

General Information

- Instructor** Matt Bishop; *office*: 3059 Kemper Hall; *phone*: (530) 752-8060
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office hours: TuW 10:00–11:00AM, Th 2:00–3:00PM, by appointment, or by chance
- Lectures** MWF 11:00–11:50AM in 146 Robbins
- Course Outline** Introduce the 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**
1. Learn about the access control matrix model and its variants, and how it is used to analyze the security of classes of systems;
 2. Learn about the mathematics underlying confidentiality and integrity policies;
 3. Understand the composition of policies;
 4. Learn about the confinement problem and information flow; and
 5. Learn some of the theory underlying malicious logic
- Prerequisites** 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 Professional, Boston, MA (2003); ISBN 0-201-44099-7.
- Class Web Sites** The main class web site is on MyUCDavis. To access it, go to <http://my.ucdavis.edu> and log in using your campus-wide login and password. Then go to ECS 235B in your schedule. Handouts and other documents will be posted there. I will also post announcements there. You can also go to the alternate site, <http://nob.cs.ucdavis.edu/classes/ecs235b-2007-01>. You can download the handouts from that site, but you cannot look at your grades there.
- Newsgroup** Announcements will be posted to the newsgroup ucd.class.ecs235b. Please read this newsgroup daily! If you want to discuss somethings about the class with your classmates, please use the newsgroup ucd.class.ecs235b.d. I'll read that newsgroup, too, and respond when appropriate.
- Homework** If no specific time is given, all work is due at 11:55PM on the due date. See the handout **All About Homework** for more information.
- Extra Credit** Extra credit in this course will be tallied separately from regular scores. If you end up on a borderline between two grades at the end of the course, extra credit will count in your favor. However, failure to do extra credit will never be counted against you, because grades are assigned on the basis of regular scores. You should do extra credit if you find it interesting and think that it might teach you something. Remember, though, it is not wise to skimp on the regular assignment in order to do extra credit!
- Grading** Homework, 50%; project, 50%. There is no final exam.
- Academic Integrity** Please see the *Winter 2007 Class Schedule and Room Directory* for a general discussion of this. In particular, for this course, all work submitted for credit must be your own. You may discuss your assignments with classmates or with me to get ideas or a critique of your ideas, but the ideas and words you submit must be your own. You must write up your own solutions and may neither read nor copy another student's solutions. Unless *explicitly* stated otherwise, collaboration is considered cheating and will be dealt with accordingly.