BMEN 6342 - Biomaterials and Medical Devices

BMEN 6342 Biomaterials and Medical Devices (3 semester credit hours) Introduction to the field of biomaterials used in the design of medical devices and to augment/replace soft and hard tissues. Overview of current challenges and successes with implantable devices, biomaterials properties, clinical requirements, clinical applications and cases, and in-vivo behavior of different classes of natural and synthetic materials. Analysis of biological response and biocompatibility, degradation and failure processes of implantable biomaterials/devices. Students will become familiar with several classes of biomaterials and their current clinical applications. (3-0) Y (2016-02-05 23:32:05)