

**DEPARTMENT OF MATHEMATICS**  
**California State University, Bakersfield**  
**MATH 477 – Applied Cryptography**

**Instructor:** Charles Lam

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

**Class times:** 3:30-5:30M (SCI 176), 3:30-5:30TR (DDH 107E)

**Office Hours:** 10-11:30MTR, 1-2M, or drop by when I am in.

**Course Description/Objectives:** An introduction to cryptography, history and its present day use. Topics include symmetric ciphers, hash functions, data integrity, public-key encryption, digital signatures, key establishment, key management. Related topics such as prime generation, integer factorization, discrete logarithms, pseudo-random number generation and computational complexity will also be discussed.

**Text:** Introduction to Cryptography with Coding Theory, Second Edition, by W. Trappe and L.C. Washington

**Web page:** The web page for the course is at <http://www.csub.edu/~clam/math477w06.html>

**Labs:** You are required to work in groups of 2-4 on assigned problems and hand in the lab reports **individually** a week after.

**Grading:** In addition to labs and homework, there will be one midterm test, one take-home final exam, and a project.

Labs	20%
Homework	20%
Project	25%
Midterm	15%
Final Exam	20%