

SYLLABUS

2017-1 (Fall 2017)

Class Hours: 10:00-11:40 Mon. / B101 (Week 1-20)

16:20-18:00 Thu. / B101 (Week 1-10)

Lecture Notes: courseware_ns_sysu@163.com

Instructor: Cai Guoyang, email: isscgy@mail.sysu.edu.cn

Web Security: Theory & Applications

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

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





B. ORGANIZATION

- Lecture Time
- Home works
- Lab Works

• C. COURSE OBJECTIVES

- To introduce
- To develop
- To provide

D. COURSE TOPICS

- Fundamentals of Information Security
 - ♦ Introduction to Information Security
 - ♦ Cryptographic 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

E. TEXT AND REQUIRED SUPPLIES

- Course Notes
- References
 - ♦ William Stallings, Lawrie Brown, Computer Security, Pearson (2008)
 - → Ross Anderson, Security Engineering, 2th ed., Wiley (2008)

 - → 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)

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%

G. CLASSROOM RULES OF CONDUCT

- Cell phone using
- Laptop using
- Food & drink
- Being Late for class