Tentative Course Plan MTH 346

Text: C. Vanden Eynden *Elementary Number Theory*, 2nd Edn, Waveland Press, 2006.

Quizzes and HW's will be assigned in class.

Time line	Topic	Section of Text
Lecture 1:	Intro, GCD	Ch 0 & 1.1, 1,2
Lecture 2:	Euclidean Alg.	1.3, 1.4
Lecture 3:	Congruences, Induction	1.5, 1.6
Lecture 4:	Induction	2.1, 2.2
Lecture 5:	Unique Factorization	2.3, 2.4
Lecture 6:	Apps of Unique Factorization, $\tau(n)$	2.5, 2.6
Lecture 7:	Sums of divisors, Numerical Fns, review	3.1, 3.2
Lecture 8:	Numerical Fns, quiz	3.2
Lecture 9:	Perfect Numbers, Mersenne, Fermat	3.3, 3.4
Lecture 10:	Euler's phi, Linear congruences	3.5, 4.1
Lecture 11:	Chinese Remainder, Fermat and Euler Thms, review	4.2, 4.3
Lecture 12:	Primality testing, quiz	4.4
Lecture 13:	Rat'l & irrat'l, Cont'd fractions	6.1, 6.2
Lecture 14:	Cont'd fractions, decimal representation	6.3, 6.4
Lecture 15:	Cryptography, review	4.5
Lecture 16:	Final	