## **Nebraska Wesleyan University**

Catalog 2016-2017

Course:

## **MATH 3400 Number Theory**

3 hours

Departments/Programs:

Mathematics

A study of fundamental concepts in number theory, including divisibility and factorization of integers, linear and quadratic congruences, the quadratic reciprocity theorem, Diophantine equations, number-theoretic functions, and continued fractions. Additional topics may include Euler's theorem and cryptography, perfect numbers and Mersenne primes, Pythagorean triples, and Fermat's Last Theorem.

Prerequisite(s): Grade of "C" or better in MATH 1610 Calculus II.