

BME 531	Biomedical Optical Diagnostic				
Catalog Data	Theoretical and experimental principles of optically based diagnostic systems; emphasis on generating quantitative descriptions of biochemical and biophysical interactions of optic systems as applied to medical diagnostics and sensing. Spectroscopy is also covered.				
Course Total Credit Hours:	3	Lecture:	3	Laboratory:	-
Prerequisites:	Graduate Standing and consent of instructor				
Course Coordinator:	Biomedical Engineering Faculty				
Textbooks					
<ol style="list-style-type: none"> Handbook of Optical Biomedical Diagnostics by Valery V. Tuchin, 2002. 					
References					
<ol style="list-style-type: none"> Intermediate Optical Design by Michael J. Kidger, 2004. Near-Field Nano-Optics: From Basic Principles to Nano-Fabrication and Nano-Photonics (Lasers, Photonics, and Electro-Optics) by Motoichi Ohtsu and Hirokazu Hori, 1999. 					
Goals	Familiarize the students with the theoretical and experimental concepts of optical diagnostic systems.				
Projects					
Major CAD Packages					
Last Review:	Spring Semester 2008		Signature:		