

MATH3323 - Elementary Number Theory

[MATH 3323](#) Elementary Number Theory (3 semester credit hours) Divisibility of integers, prime numbers, the Euclidean algorithm, greatest common divisors, Bezout coefficients, the fundamental theorem of arithmetic, linear congruences, the Chinese remainder theorem, Euler's totient function, polynomial congruences, Hensel's lemma, order, primitive roots, quadratic reciprocity, primality testing, factorization techniques, public key encryption algorithms, and additional topics. Prerequisite: A grade of at least a C- in either [MATH 2414](#) or in [MATH 2418](#) or [MATH 2419](#). (3-0) Y