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: Tu 12:00 noon–1:00PM, F 9:30–10:30AM, by appointment or by chance

Teaching Assistant  Lerone Banks, location to be determined
Email: ldbanks@ucdavis.edu
Office hours: to be determined

Lectures  TuTh 1:40–3:30PM in 1062 Banier

Discussion Sections
Section 001: F8:00AM–8:50AM in 176 Chemistry
Section 002: F3:10PM–4:00PM in 107 Cruess

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;
6. learn about security in networks.

Prerequisites  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 will be
dropped to make room for those who have had the prerequisites.

ISBN 0-201-44099-7

Computers  All registered students have been given an account on the computer science instructional
machines in the basement. If you have not done so already, please change your password
from the default as soon as you can. If it is not changed within a week, your account will
be disabled and you will have to see a system programmer to have it reset.

Class Web Site  The 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 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 MyUCDavis, you can go to the alternate web site at
http://nob.cs.ucdavis.edu/classes/ecs153-2005-02. You can download the handouts from
that site, but you cannot look at your grades there.

Class Newsgroup  Information about this class, homework assignments, and so forth, will be posted to the
newsgroup ucd.class.ecs153. Read this newsgroup daily! We’ll use it to put out important
information. Please do not post to this newsgroup. If you want to post things about the class,
please use the appropriate discussion newsgroup (ucd.class.ecs153.d). Discussing
something in that newsgroup is perfectly fair.

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

25% Homework 25% Midterm exam
25% Programs 25% Final exam

Exams

Midterm — Tuesday, April 28, 2005 in class
Final — Wednesday, June 15, 2005, 4:00PM—6:00PM
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 Spring 2005 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, with instructors, or with teaching assistants or readers 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.