

**Course Title:** Operating Systems

**Lecturer:** Noha A. Yousri

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**Level:** Undergraduate (Third Year)

**Course Objectives:**

Understanding the major components of an OS (Theoretically and practically)

**Text Books:**

“Operating Systems”, by Deitel, Deitel and Choffnes, 3<sup>rd</sup> edition. (Main Text Book)

“Operating Systems, Internals and Design Principles”, by William Stallings, 3rd edition.(Reference).

**Course Contents:**

- Introduction (1/2 lectures)
- Hardware and Software (1 lecture)
- Processes Concepts (2 lectures)
- Thread Concepts (2 lectures)
- Concurrent Programming (5/6 lectures)
- CPU Scheduling (2/3 lectures)
- Memory Management (2/3 lectures)
- Disk Scheduling (1 lecture)
- Case studies: linux, Windows XP (1/2 lectures)

**Grading Scheme:**

Total marks: 125

Final exam: 90

Year's work: 35

(Midterm + sheets, quizzes and programming assignments)