



Faculty of Sciences

## PHYS2902 Optics

[30h] 3 credits

This course is taught in the 2nd semester

**Teacher(s):** Philippe Antoine  
**Language:** French  
**Level:** Second cycle

### Aims

This course aims to give a student a firm base for the practical part of wave optics and the quantitative treatment of diffraction and of the interferences in the context in modern optical instrumentation.

### Main themes

General optics  
Interference and diffraction  
Fourier optics  
Coherence  
Holography

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

Prerequisites: PHYS 2263 A - Classical electromagnetism.

Support: Photocopies of handwritten course notes.

Other references: Hecht, Optics - Addison Wesley Born and Wolf, Principles of optics - Pergamon 1975.

The course is completed by demonstrations and practical work, that will be performed within laboratory of applied physics (PHYS 2905).