Concept

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Operatingsystem Engineering
Educational Objectives

- An inauspicious into the secrets and a rationale of Pure [1]

  - Aspect-oriented programming [4]
  - Object orientation [8]
  - Program families [5]
  - Feature modeling [3]

The use of software-engineering techniques in system-software design

- Focusing on system-software flexibility, portability, and scalability
- An excursion on modern operating-system design and implementation

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Operating-System Engineering — Concept
Introduction

First problem analysis

Fundamentals
domain analyses, program families, and object orientation

Case study
development and development of Tal, a threads abstraction layer

Discussion
things nice to have and not to have

Revision
aspect orientation

Lessons learned

Conclusion
Subject Matter
Prerequisites

- structured computer organization
- operating systems
- C/C++, assembler
- no fear of stuff hard to digest
- some sort of staying power
- enjoy system-level programming
- structured computer organization, operating systems

Prerequisites
Syllabus

One lecture per week, two hours each..............................2 SWS

Subject presentation

One seminar per week, two hours each..............................2 SWS

Subject consolidation

Practise discussion

Computer practice \( N \geq 164 \) hours per week, \( 0 > N > 0 \) SWS
Achievement Control

- off unless otherwise otherwise, or enjoy...

- fail consultation in case of unsuccessful elaboration of one exercise
- consultation ssed in case of successful elaboration of all exercises
- examination on lecture and seminar stuff

- or practice
Academic Staff

- Wolfgang Schroeder-Preikschat
  - http://www4.informatik.uni-erlangen.de/~wosch

- Olaf Spinczyk
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Suggested Reading


