

SYLLABUS

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| <i>Classification</i> | Lecture 3 | <i>Course No.</i> | | <i>Instructor</i> | Jae Gwan Kim |
| <i>Course Title</i> | Biology+Medicine+Light=Biophotonics | | | | |
| <i>Course Outline</i> | | | | | |
| <p>This lecture gives an overview of biomedical optics and covers the following topics.</p> <ul style="list-style-type: none">- Light-tissue interactions- Biomedical optics in clinical diagnosis<ol style="list-style-type: none">1. Fluorescence imaging2. Raman spectroscopy3. Diffuse optical spectroscopy/imaging4. Laser speckle imaging5. Optical coherence tomography6. Two-photon microscopy,7. Photoacoustic imaging- Biomedical optics in therapy<ol style="list-style-type: none">1. Laser ablation2. Photodynamic Therapy3. Low-level light therapy | | | | | |
| <i>Prerequisite and References</i> | | NONE | | | |