DEPARTMENT OF MATHEMATICS California State University, Bakersfield MATH 430 – Number Theory

Instructor: Charles Lam

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Homepage: http://www.csub.edu/~clam

Class times: 6-8 (M-WSL 3, TR-SCI 3-213)

Office Hours: 2-3:10M, 1:30-3:10TR, 5:10-6MTR, or drop by when I am in.

Text: Elementary Number Theory, 7th ed., by David M. Burton. ISBN 978-0-07-338314-9

Course Objectives: This is a course on basic number theory. Topics include

- (a) Properties of Natural Numbers, Divisibility, Euclidean Algorithm
- **(b)** Prime Numbers
- (c) Modular Arithmetic, Congruences
- (d) Number-Theoretic Functions
- (e) Primitive Roots
- (f) Other number theory topics that are of current research interests
- (g) Computational Number Theory

Web page: The web page for the course is at http://www.csub.edu/~clam/math430f11.html

Homework: Every week, homework problems will be assigned and is due the week after.

Labs: Labs are conducted every Monday. <u>Attendance is required.</u> In each lab, there will be computer work assigned that uses the software Maple.

Grading: In addition to homework, there will be one test, and a final exam (cumulative). A pass (50%) in the final exam is required to obtain a final grade of D- or better.

Homework	25%
Lab	10%
Midterm Test	25%
Final Exam	40%

Test Dates:

• Test: October 17, Monday, in class (tentative)

• Final Exam: November 23, Wednesday, 5-7:30pm

Remarks:

- There will be no make-up exams or tests. If you know in advance that you are going to miss an exam, please make your arrangements with me at least one week ahead.
- Please hand in homework on time. Late homework will be accepted up to the beginning of next class for 50% of credit.

Academic Dishonesty:

You are encouraged to work with your classmates in labs and homework. However, YOU ARE REQUIRED TO HAND IN WORK WRITTEN BY YOURSELF. A rule of thumb is to destroy any evidence of discussion before writing up the solutions yourself.

If you collaborated with anyone, ACKNOWLEDGE COLLABORATORS. Please also note that, ACKNOWLEDGING YOUR FRIENDS ON THE CONTRIBUTION DOES NOT MEAN YOU HAVE THE RIGHT TO COPY OTHERS' WORK. YOU MUST WRITE THE SOLUTIONS IN YOUR OWN WORDS.

If you are caught cheating, the policy for this class is -10% to the final grade on the first offense, -20% for the second, and -50% thereafter.