

Syllabus: CIS 4360 - Secure Computer Systems

Spring 2017

1 General Information

Instructional Staff:

Prof. Qiang Zeng, email: qzeng@temple.edu

Meeting hours: Tuesday and Thursday 3:30–4:50pm, Tuttleman 302

Office hours: Tuesday and Thursday 2:30–3:30pm, SERC 328

Prerequisite:

CIS 3207: Introduction to Systems Programming & Operating Systems

Description:

This course covers mechanisms, approaches, and techniques used to build a secure computer system. The course will be divided into the following modules: security basics (e.g., cryptography, authentication, access control); common attacks and threats (e.g., DDoS, worms, rootkits); hardware security (e.g., side-channel attacks, trusted computing); architectural mechanisms (e.g., sandboxing, virtualization); and ad hoc security concerns and measures (e.g., web security, IDS).

2 Textbooks

Required:

- “Security Engineering”, Ross Anderson, 2nd edition, 2008. // Comprehensive content; many topics are touched but not deeply explained, though. E-book: <https://www.cl.cam.ac.uk/~rja14/book.html>

Optional:

- “Computer Security: Principles and Practice”, Stallings and Brown, 3rd edition, 2014. // Easy to follow; strength in theory.

3 Grading

Assignments: 20%

Midterm: 35%

Final: 45%

4 Dates of Importance

- First class: Tue, Jan 17
- Last day to add or drop: Mon, Jan 30
- **Midterm: Thur, Mar 09, 3:30–4:50pm**
- Spring break: Mar 13–19
- Last day to withdraw: Wed, Mar 22
- Last class: Thur, Apr 27
- **Final: Thur, May 09, 1–3pm**

5 Policies

Cheating: Feel free to discuss assignments with your classmates verbally. However, **do not share your solutions with other students; do not copy solutions of others or online.** Such behaviors will be reported to the University and lead to an “F” grade.

Grading policy: If you disagree with any grade, send emails to the instructor documenting the reasons and evidence; the instructor will respond in email. If you are still dissatisfied with the response, please talk with the instructor. For a grade dispute to be considered, the written grievance must be submitted within two weeks of when the respective grade is given.

No late submissions: Late submissions will be rejected and lead to a score 0; no excuse.

Accommodations for Students with Disabilities

Any student who has a need for accommodation based on the impact of a documented disability, including special accommodations for access to technology resources and electronic instructional materials required for the course, should contact me privately to discuss the specific situation by the end of the second week of classes or as soon as practical. If you have not done so already, please contact Disability Resources and Services (DRS) at 215-204-1280 in 100 Ritter Annex to learn more about the resources available to you. I will work with DRS to coordinate reasonable accommodations for all students with documented disabilities. (<http://www.temple.edu/studentaffairs/disability/accommodations/>).

Student and Faculty Academic Rights and Responsibilities

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has a policy on Student and Faculty and Academic Rights and Responsibilities (Policy #03.70.02) which can be accessed through the following <http://policies.temple.edu/PDF/99.pdf>.