PBPG Curriculum Requirements

M.S. – Nine credits from core curriculum including at least two in section A and two in section B or C. In addition two credits of Plant Breeding Seminar are required.

Ph.D. – Eleven credits from core curriculum including at least two each in sections A, B, and C. Three credits of Plant Breeding Seminar and an exit seminar are required.

Core Curriculum

A. Plant Breeding

Hort/Agron 501 Principles of Plant Breeding (3; every spring)
Hort/Agron 502 Techniques of Plant Breeding (1; spring odd years)
Agron/Hort 812 Selection Theory (2; spring even years)

B. Genetics

Hort/Genetics 550 Molecular Approaches for Potential Crop Improvement (3; every spring)
Hort/Agron 561 Introductory Cytogenetics (Discontinued)
Genetics 631 Plant Genetics (2; fall odd years)
Genetics 701 Advanced Genetics (3, every fall)
Botany 840 Regulatory Mechanisms in Plant Development (3; fall even years)
Hort/Agron 875 Polyploid Genetics (1; spring even years)
Hort/Agron 875 Genetic Analysis with R (2; spring odd years)

C. Quantitative Genetics and Biometry

Hort/Stat 572 Statistical Methods for Bioscience II (4; every spring)
Agron/Hort 811 Biometrical Procedures in Plant Improvement (3; fall odd years)
Genetics 629 Evolutionary Genetics (3; fall odd years)
Agron 771 & 772 Applications in ANOVA and Experimental Design (1 each; spring odd years)

D. Additional Core Courses

Biochem 621 Plant Biochemistry (3; spring odd years)
Plant Path 505 Molecular Plant-Microbe Interactions (3; every spring)
Plant Path 517 Plant Disease Resistance (3; fall even years)
Genetics 633 Population Genetics (3; every fall)
Botany 500 Plant Physiology (3-4; every spring)

Additional Courses not in Core Curriculum and do not count towards the required 11 credits for MS or 17 credits for PhD

Business 311 Business Fundamentals (3; spring)
Botany 575 Scientific Writing (2; spring)