General Information

Instructor

Matt Bishop Office: 2209 Watershed Sciences Office Hours: MW 12:10pm-1:00pm, F 11:00pm-11:50am

Lectures and Discussion Section

Lecture: MWF 10:00am–10:50am in 1062 Bainer *Discussion section: to be arranged*

Course Outline

Modern topics in computer security, including: protection, access control, operating systems security, network security, applied cryptography, cryptographic protocols, secure programming practices, safe languages, mobile code, malware, privacy and anonymity, and case studies from real-world systems. Not open for credit to students who have taken course 235.

Course Goals

- Understand what computer security is and learn its basic limits;
- Learn the basic policy models underlying security;
- Know about common vulnerabilities, the basics of software security and formal verification;
- Learn the basic techniques of cryptography;
- Learn about host-based security, network security, and intrusion detection; and
- Explore other topics of interest.

Prerequisite

ECS 150, Operating Systems; ECS 152A, Computer Networks, is strongly recommended

Text

M. Bishop, *Computer Security: Art and Science*, Addison-Wesley, Boston, MA (2003). ISBN 0-201-44099-7; papers and handouts

Class Web Site

To access the class web site, go to SmartSite (http://smartsite.ucdavis.edu) and log in using your campus login and password. Then go to ECS 235A in your schedule. I will post announcements, assignments, handouts, and grades there, and you *must* submit assignments there. The alternate web site, http://nob.cs.ucdavis.edu/classes/ecs235a-2016-01, has all the handouts, assignments, and announcements.

Grading

There will be both homework and a project. In addition, you will need to present a paper from a con ference, and lead the questioning for another paper. There will be no final examination.

Homework	45%	Project	45%
Presentation	5%	Questioning	5%

Academic Integrity

The UC Davis Code of Academic Conduct, available at http://sja.ucdavis.edu/cac.html, applies to this class. For this course, all submitted work must be your own. You may discuss your assignments with classmates or the instructor to get ideas or a critique of your ideas, but the ideas and words you submit must be your own. Unless *explicitly* stated otherwise, collaboration is considered cheating and will be dealt with accordingly.