

# PLSC 467/636

## Plant Genes and Genomes



PLSC 467/636 is a newly developed course for graduate students and upper-level undergraduates. This course delves into the details of plant genes and genomes at the intersection of molecular and quantitative genetics. We will introduce genomic landscapes and analytical tools to understand the sequence and function of plant genes and genomes. Topics will also cover gene structure, chromosomal mechanics, transposons, epigenetics, gene editing, etc. Key techniques include genetic mapping methods such as Quantitative Trait Loci (QTL) mapping, Genome-Wide Association Studies (GWAS), and gene isolation. Through a combination of lectures, paper discussions, and hands-on exercises, students will gain a comprehensive understanding of how genetic and genomic information influences plant phenotypes.

### Course Details:

- **Instructor:** Dr. Qi Mu **E-mail:** [qimu@udel.edu](mailto:qimu@udel.edu)
- **Schedule:** Spring 2026 TR 11:10AM - 12:30PM
- **Instructional mode:** In-person
- **Location:** Fisher Greenhouse Rm102
- **Credits:** 3 credits

**Prerequisites:** PLSC330/PLSC367 (Plant Breeding and Genetics), or PLSC/ANSF300, or BISC303/403/401, or PLSC270. **Prerequisites may be flexible and is encourage to inquire with emails to Dr. Mu.**