

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

**Instructor:** Charles Lam

**Office:** SCI 114E

**Phone:** (661) 654 2403

**Email:** clam@csub.edu

**Homepage:** <http://www.csub.edu/~clam>

**Class times:** 6-8TR, SCI 177, 6-8W, SCI 176.

**Office Hours:** 3:30-6TR, or drop by when I am in.

**Text:** Elementary Number Theory in Nine Chapters, 2nd Ed., by James J. Tattersall. ISBN 0-521-61524-0

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

- (a) Properties of Natural Numbers, Divisibility, Prime Numbers, Perfect Numbers
- (b) Modular Arithmetic and polynomial congruences
- (c) Representations of Integers
- (d) Partitions
- (e) Computational Number Theory

**Web page:** The web page for the course is at <http://www.csub.edu/~clam/math430f07.html>

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

**Labs:** Labs are conducted every Wednesday. Attendance is required. In each lab, there will be computer work assigned that uses the software Maple.

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

Homework .....	15%
Lab .....	10%
Test 1 .....	20%
Test 2 .....	20%
Final Exam .....	35%

**Test Dates:**

- First Test: October 10, Wednesday (tentative)
- Second Test: November 7, Wednesday (tentative)
- Final Exam: November 28, 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.