Spring 2010

Date			Topic	Tasks	Notes
March	Tu	16	**Complementation of the gi5-1 mutation**	Course overview GA overview/ Discussion Pipette use DNA extraction, part I	
	Th	18		DNA extraction, part II TAIR-database PCR lecture	Turn in pipettor acuracy summary
	Tu	23		Primer design PCR Collect transformed seeds, sterilize and plate	(Transformation performed with Sean Weise)
	Th	25		Restriction digestion of DNA DNA electrophoresis DNA Ligation	**This is a very intensive day.** **Be ready.**
	Tu	30		Transform E. coli Jay Sobel: genes in other species Bioinformatics I: Blast, sequence comparison	
April	Th	1		Plasmid Minipreps Send for Sequencing Transfer transformed seedlings to soil	
	Tu	6		Sequence analysis Discussion of paper (Spielmeyer et al., 2002)	Turn in lab notebooks
	Th	8	**GA regulation of starch degradation**	**Amylase I** Overview Cut and imbibe barley seeds	
	Tu	13		**Amylase II** Protein/enzyme lecture GA dilutions Start seed induction	Turn in *gi5-1* complementation report
	Th	15		**Amylase III** Assay protein Prepare for amylase enzyme assay	
	Tu	20		**Amylase IV** PAGE and western lecture Assay alpha-amylase	
	Th	22		**Amylase V** PAGE and western Discuss amylase activity results	
	Tu	27		**Amylase VI** Develop western blot Analyze and discuss amylase western data	
	Th	29		Analyze transformed plants Discussion of results	
May	Fri	7		**FINAL**	Turn in lab notebooks Turn in Alpha-amylase report