

# 第 1 讲：Advanced OS Overview

## 第一节：Course Overview

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# 课程信息

- Instructor: 陈渝
- Research area: OS



- TA: ...
- Course Representatives: 王润基、贾越凯、戴臻旻、王逸松...

# 预备知识

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- Why should I study this as a graduate student?

**OS is cool!**

**OS is important!**

**OS is challenging!**

**Just for fun!**



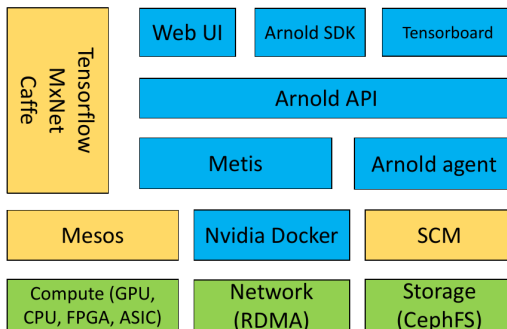


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  - Help other CS researches



- Lecture notes/papers (14 research domains)
  - ReadingList of OS
    - OS Arch, Process/Thread/Scheduling
    - Memory Management, Concurrency/Sync/Mutex
    - Distributed Systems, Virtual Machine Monitor
    - Network, File System, Scalability
    - Bugs/Security/Fault-Tolerant/Recovery
    - Encryption Authentication
    - Interface Design, Verification/Proof, DEVICES

## Reference Books

- Wolfgang Mauerer, **Professional Linux Kernel Architecture**
- Uresh Vahalia, **UNIX Internals– The New Frontiers**
- Daniel P. Bovet, **Understanding the Linux Kernel**
- Mark E. Russinovich, **Microsoft Windows Internals**
- Tanenbaum, **Modern Operating Systems**