University of Connecticut College of Liberal Arts and Sciences
Department of Molecular and Cell Biology
Structural Biology and Biophysics Major Plan of Study
Last revised: August 21, 2014

Required Courses
☐ Multivariable Calculus: MATH 2110Q or MATH 2130Q (4 cr.)
☐ Elementary Differential Equations: MATH 2410Q or MATH 2420Q (3 cr.)
☐ Organic Chemistry: CHEM 2443 and 2444 (6 cr.)
☐ Physical Chemistry: CHEM 3563 and 3564 (8 cr.)
☐ Physical Chemistry Lab: CHEM 3565W (2 cr.) or Organic Chemistry Lab: CHEM 2445 (3 cr.)
☐ Biochemistry: MCB 3010 (5 cr.)
☐ Techniques of Biophysical Chemistry: MCB 4008 (3 cr.) or Techniques in Structural Biology: MCB 5038 (3 cr.) or Special Topics: MCB 3895 (with Biophysics Program approval)
☐ Structure and Function of Biological Macromolecules: MCB 4009 (3 cr.)

Recommended Courses
☐ Senior Research Thesis: MCB 3996W or MCB 4997W or CHEM 4196W (3 cr.)
☐ Introduction to Research: MCB 3989 or MCB 4989. May be repeated; only 3 credits may count toward the 36 required credits
☐ Research Literature in Molecular and Cell Biology: MCB 3841W (3 cr.)
☐ Advanced Biochemistry Laboratory: MCB 4026W (4 cr.)
☐ Introduction to Molecular Evolution and Bioinformatics: MCB 3421 (3 cr.)
☐ Protein Folding: MCB 5035 (3 cr.)
☐ Cell Biology: MCB 2210 or MCB 3201 (3 cr.)
☐ Genetics: MCB 2410 (3 cr.) or MCB 3413 (4 cr.) or MCB 3412 (3 cr.)
☐ Microbiology: MCB 2610 (4 cr.) or MCB 3617 (4 cr.) or MCB 3635 (3 cr.)
☐ Technical Communications: CHEM 3170W (3 cr.)
☐ Quantitative Analytical Chemistry: CHEM 3332 (4 cr.)
☐ Introduction to Quantum Chemistry: CHEM 4551 (3 cr.)
☐ Linear Algebra: MATH 3210 (3 cr.)

___ Total credits at 2000 level or above (must be 36 or more).

Expected graduation month/year: ☐ May ☐ August ☐ December Year: _____________

Are you pursuing any minors? ☐ Yes ☐ No If yes, please list here: ____________________________

Are you pursuing a double major or additional degree? ☐ Yes ☐ No If yes, please list here: ____________________________

Student Name: ___________________________________________ Student ID: ___________________________
E-mail: ___________________________________________ Cell: ___________________________
I approve the above program for the Major in Biological Sciences. Advisor’s name: ____________________________
Advisor’s signature: ___________________________ Dept.: __________________ Date: ____________