

# Tentative Syllabus

Here are the topics and readings for each week. This is tentative, because we may go slower (or faster) than this schedule shows, and I may add some topics and remove others. If there is something you want to hear about and it is not listed here, please ask me about it; I'm very willing to change topics based on class interest!

## **Week 1: March 31-April 1 (1 class)**

**Topics:** Introduction to computer security

**Reading:** §1

## **Week 2: April 4-April 8 (2 classes)**

**Topics:** Principles of secure design; access control matrix model, HRU result

**Reading:** §2, 3.1–3.2,13

## **Week 3: April 11-April 15 (2 classes)**

**Topics:** Take-Grant Protection Model, SPM, expressive power, TAM

**Reading:** §3.3–3.5

## **Week 4: April 18-April 22 (2 classes)**

**Topics:** Policies in general, Bell-LaPadula confidentiality model, System Z

**Reading:** §4, 5

## **Week 5: April 25-April 29 (2 classes)**

**Topics:** Integrity policy models, other policy models

**Reading:** §6, 7

## **Week 6: May 2-May 6 (2 classes)**

**Topics:** Noninterference, nondeducibility

**Reading:** §8

## **Week 7: May 9-May 13 (2 classes)**

**Topics:** Basic cryptography, key management, PKI

**Reading:** §9, 10, 14.5

## **Week 8: May 16-May 20 (2 classes)**

**Topics:** Authentication, access control mechanisms

**Reading:** §12, 15

## **Week 9: May 23-May 27 (2 classes,)**

**Topics:** Information flow, confinement problem

**Reading:** §16, 17

## **Week 10: May 30-June 3 (2 classes)**

**Topics:** Auditing, Intrusion detection

**Reading:** §24, 25

**Week 11: June 6-June 8 (1 class)**

**Topics:** Review

**Reading:** none