2017-2018 CHEMICAL AND STRUCTURAL BIOLOGY – BIOPHYSICAL COURSE WORK

Required Courses	(F = Fall, W = Winter, S = Spring, Sm = Summer)
Chemistry 223	Biological Macromolecules (F, *Pharm. Sci*.)
Chemistry 200	Conduct of Research (F)
Chemistry 219	Chemical Biology (S)
Chemistry 221A	Fundamentals of Biophysics (S) (*offered in 2018-2019*)

At least four additional elective courses chosen in consultation with Prof. Potma and/or your research advisor

(This is just a partial list of the possible electives – check the current course offerings in the chemistry and MB&B departments for a more complete list)

Chemistry 203	Organic Spectroscopy (F)
Chemistry 208	Math for Chemists (Sm) – *recommended to everyone who has not taken advanced math courses in college*
Chemistry 213	Chemical Kinetics (S)
Chemistry 217	Physical Inorganic Chemistry (W)
Chemistry 225	Polymer Chemistry (W) (*offered in 2018-2019*)
Chemistry 230	Classical Mechanics & Electromagnetic Theory (F)
Chemistry 231A	Fundamentals of Quantum Mechanics (F)
Chemistry 231B	Applications of Quantum Mechanics (W)
Chemistry 231C	Molecular Spectroscopy (S)
Chemistry 232A	Thermodynamics & Introduction to Statistical Mechanics (W)
Chemistry 232B	Advanced Topics in Statistical Mechanics (S)
Chemistry 232C	Non-Equilibrium Statistical Mechanics (W 2018)
Chemistry 243	Advanced Instrumental Analysis (W) (*offered in 2018-2019*)
Chemistry 248	Electrochemistry (W) (*offered in 2018-2019*)
Chemistry 249	Analytical Spectroscopy (W)
Chemistry 263	Solid State Materials (W)
Chemistry 273	Technical Communication Skilles (W)
MB&B 203	Nucleic Acid Structure and Function (W)
MB&B 204	Protein Structure and Function (F)
MB&B 211	High-Resolution Structures: NMR and X-ray (not offered this year)
MB&B 223	Introduction to Computational Biology (S)

SAMPLE 1st YEAR SCHEDULE: BIOPHYSICAL CHEMISTRY

Biohysical chemistry required courses are shown in **bold** (**219**, **223**, **200**). Five additional courses will be your electives. Chem 290 is required for all first-year students. Most classes are worth 4 credit hours. Chem 290 is worth 1 credit hour. Hours for 280 (research once in a group), 291 (research seminar once in a group), 399 (teaching) vary. Your total should be between 12 and 16 credit hours. The total in excess of 16 hours will require paperwork completed by Tenley Dunn.

This table shows the most likely trajectory you will be taking in this specialization.

FALL 2017	WINTER 2018	SPRING 2018
223: Macromolecules (Poulos/Luptak)	231B: Applications of Quantum Mechanics (Mukamel)	**219: Chemical Biology (Weiss)**
231A: Fundamentals of Quantum Mechanics (Martin)	232A: Thermodynamics and Statistical Mechanics (Martens)	213: Chemical Kinetics (Smith)
An additional elective course chosen in consultation with your academic/research advisor	*An additional elective course chosen in consultation with your academic/research advisor*	*An additional elective course chosen in consultation with your academic/research advisor*
200: Conduct of Research (Nizkorodov)		
290: P-Chem seminar	290: P-Chem seminar	290: P-Chem seminar
399: Teaching	399: Teaching	399: Teaching