

# Operating Systems

## “Lecture outline”

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Lecture available at <http://mathieu.delalandre.free.fr/teachings/operating1.html>

# Lecture outline (1)

- Head “Mathieu Delalandre”
- Topics
  - A. Computer architecture “P. Makris”
  - B. Operating systems: concepts and design “M. Delalandre”
  - C. Unix operating system “R. Bocquillon, T. Rault, P. Martineau”
  - D. Parallelism and concurrency “T. Rault”

		CM	TD/g	TP/g	Exam
A	P. Makris	2	2		
B	M. Delalandre	12	8		1/3
C	R. Bocquillon and al	4		16	1/3
D	T. Rault	8	4	8	1/3
		<b>26 h</b>	<b>14h</b>	<b>24h</b>	

- Part B: Lectures and practical works downloadable from <http://mathieu.delalandre.free.fr/teachings/operating1.html>

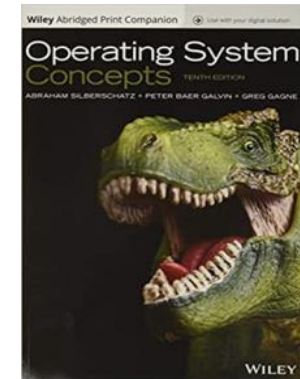
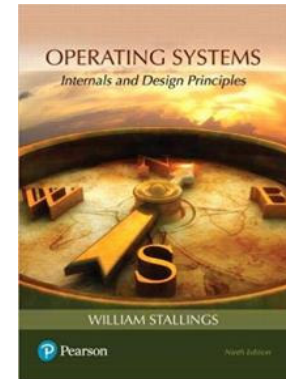
- Calendar
 

Starting	25 <sup>th</sup> of October 2023
Final exam	6 <sup>th</sup> of December 2023

# Lecture outline (2)

## Bibliography (SCD)

- [1] W. Stallings. Operating Systems, internals and design principles.  
Pearson, 2017, (ISBN-13: 978-0134670959).
- [2] A. Silberschatz and al. Operating Systems Concepts.  
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- [3] A.S. Tanenbaum and H. Bos. Modern Operating Systems:  
Global Edition. Pearson, 2014, (ISBN-13: 978-1292061429).
- [4] R.H. Arpaci-Dusseau and A.C. Arpaci-Dusseau.  
Operating Systems: Three Easy Pieces.  
Paperback, 2016 (ISBN-13: 978-1985086593).
- [5] V. Khemchandani and al. UNIX Programming : UNIX Processes, Memory  
Management, Process Communication, Networking, and Shell Scripting.  
Broché, 2022 (ISBN-13 : 978-9355510402). [univ-scholarvox-com](http://univ-scholarvox-com)
- [6] K. Amini. Extreme C : Taking you to the limit in Concurrency, OOP, and the  
most advanced capabilities of C.  
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# Lecture outline (3)

Part B. Operating systems: concepts and design “M. Delalandre”

1. Introduction
2. Process description and control
3. Uniprocessor scheduling
4. IPC and synchronization

At the corner. resources / memory management, I/O and drivers, computer security, disk drives, file systems, etc.