

# Global Learning Semesters

## Course Syllabus

Course: COMP-354 Operating Systems

Department: Computer Science

Host Institution: University of Nicosia, Nicosia, Cyprus



Course Summary		
Course Code	Course Title	Recommended Credit Hours
COMP-354	Operating Systems	3
Semester Offered	Contact Hours	Prerequisites
Spring	42	Comp 152 and sophomore standing. General knowledge of computer systems and programming.
Department	Level of Course	Language of Instruction
Computer Science	Upper Division	English

### Course Description

This course concentrates on the fundamental principles of a modern operating system. Emphasis is given to the technical topics related to computer systems and their relationships among architecture, systems software and applications software. More specifically the course covers the following topics: operating system structures, processes, CPU scheduling, process synchronization, deadlock, prevention and avoidance, memory management, virtual memory, file system interface, distributed systems, protection and security, and case studies (UNIX, Linux, and Windows NT).

### Instructor

Dr. Socrates Mylonas

### Course Aims and Objectives

To introduce students to the principles of modern operating systems and the technical topics related to computer systems with emphasis on the relationships among architecture, systems software and applications software.

### Teaching Methods

The course is delivered through a mixture of lectures and assignments.

### Course Teaching Hours

42 hours lectures/presentations. The course is delivered during the spring semester in 14-weeks (3 hours/week).

### Evaluation and Grading

Homework: 10%  
Test(s): 40%  
Final Exam: 50%

## Readings and Resources

### Required Textbook

A. Silberschatz, P. B. Galvin (1998); Operating System Concepts (5th Ed.); Addison-Wesley. (ISBN 0- 201-59113-8)

### Recommended Reading

H. M. Deitel (1990) Operating Systems (2nd Ed); Addison-Wesley. (ISBN: 0-201-50939-3)

Any general computer magazine (e.g. IEEE or ACM journals).

Andrew S. Tanenbaum, Modern Operating Systems 2nd Ed, Prentice Hall, 2001.