



Course Textbook:

Silberschatz, A., Galvin, P. & Gagne, G. (2018). *Operating System Concepts* (10th ed.). John Wiley & Sons.

Course Schedule

Course Code: ITSC 205

Course Name: Operating
Systems Internals

Term: Winter 2019

Instructor(s):

| Week | Date | Topic (i.e. Theory / Lab) | Learning Materials | Evaluations Due Date |
|------|-----------------|---|---|------------------------|
| 1 | Jan 7 – Jan 11 | Operating Systems Basics | 1. Text Book chapters 1 and 21 2. “Windows Internals 7 th ” Chapter 13 and WMIC | |
| 2 | Jan 14– Jan 18 | OS Structure Systems Calls | 1. Text Book chapters 2 and 20 | Lab #1 |
| 3 | Jan 21– Jan 25 | Process Management | 1.Text Book chapters 3 and 20 | Lab #2 Assignment 1 |
| 4 | Jan 28– Feb 1 | Threads Management | 1.Text Book chapters 4 and 20 2.Handouts provided in Class | Lab #3 |
| 5 | Feb 4- Feb 8 | Process Scheduling | 1.Text Book chapters 5, 20 and 21 2. Windows Internals 7 th Process Management | Lab #3 Quiz#1 |
| 6 | Feb 11 – Feb 15 | Process Synchronization and Deadlock | 1. Text Book chapters 6, 7 and 8 20 and 21 | Lab #4 |
| | Feb 18 – Feb 22 | Family Day | READING WEEK | |

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| 7 | Feb 25 – Mar 1 | Memory Management | 1. Text Book Chapters 9, 20 and 21 | Lab #5 Assignment 2 |
| 8 | Mar 4 – Mar 8 | MID TERM | | Lab #6 |
| 9 | Mar 11 – Mar 15 | Virtual Memory | 1.Text Book Chapter 10 2. “Windows Internals 7 th ,” Memory management | Lab #6 |
| 10 | Mar 18 – Mar 22 | Mass-Storage and File Systems | 1.Text Book Chapter 11 ,13 and chapter 20 2. “Windows Internals 7 th ,” Storage management | Lab #7 Quiz#2 |
| 11 | Mar 25 – Mar 29 | File System Interface | 1.Text Book Chapter 13 and chapter 20 | Lab #8 Assignment 3 |
| 12 | Apr 1 – Apr 5 | File System Implementation | 1.Text Book chapters 13, 15 and 21 2. “Windows Internals 7 th ,” File Systems | Lab #8 |

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| 13 | Apr 8 – Apr 12 | I/O SYSTEMS | 1.Text Book chapters 12, and 20 | Lab #9 Quiz#3 |
| 14 | April 15– April 18 Good Friday | FINAL REVIEW | | Lab #10 Assignment 4 |
| 15 | April 23– April 26 Easter Monday | FINAL THEORY EXAM | | 20% topics before midterm 80% topics after midterm |