Topic/Subtopic	Learning Strategies/ Activities	Week/Meeting
1.4 Least Common Multiple 1.5 Prime and Composite Numbers 1.6 Unique Factorization		
2. The Theory of Congruences 2.1 Basic Properties of Congruences 2.2 Linear Congruences 2.3 Linear Diophantine Equations 2.4 The Chinese Remainder Theorem 2.5 Fermat's Theorem 2.6 Wilson's Theorem 2.7 Euler's Phi Function and Its Properties 2.8 Euler's Generalization of Fermat's Theorem	Lecture Facilitated group discussion Problem solving Problem Set	Weeks 3-5
LONG TEST 1		Weeks 6
3. Primitive Roots 3.1 Exponents and Orders 3.2 Primitive Roots of Prime and Composite Numbers	Lecture Facilitated group discussion Problem solving Individual Inquiry	Weeks 7-8
4. Quadratic Reciprocity 4.1 Euler's Criterion 4.2 The Legendre Symbol and Its Properties 4.3 Quadratic Residues 4.4 The Quadratic Reciprocity Law	Lecture Facilitated group discussion Problem solving Problem set	Weeks 9-10
5. Number Theoretic Functions 5.1 The Functions and 5.2 The Mobius Inversion Formula 5.3 The Greatest Integer Function 5.4 Pythagorean Triples	Lecture-Discussions Individual/Group ReportingLecture Facilitated group discussion Problem solving	Weeks 11
LONG TEST 2	Lecture-Discussions Individual/Group Reporting	Weeks 12
Oral Report: Exposition of Paper		Week 13
FINAL EXAMINATION		Week 14

COURSE REQUIREMENTS

- 2 Long Tests
- 2 Problem Sets
- 1 Final Examination
- 1 Partial exposition of an article on Number Theory

SOURCES

TEXTBOOKS

- BaD