- 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): Christian Göttel

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

The evaluation is based equally on the final exam (50% of the grade) and on the grades of the project assignments (50%). The project assignments are mandatory and are due on fixed dates announced during the first TA session. Upon failure at the exam, the grade for the assignments will be kept when the student passes the exam another time (note that it is not possible to secure a 4 by passing only the exam due to the 50%/50% rule). Weekly quizzes are provided for self-evaluation of students' progress. These quizzes are corrected but are not graded.

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 from the library 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 langage 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), practical (2h), weekly quiz corrected upon submission, practicals in the form of several mini-projects of 1 to 4 weeks.

URLs	1) https://moodle.unine.ch/course/view.php?id=1822