

PBIO Major Requirements

Required Courses (32-34 hours)

Required Core Courses (18 hours)

BIOL 1108 - Principles of Biology II (3 hours) + BIOL 1108L - Principles of Biology II Laboratory (1 hour)
or
BIOL 2108H - Principles of Biology II (Honors) (3 hours) + BIOL 2108L - Principles of Biology II Laboratory (Honors) (1 hour)
or
PBIO 1220 - Organismal Plant Biology (3 hours) + PBIO 1220L - Organismal Plant Biology Laboratory (1 hour)

GENE 3000-3000D - Evolutionary Biology (4 hours)

GENE 3200-3200D - Genetics (4 hours)

HORT(CRSS) 4430/6430 - Plant Physiology (3 hours)
or
HORT(CRSS) 4430E/6430E - Plant Physiology (3 hours)

STAT 2000 - Introductory Statistics (4 hours)
or STAT 2100H - Introduction to Statistics and Computing (Honors) (4 hours)
or BIOS 2010-2010L - Elementary Biostatistics (4 hours)

Select an Area of Emphasis

I) Area of Emphasis: Plant Ecology and Environment (14-16 hours)

PBIO 3650-3650L - Plant Ecology (4 hours)
PBIO 4650/6650-4650L/6650L - Plant Taxonomy (4 hours)

Choose one course from the following:

BIOS 3000 - Intermediate Biostatistics for Public Health Sciences (3 hours)
GEOG 4370/6370-4370L/6370L - Geographic Information Science (3 hours)
HORT 4095/6095 - GPS/GIS Applications for Landscape Managers (3 hours)
PBIO 3660L - Plant Biology Intensive Laboratory (4 hours)

Choose one course from the following:

ANTH(BIOL)(ECOL)(EETH)(ENTO)(FANR)(GEOL)(PATH)(PBIO) 4261 - Museum of Natural History Internship (3 hours)
PBIO 4940 - Internship in Plant Biology (3-4 hours)
PBIO 4960 - Independent Research in Plant Biology (1-4 hours) (4 hours)
PBIO 4960H - Independent Research in Plant Biology (Honors) (1-4 hours)

II) Area of Emphasis: Plant Biotechnology and Bioinformatics (14-15 hours)

BCMB 3100 - Introductory Biochemistry and Molecular Biology (4 hours)
BTEC(BCMB)(PBIO) 4000L - Methods in Biotechnology (4 hours) or PBIO 3660L - Plant Biology Intensive Laboratory (4 hours)
PBIO(BINF) 4550/6550 - Bioinformatics Applications (3 hours)

Choose one course from the following:

PBIO 4940 - Internship in Plant Biology (3-4 hours)
PBIO 4960 - Independent Research in Plant Biology (1-4 hours) (4 hours)
PBIO 4960H - Independent Research in Plant Biology (Honors) (1-4 hours)

New Area of Emphasis (effective spring semester 2018)

III) Area of Emphasis: Plants and Microbes (14-16 hours)

PATH 3530-3530L – Introductory Plant Pathology (3 hours)
PATH 4150 - Plant Path undergrad seminar (1 hr)

Choose one course from the following:

PATH/PBIO 4200-4200L - Mycology (4 hours)
MIBO 3500 - Introductory Microbiology- (3 hours)
MIBO 3500E - Introductory Microbiology, online- (3 hours)

Choose one course from the following:

CRSS(MIBO) 4610-4610L - Soil Microbiology (4 hours)
PBIO 3650-3650L - Plant Ecology (4hour)
PBIO 3660L - Plant Biology Intensive Laboratory (4 hours)

Choose one course from the following:

PBIO 4940 - Internship in Plant Biology (3-4 hours)
PBIO 4960 - Independent Research in Plant Biology (4 hours)
PBIO 4960H - Independent Research in Plant Biology (Honors) (4 hours)

Major Electives (9-12 hours)

In consultation with the department adviser, choose **three** of the following courses not used elsewhere in the major:

ANTH(BIOL)(ECOL)(EETH)(ENTO)(FANR)(GEOL)(PATH)(PBIO) 4261 - Museum of Natural History Internship (3 hours)
ANTH(PBIO) 4300/6300-4300L/6300L - Ethnobotany (4 hours)
BCMB 3100 - Introductory Biochemistry and Molecular Biology (4 hours)
BCMB 3600 - Genomics and Bioinformatics (3 hours)
BIOS 3000 - Intermediate Biostatistics for Public Health Sciences (3 hours)
BTEC(BCMB)(PBIO) 4000L - Methods in Biotechnology (4 hours)
CBIO 3400 - Cell Biology (4 hours)
CBIO(PBIO) 4600/6600 - Biology of Protists (3 hours) and CBIO(PBIO) 4600L/6600L - Biology of Protists Laboratory (1 hour)
CRSS(FANR) 3060 - Soils and Hydrology (3 hours) and CRSS(FANR) 3060L - Soils and Hydrology Laboratory (1 hour)
CRSS 4450/6450 - Crop Physiology (3 hours)
CRSS(HORT)(ECOL) 4590/6590 - Soil Fertility and Plant Nutrition (3 hours) and CRSS(HORT) 4590L/6590L - Soil Fertility and Plant Nutrition Laboratory (1 hour)
CRSS 4600/6600 - Soil Physics (3 hours) and CRSS 4600L/6600L - Soil Physics Laboratory (1 hour)
CRSS(MIBO) 4610/6610-4610L/6610L - Soil Microbiology (3 hours)
ECOL 3500-3500L - Ecology (4 hours) or ECOL 3505H-3505L - Ecology (Honors) (4 hours)
ECOL 4000/6000 - Population and Community Ecology (3 hours)
ECOL 4500/6500 - Evolutionary Ecology (4 hours)
FANR 4350/6350 - Conservation Genetics (3 hours)

[GEOG\(PBIO\) 4220/6220](#) - Ecological Biogeography (3 hours)
[GEOG\(PBIO\) 4240/6240](#) - Plant Geography (3 hours)
[GEOG 4370/6370-4370L/6370L](#) - Geographic Information Science (3 hours)
[HORT\(ANTH\)\(PBIO\) 3440](#) - Herbs, Spices, and Medicinal Plants (3 hours)
[HORT 4095/6095](#) - GPS/GIS Applications for Landscape Managers (3 hours)
[HORT\(CRSS\) 4440/6440-4440L/6440L](#) - Environmental Physiology (4 hours)
[PATH\(ANTH\)\(PBIO\) 3010](#) - Fungi: Friends and Foes (3 hours)
[PATH 3530-3530L](#) - Introductory Plant Pathology (3 hours)

[PATH\(PBIO\) 4200/6200-4200L/6200L](#) - Mycology (4 hours)
[PBGG\(CRSS\)\(HORT\) 4140/6140](#) - Plant Breeding (3 hours)
[PBIO 3270](#) - Flowers (3 hours)
[PBIO 3400](#) - Plants and Society (3 hours)
[PBIO 3600](#) - Plant Cell and Developmental Biology (4 hours)
[PBIO 3650-3650L](#) - Plant Ecology (4 hours)
[PBIO 3660L](#) - Plant Biology Intensive Laboratory (4 hours)
[PBIO\(CRSS\) 4500/6500](#) - Introduction to Gene Technology (3 hours)
[PBIO\(GENE\)\(PATH\)\(BINF\) 4510/6510](#) - Genome Evolution Across the Tree of Life (3 hours)
[PBIO\(BINF\) 4550/6550](#) - Bioinformatics Applications (3 hours)
[PBIO 4650/6650-4650L/6650L](#) - Plant Taxonomy (4 hours)
[PBIO\(ECOL\) 4750/6750](#) - Tropical Ecology and Conservation (3 hours)
[PBIO 4940](#) - Internship in Plant Biology (3-4 hours)
[PBIO 4960](#) - Independent Research in Plant Biology (1-4 hours) (4 hours)
[PBIO 4960H](#) - Independent Research in Plant Biology (Honors) (1-4 hours)
[PBIO 4970H](#) - Independent Research in Plant Biology (Honors) (1-4 hours)
[WASR\(FORS\) 4110/6110-4110L/6110L](#) - Forest Hydrology (4 hours)
[WASR 4400-4400L](#) - Introduction to Wetlands (3 hours)