APPROVED ELECTIVES FOR NANOTECHNOLOGY AND BIOMATERIALS CONCENTRATIONS Course Offering Schedule (as of November 2024)

Course Number	Course Title	Instructor	Semester Offered
Nanotechnology Concentration (select 3, to go with required 510.442)			
510.400	Introduction to Ceramics	McGuiggan	Spring (Odd)
510.420	Stealth Science and Engineering	Spicer	Fall (Odd)
510.422	Micro- and Nano- Structured Materials and Devices	TBD	Spring
510.452	Materials in Extreme Environments	Taheri	Spring
510.443	Chemistry and Physics of Polymers	Katz	Fall (even)
510.442	Nanomaterials Lab	McGuiggan	Fall
510.453	Materials Characterization	McGuiggan	Fall
510.457	Materials Science of Thin Films	Weihs	Fall
510.466	Introduction to Computational Materials Modelling	Oses	Fall
510.425	Advanced Batteries	Garcia-Mendez	Spring
520.495	Microfabrication Laboratory	Andreou	Fall
540.403	Colloids and Nanoparticles	Bevan	Spring
540.415	Interfacial Nano Systems	Liu	Fall
540.440	Micro/Nanotechnology: The Science and Engineering of Small Structures	Gracias	Fall
Biomaterials Concentration (select 3, to go with required 510.430)			
510.402	Dynamics of Soft Materials	McGuiggan	Spring (Even)
510.407	Biomaterials Principles and Applications	Gu	Fall
510.426	Biomolecular Materials I: Soluble proteins and amphiphiles	Hristova	Fall
510.430	Biomaterials Laboratory	Lin	Spring
510.436	Biomaterials for Cell Engineering	Gu	Spring
510.443	Chemistry and Physics of Polymers	Katz	Fall (even)
530.436	Bioinspired Science and Technology	Kang	Fall
540.402	Metabolic Systems Biotechnology	Betenbaugh	Fall
540.403	Colloids and Nanoparticles	Bevan	Spring
540.428	Supramolecular Materials and Nanomedicine	Cui	Spring
540.465	Engineering Principles of Drug Delivery	Sofou	Fall
580.441	Cellular Engineering	Green	Fall
580.442	Tissue Engineering	Grayson	Fall
580.444	Biomedical Applications of Glycoengineering	Yarema	Spring

This list is NOT meant to be exhaustive. Other courses on campus can be selected, as long as they focus on bio or nano (email Prof. Orla Wilson owilson@jhu.edu if you have candidates or questions).