

March 31, 2025 Outline

Reading: *text*, §1, 2, 20.1.2.2

Due: Homework #1, due April 14; Project selection, due April 16

Module 1

1. Introduction to class
 - (a) General information
 - (b) Homework
 - (c) Handouts

Module 2 (Reading: *text*, §1)

2. The basic components of security

Module 3 (Reading: *text*, §20.1.2.2)

3. Reference monitors and security policy

Module 4 (Reading: *text*, §2)

4. Access control matrix and entities
 - (a) Subject, objects (includes subjects)
 - (b) State is (S, O, A) where A is access control matrix
 - (c) Rights (represent abstract notions)
5. Instantiating access control matrices
 - (a) Example: UNIX file system
 - i. *read, write, execute* on files
 - ii. *read, write, execute* on directories
6. Access control matrix and entities
 - (a) Example: Boolean expressions
 - (b) Example: History and limiting rights