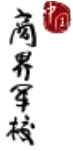




**PHBS**  
北京大学汇丰商学院



# Course Code Information Security Module 2, 2024-25

## Course Information

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**Instructor: Haiyang Zheng**

Office: 649

Phone:

Email:

Office Hour: Monday and Thursday from 8:30 to 9:30am, Wednesday from 3 to 5pm

**Teaching Assistant: Lei Cheng**

Phone:

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**Classes:**

Lectures: TBD

Venue: TBD

**Course Website:**

TBA

## 1. Course Description

### 1.1 Context

Course overview:

This course is an introductory course in information security. It teaches the basic concepts, principles, and fundamental approaches to secure computers and networks. The main topics include basics of security, security management and risk assessment, software security, operating systems security, database security, cryptography algorithms and protocols, network authentication and secure network applications, malware, network threats and defences, web security, mobile security, legal and ethical issues, and privacy.

Prerequisites:

One undergraduate level course on operating systems and networks, and one undergraduate level course on programming.

### 1.2 Textbooks and Reading Materials

- No required textbooks
- Optional: Introduction to Computer Security, Goodrich & Tamassia (G&T)
- Optional: The Craft of System Security, Smith & Marchesini (CRAFT)
- Optional: Computer Security: Principle and Practice, Stallings and Brown (P&P)

## Learning Outcomes

### **2.1 Intended Learning Outcomes**

<b>Learning Goals</b>	<b>Objectives</b>	<b>Assessment (YES with details or NO)</b>
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	YES
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	YES
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	YES
	2.2. Students will be able to apply leadership theories and related skills.	YES
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	
	3.2. Our students will practice ethics in the duration of the program.	
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	YES
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	YES
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	YES
	5.3. Our students will demonstrate competency in critical thinking.	YES

### **2.2 Course specific objectives**

See section 1.1 Context.

### **2.3 Assessment/Grading Details**

Attendance 5%, Assignments 20%, Exams 35%, Final Project 40%

Attendance will be checked randomly.

The level of background knowledge may vary among students, but it will be ignored in grading.

Grading will be strictly based on outcome, not on effort or progress.

### **2.4 Academic Honesty and Plagiarism**

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

For more information of plagiarism, please refer to *PHBS Student Handbook*.

## 2. Topics, Teaching and Assessment Schedule (Tentative)

Week	Dates	Topics
1		Introduction; general security principles
2		Memory safety: buffer overflow; x86 stack structure
3		Software security: control hijacking
4		Cryptography symmetric
5		Cryptography asymmetric
6		Midterm exam and project proposals
7		Web security
8		Network security
9		Advanced topics

## 3. Miscellaneous