

N O T I C E**Operating Systems (GEIAL302-B2a)****REQUIREMENTS OF THE SUBJECT**

in the Spring Semester of the Academic Year 2024/2025

Objectives

The main objective of this course is to provide students an introduction to the computer Operating Systems. A further aim is to present the fundamental concepts, principles and methodologies with applications to modern operating systems.

Schedule for Weeks

- #1 Basic administration. Get to know the Requirements.
- #2 Introduction. Installation. OS types, functions.
- #3 Interfaces. OS structures and generations.
- #4 Events and its handling. Process. States. Scheduling.
- #5 Threads. Time-shearing. Schedulers.
- #6 Inter Process Communication.
- #7 Resource handling. Deadlock.
- #8 Memory management. Pager.
- #9 File-systems. I/O.
- #10 IT handling. Security. *Midterm exam.*
- #11 *Spring Holiday.*
- #12 *Spring Holiday.*
- #13 Disk management.
- #14 *Project task* presentation.
- #15 Summary. Repeating the midterm exams failed.

Getting the Signature

There are two lectures and two practical classes a week during the fifteen-week term-time. Regular attendance at the classes is compulsory. **One midterm exam** is to be written during the semester and **one project task** is to be done. Each lasts for 45 **minutes** and the **maximum score is 40**. Students are expected to score altogether at least 32 (40 %) to get the signature.

The midterm exam is to be held on **week 10** and the own project task is on **week 14**. Students who do not achieve the minimum prescribed score have to take a **make up exam** on **last week**. This exam lasts for 45 **minutes**, the **total score is 40** and the **passing score is 16 (40 %)**.

Students who fail to get the signature in the term-time can **make-up for the signature in the examination period**. This make-up exam lasts for 45 **minutes**, the **total score is 40** and the **passing score is 20 (50 %)**

Taking the Final Exam

Students with signature have to take the final exam in the examination period to complete the course. This written exam is 45 **minutes** long and the mark depends on the performance as shown in the proceeding table.

Score	0 – 19	20 – 23	24 – 27	28 – 31	32 –
Mark	<i>Fail(1)</i>	<i>Pass(2)</i>	<i>Fair(3)</i>	<i>Good(4)</i>	<i>Excellent(5)</i>

To reward regular work, one quarter of the score above 32 achieved in the term-time is added to the total score of the final exam.

Suggested Literature

- [1] Andrew S. Tannenbaum and Herbert Bos *Modern Operating Systems*, 4th Ed., Pearson Prentice-Hall, **2015** .
- [2] Cameron Newham *Learning the bash Shell*, 3rd Ed., O'Reilly Media, Inc. **2009**.
- [3] MS/Teams Lecturer's website

Miskolc, Feb 03, 2025.

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