General Information

Instructor	Matt Bishop; *Office*: 3059 Kemper Hall; *Phone*: 752-8060 *Email*: bishop@cs.ucdavis.edu; *Web*: http://seclab.cs.ucdavis.edu/~bishop *Office Hours*: MW 11:00AM–12:00 noon; Th 9:00–10:00AM, by appointment, or by chance
Teaching Assistant	Michael Clifford Email: cs153t@cs.ucdavis.edu Office Hours: Tu 4:00–6:00PM; F 10:00–11:00AM
Lectures	TuTh 10:30AM–11:50AM in 1 Wellman. ***Note the room has changed!***
Discussion Section	F 9:00AM–9:50AM in 55 Roessler
Course Outline	Introduce principles, mechanisms, and implementations of computer security; learn how attacks work, how to defend against them, and how to design systems to withstand them

Course Goals   Some goals we hope you achieve:

1. learn about security in the UNIX system and programming environments;
2. learn how to attack a system, and to defend it by analyzing the system for vulnerabilities and ameliorating those problems;
3. understand the strengths, and weaknesses of cryptography as a tool of security;
4. learn how access to systems, resources, and data can be controlled;
5. learn the basics of writing security-related programs; and
6. learn about security in networks.

Prerequisite	The prerequisite for this course is ECS 150, Operating Systems. Students who have not taken, or are not taking, this course are at a serious disadvantage in this class and, if necessary, will be dropped to make room for those who have had the prerequisites.
Text	M. Bishop, *Computer Security: Art and Science*, Addison-Wesley, Boston, MA (2003). ISBN 0-201-44099-7
Computers	All registered students have been given an account on the computer science instructional machines in the basement.
Class Web Site	The class web site is on SmartSite. Go to http://smartsite.ucdavis.edu and log in using your campus-wide login and password. Then go to ECS 153 in your schedule. Handouts and other documents will be posted there. We will also post announcements there, too. If you do not have access to SmartSite, you can go to the alternate web site at http://nob.cs.ucdavis.edu/classes/ecs153-2008-01. You can download the handouts from that site, but you cannot look at your grades or submit homework there.
Homework	All work is due at 11:55PM on the date stated on the homework, unless otherwise stated. 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................. 25%   Midterm Exam..........................25%
                       Project.......................25%   Final Exam............................... 25%

Exams   *Midterm*: Friday, February 8 at 9:00AM–9:50AM
                       Final: Saturday, March 22 at 10:30AM–12:30PM

                       These are open book/open notes exams. No early or late exam will be given; if you miss an exam for medical reasons (you *must* document this; no other excuses are acceptable), you may be allowed or required to take a make-up exam, or the other parts of the course will be counted proportionally more (the choice is the instructor's). In particular, forgetting the time or place of an exam is not an excuse for missing it!

Academic Integrity   Please see the *Winter 2008 Class Schedule and Registration Guide*, pp. 141–142, 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, with the instructor, or with the teaching assistant in the course 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.
- For written homework, you must write up your own solutions and may neither read nor copy another student's solutions.
- For programs, you must create and type in your own code and document it yourself. Note that you are free to seek help while debugging a program once it is written.

A good analogy between appropriate discussion and inappropriate collaboration is the following: you and a fellow student work for competing software companies developing different products to meet a given specification. You and your competitor might choose to discuss product specifications and general techniques employed in your products, but you certainly would not discuss or exchange proprietary information revealing details of your products. Ask the instructor for clarification beforehand if the above rules are not clear.