Dr. Mann's M328K Fall 2014 Introduction to Number Theory

| Date | Text Sections | Concepts |
| :---: | :---: | :---: |
| 27-Aug | 1.1 | Syllabus \& Numbers, Sequences, and Sums |
| 29-Aug | 1.1 | Numbers, Sequences, and Sums |
| 1-Sep | Holiday | Labor Day |
| 3-Sep | 1.2 | Sums and Products |
| 5-Sep | 1.3 | Mathematical Induction |
| 8-Sep | 1.3 | Mathematical Induction |
| 10-Sep | 1.5 | Divisibility |
| 12-Sep | 3.1 | Prime Numbers |
| 15-Sep | 3.1 | Greatest Common Divisors |
| 17-Sep | Review | Exam 1 Review |
| 19-Sep | Exam 1 | Sections 1.1-1.3, 1.5, 3.1 |
| 22-Sep | 3.3 | Greatest Common Divisors |
| 24-Sep | 3.3 | Greatest Common Divisors |
| 26-Sep | 3.5 | The Fundamental Theorem of Arithmetic |
| 29-Sep | 3.7 | Linear Diophantine Equations |
| 1-Oct | 4.1 | Introduction to Congruences |
| 3-Oct | 4.1 | Introduction to Congruences |
| 6-Oct | 4.2 | Linear Congruences |
| 8-Oct | 4.2 | Linear Congruences |
| 10-Oct | 4.3 | The Chinese Remainder Theorem |
| 13-Oct | 4.3 | The Chinese Remainder Theorem |
| 15-Oct | 4.4 | Solving Polynomial Congruences |
| 17-Oct | 4.4 | Solving Polynomial Congruences |
| 20-Oct | Flex Day |  |
| 22-Oct | Review | Exam 2 Review |
| 24-Oct | Exam 2 | Sections 3.3, 3.5, 3.7, 4.1-4.4 |
| 27-Oct | 6.1 | Wilson's Theorem and Fermat's Little Theorem |
| 29-Oct | 6.1 | Wilson's Theorem and Fermat's Little Theorem |
| 31-Oct | 6.1 | Wilson's Theorem and Fermat's Little Theorem |
| 3-Nov | 6.3 | Euler's Theorem |
| 5-Nov | 7.1 | The Euler Phi-Function |
| 7-Nov | 7.1 | The Euler Phi-Function |
| $10-\mathrm{Nov}$ | 7.2 | The Sum and Number of Divisors |


| 12-Nov | 7.3 | Perfect Numbers and Mersenne Primes |
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| 14-Nov | Flex Day |  |
| 17-Nov | Review | Exam 3 Review |
| 19-Nov | Exam 3 | 6.1, 6.3, 7.1-7.3 |
| 21-Nov | 13.1 | Pythagorean Triples |
| 24-Nov | 13.2 | Fermat's Last Theorem |
| 26-Nov | Flex Day | Student Presentations |
| 28-Nov | Holiday | Thanksgiving Holiday |
| 1-Dec | Flex Day | Student Presentations |
| 3-Dec | Flex Day | Student Presentations |
| 5-Dec | Review | Final Exam Review |
| 11-Dec | Final Exam | All Topics Covered During the Semester |

