School of Electrical and Computer Engineering
Georgia Institute of Technology
ECE 8803 Secure Communications
Spring 2005

INSTRUCTOR

Professor Steven W. McLaughlin
Office: 301
Email: swm@ece.gatech.edu
Course Homepage:
http://www.ece.gatech.edu/users/swm/ECE8803/ECE8803.html
Office Hrs.: Immediately after class or by appointment.

GOAL

To provide an introduction to the basics of cryptography including substitution, block and stream ciphers, has functions and public key cryptosystems

COMMENTS

This course will be algorithm based, all of the homework will be computer projects.

TEXT

Cryptography – Theory and Practice, 2nd Edition, by Stinson, JCRC Press, 2002.

PREREQUISITES

Graduate standing

COURSE OUTLINE

Chap. 1: Classical Cryptography
Chap. 2: Shannon Secrecy
Chap. 3: Block Ciphers, DES, AES
Chap. 4: Hash Functions
Chap. 5: RSA
Chap. 6: PK Cryptosystems based on Discrete Logarithm
Advanced topics as time allows

EXAMS

GRADING POLICY

Project 1	10%
Project 2	20%
Project 3	25%
Project 4	25%
Final	20%

Honor Code: All projects are to be done individually. You may discuss technical content of the projects with your colleagues, but you must write your own software without any assistance from other colleagues. Violations of this policy will be considered a very serious beach of the GT Honor Code and will dealt with swiftly and severely.