CHEMISTRY B.S. 2011/12

Name: ___________________________ Date: __________________________

(Quarter offered: F=Fall, W=Winter, S=Spring)

NOTE: Courses appearing in more than one category can fulfill only one requirement.

INTRODUCTORY REQUIREMENTS

Calculus: MATH 19A (FWS) ___ + 19B (FWS) ___ + 22 (WS) ___
OR MATH 11A (FWS) ___ + 11B (FWS) ___ + 22 (WS) ___

ONE of the following

Advanced Mathematics: MATH 21 (FWS) ___ OR MATH 24 (S) ___ OR AMS 10 (FS) ___

General Chemistry: CHEM 1A (FWS) ___ + 1B/M (FWS) ___ + 1C/N (FWS) ___

Organic Chemistry: CHEM 112A/L (F) ___ + 112B/M (W) ___ + 112C/N (S) ___
OR CHEM 108A/L (FW) ___ + 108B/M (WS) ___ + 143** (F) ___

Physics: PHYS 6A/L (FW) ___ + 6B/M (WS) ___ + 6C/N (FS) ___
OR PHYS 5A/L (F) ___ + 5B/M (W) ___ + 5C/N (S) ___

ADVANCED REQUIREMENTS

Chemistry: CHEM 103 Biochemical Structures, Reactions & Energetics* (S) ___
CHEM 151A/L Chemistry of Metals (S) ___
CHEM 163A Quantum Mechanics & Basic Spectroscopy (F) ___
CHEM 163B Thermodynamics & Kinetic Theory (W) ___
CHEM 163C Kinetics, Statistical Mechanics, Spectroscopic (S) ___
CHEM 164 Physical Chemistry Lab (W) ___

Electives: TWO from the following...
CHEM 122 Principles of Instrumental Analysis (F) ___
CHEM 143 Organic Chemical Structure & Reactions** (F) ___
CHEM 151B Chemistry of the Main Group Elements (W) ___
BIOC 100A/K Biochemistry* (F) ___
BIOC 100B Biochemistry* (W) ___
BIOC 100C Biochemistry* (S) ___
METX 101 Sources & Fates of Pollutants (F) ___
METX 102 Cellular & Organismal Toxicology (S) ___
OCEA 120 Aquatic Chemistry: Principles & Applications (*) ___
OCEA 220 Chemical Oceanography (W) ___
PHYS 110A Electricity, Magnetism, & Optics (W) ___
PHYS 110B Electricity, Magnetism, & Optics (S) ___
PHYS 116A Mathematical Methods in Physics (W) ___
PHYS 116B Mathematical Methods in Physics (S) ___
PHYS 180 Biophysics (S) ___

** If CHEM 143 is used to complete the organic chem requirement it may NOT
also fulfill an elective.

Advanced Laboratory: ONE from the following...
CHEM 146A Advanced Laboratory in Organic Chemistry (F) ___
CHEM 146B Advanced Laboratory in Inorganic Chemistry (S) ___
CHEM 146C Advanced Laboratory in Physical Chemistry (S) ___

Disciplinary Communication: CHEM 151L and one of CHEM 146A, B, or C

COMPREHENSIVE REQUIREMENT: Senior Thesis: CHEM 195A ___ + 195B ___ + 195C ___
OR Senior Essay: CHEM 199 (FWS) ___

NOTE: Students conducting senior thesis research are required to choose a lab outside of their area of research.
NOTE: CHEM 122 must be taken to receive certification from the American Chemical Society.