WORKSHEET FOR SELECTING A COURSE SEQUENCE
Molecular and Cell Biology Concentration

Please complete this worksheet and return it, along with the Student Information Form, to the Biology Academic Office in Leidy Labs, room 102. When you are provisionally admitted to the major you will be assigned to a major advisor and these documents will become part of your major file.

You must discuss your course selections with your major advisor. The aim of the discussion is to construct a combination of courses that closely reflects your specific interests. Once your major advisor has approved this form, retain a copy for yourself and return the original form, along with your major file, to the Biology Academic Office. You may make changes to your course plan even after your advisor has signed off on it. However, it is your responsibility to ensure that your new course choices fulfill the concentration requirements.

Concentration Requirements (18 CU)

Introdutory Biology (2-3 CU) Semester Year

Track 1 (2 CU)

BIOL 1121/1123 1.5 CU _____ _____

BIOL 1124 0.5 CU _____ _____

OR Track 2 (3 CU)

BIOL 1101 1.5 CU _____ _____

BIOL 1102 1.5 CU _____ _____

Chemistry (4 CU)
(Circle Appropriate Course)

CHEM 1011 or 1012 or 1151 (1 CU) _____ _____

CHEM 1021 or 1022 or 1161 (1 CU) _____ _____

CHEM 1101 and 1102 (1CU) _____ _____

CHEM 2411 (1.5 CU) _____ _____

CHEM 2421 (1.5 CU) _____ _____

MATH (2 CU)
(Circle Appropriate Course)

MATH 1400 (1 CU) _____ _____

MATH 1410 or 1510 (1 CU) _____ _____

STAT 1110 or BIOL 2510 (1 CU) _____ _____

Intermediate Biology (3 CU) Semester Year

BIOL 2810 or CHEM 2510 (1 CU) _____ _____

BIOL 2010 (1 CU) _____ _____

BIOL 2210 (1 CU) _____ _____

Intermediate and Advanced Electives (4-5 CU)
(Track 1: 5 courses; Track 2: 4 courses)
(See List on second page)

Molecular/Cell Biology (2 CU)

BIOL _____ _____ _____

BIOL _____ _____ _____

Genetics and Genomics (2 CU)

BIOL _____ _____ _____

BIOL _____ _____ _____

Additional Elective (1 CU) **(Track 1 ONLY)**

BIOL _____ _____ _____

Research Experience (2 CU)

BIOL 3999 (1 CU) _____ _____

BIOL 4999 (1 CU) _____ _____

STUDENT NAME _____ PENNID _____

Group 1: Molecular and Cell Biology
BIOL 3710 – Microbial Diversity and Pathogenesis (1 CU)
BIOL 4004 – Immunobiology (1 CU)
BIOL 4016 – Molecular Mechanisms of Human Disease (1 CU)
BIOL 4007 – Cancer Biology (1 CU) (Only available for LPS students)
BIOL 4010 – Advanced Cell Biology (1 CU)
BIOL 4022 – Cell Signaling (1 CU)
BIOL 4024 – Cell Motility and the Cytoskeleton (1 CU)
BIOL 4026 – Chromosome and the Cell Cycle (1 CU)

Group 2: Genetics and Genomics
BIOL 4210 – Molecular Genetics (1 CU)
BIOL 4244 – Epigenetics of Human Health and Disease (1 CU)
BIOL 4231 – Genome Sciences and Genomic Medicine (1 CU)
BIOL 4536 – Introduction to Computational Biology and Biological Modeling (1 CU)
BIOL 4234 – Epigenetics (1 CU)
BIOL 5240 – Genetic Systems (1 CU)
BIOM 5550 Regulation of the Genome (1 CU)

Advanced Experimental Research
BIOL 3711 – Molecular Diversity and Pathogenesis Laboratory (1 CU)
BIOL 4825 – Biochemistry and Molecular Genetics Superlab (1 CU)
BIOL 3999 – Independent Study (1 CU)
BIOL 4999 – Advanced Independent Study (1 CU)