

## General Information

### Instructor

Matt Bishop  
Office: 2209 Watershed Science  
Office Hours: MW 11:30am–12:30pm; F 1:30pm–2:30pm

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### Lectures and Discussion Section

Lecture: MWF 10:00am–10:50am in 205 Olson  
Discussion section: to be arranged as needed

### Course Outline

Theoretical foundations of methods used to protect data in computer and communication systems. Access control matrix and undecidability of security; policies; Bell-LaPadula, Biba, Chinese Wall models; non-interference and non-deducibility; information flow and the confinement problem.

### Course Goals

- Learn about the access control matrix model and its variants, and how it is used to analyze the security of classes of systems;
- Learn about the mathematics underlying security policies;
- Understand the composition of policies;
- Learn about the confinement problem and information flow; and
- Explore other topics of interest.

### Prerequisite

ECS 235A, Computer and Information Security. ECS 150, Operating Systems, and ECS 120, Theory of Computation, are strongly recommended

### Text

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

### Class Web Site

To access the class web site, go to Canvas (<http://canvas.ucdavis.edu>) and log in using your campus login and password. Then go to ECS 235B 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/ecs235b-2017-02>, has all the handouts, assignments, and announcements.

### Grading

Homework is 50% of your grade and the project is 50% of your grade, and your in-class presentation is 10% of your grade.

### 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.