Course Number
BME-335-01
Course Description
This course focuses on the use of polymeric biomaterials for biomedical applications. Topics include, but are not limited to, basic polymer theory and characterization, the design and functionalization of novel polymers, processing techniques to fabricate polymeric biomaterials (e.g., meshes or hydrogels) with desired micro- and macroscopic properties, the interactions of human cells and tissues with these materials, and the use of synthetic polymers to control the delivery of therapeutic molecules and as scaffolding materials for regenerative medicine applications.The course will also include an ethics module to discuss topical regulatory and/or ethical issues related to the field (e.g., the use of human embryonic stem cells in combination with polymeric scaffolds for regenerative applications).
Academic Term
21/FA
Instructor
Khetan, Sudhir
Location & Meeting Time
Lippman-101+ M/W/F 09:15AM-10:20AM LEC
Petition
Y
Credits
1.00
Capacity
24
Total Students
23
Academic Department
Biomedical Engineering
Field Of Study
Biomedical Engineering (BME)