	Fri Nov 4	31	5.4 Strong Mathematical Induction	
12	Mon Nov 7	32	**Exam 3 Covering Chapter 5**	**X3**
	Wed Nov 9	33	1.2 and 1.3 Intro to Sets and Relations	
	Fri Nov 11		Veterans Day Holiday: No Class	
13	Mon Nov 14	34	8.1 Relations on sets	
	Wed Nov 16	35	8.2 Reflexivity, Symmetry, Transitivity	
	Fri Nov 18	36	8.3 Equivalence Relations	**Q09**
14	Mon Nov 21	37	8.4 Modular Arithmetic with Applications to Cryptography	
	Wed Nov 23		Thanksgiving Break: No Class	
	Fri Nov 25		Thanksgiving Break: No Class	
15	Mon Nov 28	38	8.4 Modular Arithmetic with Applications to Cryptography	
	Wed Nov 30	39	8.4 Modular Arithmetic with Applications to Cryptography	**Q10**
	Fri Dec 2	40	8.4 Modular Arithmetic with Applications to Cryptography	
16	Mon Dec 5		**Final Exam 10:10am - 12:10pm in Morton 218**	**FX**