### **Class Information**

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### What?

- It's about network security
- Textbook:
  - Network Security: Private Communication in a Public World, 2nd edition, by Charlie Kaufman, et al
  - 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/

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# Prerequisites

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

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### Who?

• Instructor:

- Jun Li: lijun@cs.uoregon.edu

- Office: Deschutes 334

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### When?

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

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# 410 Grading Policy

• Undergrads:

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

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### 510 Grading Policy

· Graduate students

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

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### Quiz

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

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#### 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

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### 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

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### **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

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### **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
    - $\bullet$  At most 5 graphs, each smaller than 3.5"x3.5"

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### 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

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### 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)

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### (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)

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# 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)

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# 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

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