

General Information

Course

Name: ECS 235A, Computer and Information Security
CRN: 30649

Instructor

Matt Bishop *Email:* mabishop@ucdavis.edu
Office: 2209 Watershed Sciences *Phone:* (530) 752-8060
Office Hours: TuTh 11:00am–11:50am in 2203 Watershed Sciences; W 2:40pm–3:30pm by Zoom¹,
by appointment, or by chance

When you send me email, please *begin* the Subject field with “ECS 235A” so I see that the letter has to do with the class. I receive lots of email and, while I look at it all, I sometimes fall behind. When that happens, I skim the Subject fields to see which letters are very important. Putting “ECS 235A” at the beginning of the Subject field will tell me it is very important.

Lectures and Discussion Section

Lecture: MWF 1:10pm–2:00pm in 2218 TLC
Discussion section: W 3:10pm–4:00pm in 3214 TLC; I will announce any discussion sections to be held.

Teaching Assistant

Somdutta Bose *Email:* sombose@ucdavis.edu
Office: to be arranged
Office Hours: 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*, Second Edition, Addison-Wesley, Boston, MA (2019). ISBN 978-0-321-71233-2

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 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-2022-04>, has everything except the Zoom information, your grades, and you cannot submit work there.

¹ See the Announcements in Canvas for the Zoom link.

Grading

There will be both homework and a project, which *tentatively* will each be weighted 50%. I reserve the right to change this. There will be no final examination.

UC Davis Student Resources

UC Davis has developed a web site of student resources. The resources cover academic support, health and wellness, career and internships, and the campus community. The web site is <https://ebeler.faculty.ucdavis.edu/resources/faq-student-resources/>. Please consult it whenever you feel necessary. And as always, feel free to reach out to me, too. If I can't help, I will suggest people and places that might be able to.

Academic Integrity

The UC Davis Code of Academic Conduct, available at <https://sja.ucdavis.edu/files/cac.pdf>, 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.

Remember to cite, and give the source for, anything you copy or paraphrase, as is standard academic protocol. Plagiarism is cheating and will be handled as such.

Any cheating will be reported to the Student Judicial Agency (the SJA).