

<b>BME 542</b>	<b>Biomaterials</b>						
<b>Catalog Data</b>	This course addresses the bulk and surface properties of biomaterials used for medical applications. Artificial Organs and Tissues and Tissue Engineering are included. Analytical techniques pertinent to biomaterial evaluation, and testing.						
<b>Course Total Credit Hours:</b>	<b>3</b>	<b>Lecture:</b>	<b>3</b>	<b>Laboratory:</b>	<b>-</b>	<b>Project</b>	<b>-</b>
<b>Prerequisites:</b>	ME410 or consent of instructor.						
<b>Course Coordinator:</b>	Biomedical Engineering Faculty						
<b>Textbooks</b>							
Biomaterials Science, Second Edition: An Introduction to Materials in Medicine by Buddy D. Ratner, Allan S. Hoffman, Frederick J. Schoen, and Jack E. Lemons, 2004.							
<b>References</b>							
1. Transport Phenomena in Biological Systems by George A. Truskey, Fan Yuan, and David F. Katz, 2003.							
2. An Introduction to Tissue-Biomaterial Interactions by Kay C. Dee, David A. Puleo, and Rena Bizios, 2002.							
<b>Goals</b>	1. Understand the effect of bulk and surface properties of materials used for medical implants  2. Understand the mechanics of tissue-biomaterial interaction						
<b>Projects</b>							
<b>Major CAD Packages</b>							
<b>Last Review:</b>	<b>Spring Semester 2008</b>			<b>Signature:</b>			