ECS 235B Module 1
Administrative Material

Let's Get the Hard Stuff Out of the Way

- Adding the class
  - If/when students drop, those on the waiting list will be admitted
  - The department policy controls who gets PTAs; it is available at https://cs.ucdavis.edu/graduate/current-students/faqs-current-grads (scroll down to Registration; the third question is "How do I get a PTA for a class?")
  - I can only issue PTAs in accordance with those directions (ie, only when *the department* asks me).

General Information

- Who we are
  - Instructor: Matt Bishop, office hours: *to be arranged*
  - TA: Muwei Zheng, office hours Th 2:00–4:00pm
- Goals:
  - Learn about the reference monitor and high assurance systems;
  - 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 and their composition;
  - Learn about the confinement problem and information flow; and
  - Explore other topics of interest.

General Information

- Prerequisites
  - ECS 235A (Computer and Information Security), or knowledge of security commensurate with it
  - Recommended: ECS 150 (Operating Systems(; ECS 120 (Theory of Computation)
- Texts:
  - M. Bishop, *Computer Security: Art and Science*, 2nd Edition, Addison-Wesley Professional, Boston, MA (2018). ISBN: 978-0-321-71233-2.
  - Recommended: R. Anderson, *Security Engineering: A Guide to Building Dependable Distributed Systems*, 3rd Edition, John Wiley & Sons, Inc., New York, NY (2020). ISBN: 978-1-119-64281-7.

General Information

- Class Web Site
  - It's on Canvas; log in there, and go to ECS 235B
  - If you don't have access and need it, please email me and I will add you
    - This *does not* mean you will be admitted to the course!
  - Backup web site: http://nob.cs.ucdavis.edu/classes/ecs235b-2021-01
- Grading
  - Homework is 48% total, and I expect 4 or 5 equally weighted assignments
  - Project is 48%, weighted as described in the handout
  - Quizzes are 4%; these are given in class, and should be done there; they *must* be done by 5:00pm Pacific time on the next day
    - They should be very easy if you have been listening!

General Information

- General UC Davis resources
  - Cover health and wellness, virtual classroom fatigue, etc.
  - You can also come to me and I will either help or suggest where you can get help
  - Web site: https://ebeler.faculty.ucdavis.edu/resources/faq-student-resources/
- Academic integrity
  - Paramount!!! And plagiarism is a violation of academic integrity
  - Follow the UC Davis Code of Academic Conduct
    - Available at https://ossja.ucdavis.edu/code-academic-conduct
  - I report cheating to the Office of Student support and Judicial affairs; they handle it appropriately

Homework

- Due at 11:55pm on the due date, unless stated otherwise

- Submit it on Canvas
  - We'll give you comments and grades on Canvas too
  - None of this will be on the secondary web site; only on Canvas

- Don't be wishy-washy in your answer

- Write it in good English; be clear and concise
  - An example of a good answer is on the web site

- Submit PDF or text files *only*; do *not* submit other formats!
  - Other formats often don't render well across all systems

Homework

- Late policy: initially, no points off
  - I reserve the right to change this if abused
  - I will *not* post answers until *all* turn in that assignment
- Extra credit
  - It is *not* added into your homework score
  - It is used only if your grade is on a borderline (for example, right between an A- and an A; it helps determine which one you get

Term Project

- Goal: get you to explore an area of security in depth

- It can be:
  - Detailed survey or research paper
  - Programming project on validating or working with some formalism
  - Implementing a policy model and formally verify your implementation is correct

- Key rule: ***pick something that interests you***

- Team size: no more than 3
  - If for some reason a team wants more than 3 people, talk to me about it
  - The larger the team, the more I will expect from it

Term Project

Due dates:

- *Project selection*: January 22, 2021; 10% of project score
- *Progress report*: February 12, 2021; 20% of project score
- *Final project*: March 18, 2021, by 3:00pm; 70% of project score

Only one team member needs to submit these

- Other term members need to submit a short text file saying who is submitting the material

Class

- Zoom fatigue

- Recordings
  - So if you are in a different time zone and can't attend class, you can see the recordings

- Asking questions: speak up!
  - You can raise your hand and I will unmute you
  - You can ask in the chat room and the TA or I will answer