

- · Faculté des sciences
- www.unine.ch/sciences

Operating Systems (3IN1031)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Bachelor en mathématiques	Cours: 2 ph Exercice: 2 ph	Voir ci-dessous	6
Bachelor en systèmes naturels	Cours: 2 ph Exercice: 2 ph	Voir ci-dessous	6
Master en informatique	Cours: 2 ph Exercice: 2 ph	Voir ci-dessous	6

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

· Semestre Printemps

Equipe enseignante

Lectures: Dr. Valerio Schiavoni Assistant(s): Simon Queyrut

Contenu

This course covers the fundamentals of operating systems and their underlying principles: process management and time sharing (including synchronization and scheduling), memory management, storage management. Exercises are based on simulations or simplified computer systems environments and help mastering the concepts presented during the lectures.

Forme de l'évaluation

50% of the grade from mandatory projects evaluated through the semester.

50% of the grade from the exam.

Written exam, 2 hours. Weekly quizzes are provided for self-evaluation of students' progress. These quizzes are corrected but are not graded.

Modalités de rattrapage

The semester projects and their grades are kept (students only have to re-do the actual exam), unless they are fully insufficient.

Documentation

Operating System Concepts with Java Abraham Silberschatz, Peter B. Galvin, Greg Gagne (Wiley)

The book is mandatory for the course but students do not have to buy it. Books will be available to borrow from the library for the entire semester.

Pré-requis

- no prior knowledge of operating systems concepts required
- no prior knowledge of UNIX required
- general knowledge of the Java programming language. Students without any knowledge of Java but knowledge of another object-oriented language should not have any problem taking the course, but it is recommended that they contact the instructor, who will provide pointers to documentation/online resources for a self-taught course.

Forme de l'enseignement

Every week: lecture (1h45), practicals (2h), weekly quiz corrected upon submission, practicals in the form of several mini-projects of 1 to 4 weeks.