

BME 536	Information Processing in Biomedical Engineering						
Catalog Data	Mathematical and computer modeling of physiological systems and mechanisms; principal emphasis on cardiovascular system, nerve cells, respiratory system, renal system, and skeletal-muscle.						
Course Total Credit Hours:	3	Lecture:	3	Laboratory:	-	Project	-
Prerequisites:	PHSL 410A, or CHEM 444, and ECE421, or consent of instructor						
Course Coordinator:	Biomedical Engineering Faculty						
Textbooks							
1. HDL Programming Fundamentals by N. Botros, 2005.							
2. Medical Physiology by Boron and Boulpaep, 2005.							
References							
1. Molecular Cell Biology by Lodish, Berk, Matsudaira, Kaiser, Krieger, Scott, Zipursky, and Darnell, 5th Edition, 2003.							
2. Advanced Organic Chemistry by Jerry March, 2004.							
Goals	1. To familiarize the students with the basic knowledge of modeling biological mechanisms 2. To familiarize the students with the state-of-art computer aided design tools for simulation and synthesis						
Projects							
Modeling and realization of a comprehensive biological mechanism							
Major CAD Packages							
Xilinx package							
Last Review:	Spring Semester 2008			Signature:			