


 Faculty of Applied Sciences

**MAPR2631 Solid surface analysis and treatment**

[22.5h+22.5h exercises] 4 credits

This course is taught in the 1st semester

**Teacher(s):** Patrick Bertrand (coord.), Jacques Devaux, Alain Jonas, Bernard Nysten  
**Language:** French  
**Level:** Second cycle

**Aims**

Critical initiation of the students to the new physics based analysis methods for solid surface and interface characterization at the atomic scale.

**Main themes**

- Introduction to Surface Science
- Electron spectrometries: LEED, AES, XPS
- Ion spectrometries: ISS, RBS, SIMS
- Ion sputtering for depth profiling

**Content and teaching methods**

Nil

**Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)**

Nil

**Other credits in programs**

<b>MATR22</b>	Deuxième année du programme conduisant au grade d'ingénieur civil en science des matériaux	(4 credits)
<b>MATR23</b>	Troisième année du programme conduisant au grade d'ingénieur civil en science des matériaux	(4 credits)