Class Information

What?

• It’s about network security
• Textbook:
  – Does everybody have the book?
• Course Reserves at Science Library
• Reference Book:
  – *Computer Security: Art and Science* by Matt Bishop
• Web Page: [www.cs.uoregon.edu/classes/03F/cis410netsec/](http://www.cs.uoregon.edu/classes/03F/cis410netsec/)

Prerequisites

• CIS 410/510 on Computer Security
  – Materials will be reviewed
• Or equivalent courses
  – Talk with Jun

Who?

• Instructor:
  – Jun Li: lijun@cs.uoregon.edu
  – Office: Deschutes 334

When?

• Class hours:
  – Tuesdays, Thursdays 2:00 - 3:20 p.m.
  – 202 Cascade
• Office hours:
  – Fridays 14:00 - 15:00
  – 334 Deschutes

410 Grading Policy

• Undergrads:
  – Class participation: 10%
  – In-class quiz: 10%
  – Class project: 25%
  – Midterm: 55%
  – (There is no Final)
510 Grading Policy

- Graduate students
  - Class participation: 10%
  - In-class quiz: 10%
  - Class project: 55%
  - Midterm: 25%
  - (There is no Final)

Quiz

- Quiz:
  - To check your learning quality
  - No announcement in advance
  - Often in 5 minutes

Midterm

- Will test your understanding of materials covered in class
- To get a good grade, understand the lecture notes!
  - Also use lecture notes as the guideline for reading the textbook and other materials
- Handling simple, real scenarios may be tested

Class Project

- 1-3 people per team
- Identify a security problem to solve by yourself
  - But talk to me before decided
  - Typically you should get your hands dirty
- Be ambitious:
  - A good work can be publishable
- Be down-to-earth
  - Make sure you make solid progress day by day

Project Report Contents

- A final report MUST contain:
  - Title
  - Author name
  - Introduction
    - Problem statement
    - Motivation
    - Prior work (if none or little, then say so)
    - Overview of your approach
  - Design
  - Implementation
  - Evaluation
    - Analysis
    - Measurement or simulation results
  - Conclusions
  - Acknowledgment
  - References

Project Report Format

- Email me in PDF format
  - Imagine you are publishing a paper
    - 5 pages on letter-sized paper, 1” margin on all sides, single space, 11 Times New Roman font
    - At most 5 graphs, each smaller than 3.5” x 3.5”
How Would I Grade Projects?

- I’ll consider the following factors:
  - Is the idea original?
  - Are your hands dirty?
  - Are in-class presentation and progress report well done?
    - A good project web page also helps
  - A well-presented final report
  - Positive attitude: proactive, constant interaction with me, lots of discussion

Class Weekly Schedule

- Week 1 (9/30, 10/2): Class syllabus; overview of network security (I)
  - NO CLASS on THURSDAY
- Week 2 (10/7, 10/9): Overview of network security (II)
- Week 3 (10/14, 10/16): Cryptography review
- Week 4 (10/21, 10/23): Kerberos and PKI
- Week 5 (10/28, 10/30): IPsec (AH, ESP, IKE)

(cont’d)

- Week 6 (11/4, 11/6): Web security (SSL/DDoS/etc.)
- Week 7 (11/11, 11/13): Email security
- Week 8 (11/18, 11/20): Midterm; routing security
- Week 9 (11/25): Firewall and VPN
- Week 10 (12/2, 12/4): Q&A (or a selected topic)

Important Schedules

- Midterm:
  - Nov 18th, Tuesday, 2-3:20 p.m.
  - Coverage: all materials covered up to Week 7
- Project
  - A 5-10 minutes presentation (10/14) (grads only)
  - A 2-page progress report (10/30)
  - A final report (12/11)

On using emails

- Subject line must be in the format of
  - CIS 410: <issue>, or
  - CIS 510: <issue>
- Otherwise may be ignored
  - Sorry I have many emails to handle every day