

Introduction to NanoBiophotonics

In this course the fundamentals and recent developments of nanobiophotonics are reviewed. Nanobiophotonics is a cross-disciplinary among nanoscience, biophysics and photonics and the graduate students are provided with knowledge mainly in the issues of:

Photonics and Biomolecules - Tissue Optics,

Photonic Detection and Bio-Imaging Techniques,

Optical Biopsy, Intervention and Treatment Techniques,

Advanced Biophotonics and Bioinformatics

and Advanced Biophotonics for Nanomedicine

Graduate students are participated as well in four laboratories (Bioinformatics, Confocal Imaging, Monte-Carlo Simulations for Tissue Optics and AFM-imaging of biomolecules)

Grades are evaluated on written examination and team projects.