MATH 406  Fall 2018  TuTh 2:00 - 3:15  Room: MTH B0421

Lecturer:
Larry Washington
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Office hours: Monday 10:30am - 11:30am, Thursday 12:40pm - 1:45pm

Course web page: www.math.umd.edu/~lcw/Math406.html

Grading:
Quizzes: 15% There will be a short quiz at the beginning of approximately every third class. One quiz will be dropped.
Graded Homework: 10%
Two midterms: 20% each. The tentative dates for the midterms are October 4 and November 15
Final: 35%. The final exam will be on Saturday, December 15, 10:30am - 12:30pm
Grading will use + and - grades.

Homework problems will be of two types. Approximately three problems in each assignment will be handed in. The remaining problems are not to be handed in, but the problems on the quizzes will come directly from these homework problems.

Text: An Introduction to Number Theory with Cryptography, 2nd edition by James S. Kraft and Lawrence C. Washington

The course will cover most of the following chapters:
Chapter 2: Divisibility
Chapter 3: Linear Diophantine Equations
Chapter 4: Unique Factorization
Chapter 5: Applications of Unique Factorization
Chapter 6: Congruences
Chapter 7: Classical Cryptosystems
Chapter 8: Fermat, Euler, and Wilson
Chapter 9: RSA
Chapter 11: Order and Primitive Roots
Chapter 13: Quadratic Reciprocity
Chapter 16: Arithmetic Functions
Chapter 18: The Gaussian Integers
Material from other chapters if there is enough time.