

Spring 2022

Prof. Yunde Zhao

BICD123: Plant Molecular Genetics Laboratory

March 28 (Monday)	Safety/Flower development/Genetic Crosses
March 30 (Wednesday)	Seed Storage Protein Expression/Protein gels
April 4 (Monday)	Protein Gel Analysis/Plant Transformation/Genome editing
April 6 (Wednesday)	Agarose Gels/Gibson assembly/E.coli Transformations
April 11 (Monday)	Colony PCR/Minipreps/Digests/Gels/Sequencing
April 13 (Wednesday)	Sequence analyses/Database search
April 18 (Monday)	DNA markers and Positional cloning 1
April 20 (Wednesday)	DNA markers and Positional cloning 2
April 25 (Monday)	Light signaling 1
April 27 (Wednesday)	Auxin signaling /Next generation sequencing 1
May 2 (Monday)	Light signaling 2
May 4 (Wednesday)	Auxin signaling /Next generation sequencing 2
May 9 (Monday)	Nitrate reductase biochemical assay
May 11 (Wednesday)	Environmental induction of nitrate reductase
May 16 (Monday)	Yeast complementation/heavy metal resistance
May 18 (Wednesday)	Stomatal movements
May 23 (Monday)	Allelism/Mutant screen
May 25 (Wednesday)	Allelism/Mutant screen
May 30 (Monday)	Holiday

June 1(Wednesday) GUS staining and RUBY

June 6(Wednesday) Final Exam

Grading policies

Course Grade: Grades will be determined by a combination of the written lab reports (75%) and a Final exam (25%).

Late lab reports: All lab reports must be handed in on time to receive full credit. Late lab reports will be assessed a 10% penalty for each day it is late. For example, if a report is worth 20 points, a lab report handed in two days late could receive a maximum of 16 points.

Class Attendance: Students are expected to attend ALL of the lab classes. If, for reasons of illness, a student misses a class, they must write an essay on a topic that will be assigned by the instructor. If a student misses a class and fails to write the essay, they will lose 5% from the overall course grade.