



中山大學  
SUN YAT-SEN UNIVERSITY

# SYLLABUS

2017-1 (Fall 2017)

Class Hours: 14:20-16:00 Tue. / B102 (Week 1-20)

14:20-16:00 Thu. / B102 (Week 1-10)

Lecture Notes: [courseware\\_is\\_sysu@163.com](mailto:courseware_is_sysu@163.com)

Instructor: Cai Guoyang, email: [isscgy@mail.sysu.edu.cn](mailto:isscgy@mail.sysu.edu.cn)

**Information Security: Theory & Applications**

School of Data & Computer Science, Sun Yat-sen University

# Syllabus

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- **A. DESCRIPTION**

- The Importance of Web Security

- ✧ CNCERT/CC Annual Report 2016
    - ✧ OWASP Top 10 For 2013

- Prerequisite

- ✧ Discrete Mathematics
    - ✧ C-like Languages
    - ✧ Operating Systems
    - ✧ Computer Networks



# Syllabus

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- **B. ORGANIZATION**
  - Lecture Time
  - Home works
  - Lab Works



# Syllabus

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- **C. COURSE OBJECTIVES**
  - To introduce
  - To develop
  - To provide



# Syllabus

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- **D. COURSE TOPICS**

- Fundamentals of Information Security
  - ✧ Introduction to Information Security
  - ✧ Cryptographic Techniques
  - ✧ Authentication Techniques
- Internet Security
  - ✧ Introduction to Internet Security
  - ✧ Network Attack and Defence
  - ✧ Firewall
  - ✧ Intrusion Detection
- Web Security
  - ✧ The Architecture and Security of Web Applications
  - ✧ Security Flaws of Web Applications
  - ✧ Secure Web Programming

# Syllabus

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- **E. TEXT AND REQUIRED SUPPLIES**

- Course Notes

- ✧ [courseware\\_is\\_sysu@163.com](mailto:courseware_is_sysu@163.com)

- References

- ✧ William Stallings, Lawrie Brown, Computer Security, Pearson (2008)
    - ✧ Ross Anderson, Security Engineering, 2th ed., Wiley (2008)
    - ✧ Eric Cole, Network Security Bible, 2th ed., Wiley (2009)
    - ✧ Dafydd Stuttard, Marcus Pinto, The Web Application: Hacker's Handbook, 2th ed., Wiley (2011)
    - ✧ Paco Hope, Ben Waltber, Web Security Testing Cookbook, O'Reilly (2009)



# Syllabus

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- **F. GRADING PLAN**

- Assignments 30%
  - ✧ Pls. send to **TA**
  - ✧ You can discuss the problems with your classmates, but all work handed in should be original, written by you in your own words and uploaded on time.
  - ✧ **No late homework will be accepted.**
- Final Exam 60%
- Attendance 10%

# Syllabus

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- **G. CLASSROOM RULES OF CONDUCT**
  - Cell phone using
  - Laptop using
  - Food & drink
  - Being Late for class

