



CIS*3110/Operating Systems

Chapter Mappings/W25

TEXTBOOK TOPICS

CIS*3110 Topics and Textbook References

1 “Processes” Notes

1.1 Course Intro

- Intro/System organization (1.2, 1.3, 1.4)
- Operating System Structures (2.1, 2.2, 2.3, 2.8)

1.2 Process Management (Textbook Parts 2 and 3)

- Processes (3.1, 3.4, 3.5)
- Threads (4.1, 4.2, 4.3, 4.6)
- Synchronization (6.1, 6.2, 6.4, 6.5, 6.6, 7.1)
- Deadlock (8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7)
- Scheduling (5.1, 5.2, 5.3)

2 “M/M/1” Notes

- Additional reading (if required) listed in bibliography of these notes

3 “Memory” Notes

3.1 “Memory” (Textbook Part 4)

- Main Memory (9.1, 9.2, 9.3, 9.4, 9.5)
- Virtual Memory (10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.8)

4 Midterm exam (week 6)

5 “I/O” Notes

5.1 Storage Management (Textbook Part 5)

- Mass-Storage Structure (11.1, 11.2, 11.3)
- I/O Systems (12.2, 12.3, 12.4, 12.5)

5.2 File System (Textbook Part 6)

- File-System Interface (13.1, 13.2, 13.3, 13.4)
- File-System Structure (14.1, 14.2, 14.3, 14.4, 14.5, 14.6)
- File-System Internals (15.5, 15.6, 15.8)

6 “Security” Notes

6.1 Security and Protection (Textbook Part 7)

- Security (16.1, 16.2, 16.3)
- Protection (17.1, 17.2, 17.3, 17.4, 17.5, 17.6, 17.7, 17.8, 17.9)

7 “Networking and Distributed Systems” Notes

- Networks and Distributed Systems (19.1, 19.2, 19.3, 19.4, 19.6)