

## **Purdue Plant Science Major**

### **Directed Selective and Additional Science Selective Courses**

#### **Plant Biology**

BTNY 350 Biotechnology in Agriculture  
BTNY 551 Plant Response to the Environment  
BTNY 552 Molecular Approaches in Plant  
Biology  
BTNY 553 Plant Growth and Development  
BTNY 562 Plant Hormone Biology  
BTNY 590 Cell Biology of Plants  
BTNY 590 Plant Developmental Genetics  
BIOL 241 Biology IV: Genetics and Molecular  
Biology  
BIOL 415 Introduction to Molecular Biology  
BIOL 420 Eukaryotic Cell Biology

#### **Plant Pathology**

BTNY 301 Introductory Plant Pathology  
BTNY 525 Intermediate Plant Pathology  
BTNY 535 Plant Disease Epidemiology  
BTNY 552 Molecular Approaches to Plant  
Pathology  
BTNY 558 Pathogens of Plants  
BTNY 613 Advanced Plant Pathology  
BIOL 221 Introduction to Microbiology  
BIOL 550 Eukaryotic Molecular Biology

#### **Weed Science**

BTNY 304 Introductory Weed Science  
BTNY 504 Advanced Weed Science  
BTNY 505 Advanced Biology of Weeds

#### **Plant Physiology**

BTNY 551 Plant Response to the Environment  
FNR 434 Tree Physiology  
AGRY 525 Crop Physiology and Ecology  
AGRY 518 Plant Physiology and Biotechnology  
Research Techniques

#### **Genetics**

AGRY 480 Plant Genetics  
AGRY 520 Principles & Methods of Plant  
Breeding  
AGRY 530 Advanced Plant Genetics  
BIOL 481 Eukaryotic Genetics  
FNR 305 Conservation Genetics

#### **Statistics**

BIOL 582 Ecological Statistics  
FNR 598 Methods in Statistical Ecology  
STAT 511 Statistical Methods

#### **Bioinformatics**

FNR 210 Natural Resource Information  
Management

#### **Entomology**

ENTM 206 General Entomology  
ENTM 207 General Entomology Laboratory  
ENTM 311 Insect Ecology  
ENTM 410 Applied Insect Biology  
ENTM 510 Insect Pest Management

#### **Ecology & Evolution**

BIOL 580 Evolution  
BIOL 582 Ecological Statistics  
ENTM 311 Insect Ecology  
FNR 331 Forest Ecosystems  
SFS 301 Agroecology

#### **Microbiology**

BTNY 550 Biology of Fungi  
AGRY 580 Soil Microbiology  
BIOL 221 Introduction to Microbiology  
BIOL 416 Viruses and Viral Diseases  
BIOL 438 General Microbiology

#### **Crop Production/World Crops**

BTNY 285 Plants and Civilization  
BTNY 350 Biotechnology in Agriculture  
AGRY 285 World Crop Adaptation and  
Distribution  
AGEC 250 Economic Geography of World Food  
and Resources  
AGEC 340 Economics of World Development  
AGEC 410 Agricultural Policy  
HORT 201 Plant Propagation  
HORT 319 Controlled Environment Production  
of Horticultural Crops

**Climate and Soil Science**

AGRY 255 (or NRES 255) Soil Science  
AGRY 270 Forest Soils  
AGRY 335 Weather and Climate  
AGRY 349 Soil Ecology  
AGRY 385 Environmental Soil Chemistry  
AGRY 450 Soil Conservation and Water  
Management  
AGRY 536 Environmental Biophysics  
AGRY 544 Environmental Organic Chemistry  
AGRY 580 Soil Microbiology  
ASM 236 Environmental Systems Management

**Engineering/Phenotyping**

ABE 325 Soil and Water Resource Engineering  
AGRY 545 Remote Sensing of Land Resources  
FNR 357 Fundamental Remote Sensing  
FNR 558 Digital Remote Sensing and GIS

**Forestry**

FNR 210 Natural Resource Information  
Management  
FNR 225 Dendrology  
FNR 305 Conservation Genetics  
FNR 331 Forest Ecosystems  
FNR 338 Introduction to Silviculture  
FNR 439 Silviculture

**Skills courses**

BTNY 660 Scientific Writing  
AGRY 518 Plant Physiology and Biotechnology  
Research Techniques  
BTNY 552 Molecular Approaches to Plant  
Pathology