Cellular and Tissue Engineering

Upper Level Engineering Courses (ULEs)

510.311	Structure of Materials (3)
510.312	Physical Chemistry of Materials I: Thermodynamics (3)
510.313	Mechanical Properties of Materials (3)
510.314	Electronic Properties of Materials (3)
510.315	Physical Chemistry of Materials II: Kinetics and Phase Transformations (3)
510.316	Biomaterials I (3)
510.403	Materials Characterization (3)
510.407	Biomaterials II (3)
510.420	Topics in Biomaterials (3)
510.426	Biomolecular Materials (3)
510.431	Biocompatibility of Materials (3)
510.606	Chemical and Biological Properties of Materials (3)
510.665	Advanced Topics in Thermodynamics and Kinetics of Materials (3)
540.301	Kinetic Processes (4)
540.303	Transport Phenomena I (4)
540.304	Transport Phenomena II (4)
540.306	Chemical and Biological Separations (4)
540.402	Cellular and Molecular Biotechnology of Mammalian Systems (3)

540.409	Modeling, Dynamics, and Control for Chemical and Biological Systems (3)
540.426	Introduction to Biomacromolecules (4)
540.427	Introduction to Polymer Science (3)
540.433	Engineering Aspects of Controlled Drug Delivery (3)
540.438	Interfacial Phenomena in Nanotechnology (3)
540.440	Micro and Nanotechnology (3)
540.460	Computational and Experimental Design of Biomolecules (3)
540.473	Interfacial Phenomena (3)
550.391	Dynamical Systems (4)
580.440	Cellular and Tissue Engineering (3)
580.450	Mechanics of Living Tissues (3)
580.451/2	Cellular and Tissue Engineering Laboratory (2)
580.455	Introduction to Orthopaedic Biomechanics (3)
580.460	Physiological Fluid Mechanics (3)
580.461	Biological Transport (3)
580.470	Biomedical Instrumentation I: Molecular and Cellular (3)
580.495	Microfabrication Laboratory (4)

Other Focus Area Courses (non-ULE)

020.300	Genetics (3)
020.336	Stem Cell Biology in Development & Disease (3)
020.363	Developmental Biology (3)
020.373	Developmental Biology Laboratory (2)

250.326	Biological Macromolecules: Structure and Function (3)
250.391	Proteins and Nucleic Acids (3)

Last Edited 19 September 2007