

## Graduate Portfolio in Pharmacoengineering Courses

Subject to change

Course Name	Grad Program	Instructor GSC	Term	Molecular level	Cellular level	System level	Theme (Topics)
Imaging Signals and Systems	BME 381J.3	Adam Bush <i>or</i> Tom Yankeelov BME	Fall			X	Imaging (2,4)
Functional Imaging Lab	BME 381J.8	Andy Dunn BME	Fall			X	Imaging (4)
Molecular Sensors and Nanodevice	BME 382J.3	Tim Yeh BME	Fall every other year	X			Imaging (4)
Molecular Biophysics	BME 382J.8	Jeanne Stachowiak BME / CHE	Spring every other year	X	X		Drug Dev & Delivery (3)
Delivery of Therapeutic Agents	BME 382J.13	Nicholas Peppas BME	Fall	X	X		Drug Dev & Delivery (3,4)
Nanomedicine	BME 382J.14	Tyrone Porter BME	Spring	X	X	X	Drug Dev & Delivery (3,4)
Matrices, Organoids, and Microphysiol. Systems	BME 382J.15	Stephanie Seidlits BME	Spring		X	X	Tissue & BME (4)

Introduction to Computational Oncology	BME 383J.3	Tom Yankeelov BME	Spring		X	X	Comp (1,2)
Computational Methods for BME	BME 383J.9	Mia Markey & Pengyu Ren BME	Fall	x	x	x	Comp (1)
Computational Biomolecular Engineering	BME 383J.10	Pengyu Ren BME	Fall every other year	X			Comp (1,2)
Cancer Bioengineering	BME 385J.40	Amy Brock BME	Fall every other year		X	X	Tissue & BME (2)
BME Microscopy Foundations Laboratory	BME 386J	Sapun Parekh BME	Spring	X			Imaging (4)
Structure and Function of Proteins and Nucleic Acids	BCH 394	Ken Johnson BCH	Spring	X			Biochem (5)
Bioinformatics	BCH 394P	Ed Marcotte BCH	Spring			X	Comp (1,2)
Structure and Function of Proteins and Membranes	BCH 395G	Jason McLellan BCH	Spring	X			Biochem
Product Development/Advanced Manufacturing Pharmacy	PGS 381F/ PGS 381G	Bill Williams Hugh Smyth PGS	Fall			X	Pharm (5)

Advanced Pharmaceutical Processing	PGS 381H	Feng Zhang PGS	Fall			X	Pharm (5)
Advanced Biopharmaceutics	PGS 382S	Zhengrong Cui PGS	Summer			X	Pharm (3)
Pharmaceutical Biotechnology	PGS 382V	Maria Croyle PGS	Spring	X			Pharm (5)
Neuropharmacology I	PGS 383D	Team Taught	Spring			X	Pharm
Analytical Methods in Biologic Formulations	PGS 383G	Rana Ghosh PGS	Spring	X			Pharm
Health Innovation Entrepreneurship	PGS 383M	Janet Walkow PGS	Fall			X	Pharm (5)
Advanced Pharmacokinetic	PGS 383P	TBD	Fall			X	Pharm (2,3)
Fundamentals of Health Innovations	PGS 389M	Janet Walkow PGS	Spring			X	Pharm (5)
Programming and Data Analysis for Modern Neuroscience	NEU 385P	Marcel Goldschen	Spring			X	Comp