

2008 Plant Physiology Laboratory Schedule (subject to change)

Date	Unit	Readings	Report Due
Jan 8	Lab check-in Lab safety orientation Lab Notebook Guidelines Writing a Lab Report	McMillan	
Jan 10	Unit 1. Introduction to Spectrophotometry and Beer's Law	Fig 7.4 (p 127) Web Topic 7.1	
Jan 15	Unit 2. Anthocyanins vs. Betacyanins	pp 326-327	Jan 22
Jan 17	Unit 7. Cell Membranes		
Jan 18 (Friday)	Unit 3. Leaf Senescence I: The Effect of Kinetin on Chlorophyll Levels During Leaf Senescence. Set up leaf segments.	410-412 (PCD) Web Topics 21.3, 23.3 (bioassay) 559 (cytokinin)	
Jan 22	Unit 3. Start chlorophyll extraction		
	Unit 6. Enzyme Kinetics: β -Galactosidase	Ch. 2 (online)	Jan 29
Jan 24	Unit 3. Chlorophyll measurements		
	Unit 4. Leaf Senescence II: Student-designed Experiments with Leaf Senescence Students design their experiments		Feb 14
Jan 29	Unit 8. Induction of Nitrate Reductase I: Dependence of induction on nitrate concentration	pp 292-294	
Jan 31	Unit 5. Developmental Change in β -Galactosidase Activity	Ch. 2 (online)	Feb 7
Feb 5	Unit 4. Leaf Senescence II: Student-designed Experiments with Leaf Senescence Start chlorophyll extractions		Feb 14
	Unit 9. Induction of Nitrate Reductase II: Student-designed experiments Students design their experiments		Feb 26

Feb 7	Unit 4. Chlorophyll measurements Tissue Culture		Feb 14
Feb 12	Unit 10. Ribonucleases I: Changes in Ribonucleases During Seed Germination		
Feb 14	Plant Hormone Lecture - Library Visit Unit 11. Ribonucleases II: Student-designed experiments Students plan experiments		
Feb 19	Unit 9. Induction of Nitrate Reductase II: Student-designed experiments		Feb 26
Feb 21	Exam 1		
Feb 26	Unit 12. Effect of Ethylene on Peroxidase Distribution in Pea Stems	pp 326-327	Mar 4
Feb 28	Unit 11. Ribonucleases II: Student-designed experiments		Mar 6
Mar 4, 6	Tools of Plant Physiology (lectures)	Ch. 14 (online) online notes	
March 10-14: Spring Break			
Mar 18	Unit 13. Affinity Purification of Pea or Lentil Lectin, Lab 1		Apr 3
Mar 20	Unit 13. Affinity chromatography, Lab 2		Apr 3
Mar 25	Exam 2		
Mar 27	Unit 13. Affinity chromatography, Lab 3		Apr 3
Apr 1, 3, 8, 10	Unit 14. SDS/PAGE, Immunoblotting, and ELISA (Enzyme-linked Immunosorbent Assay)	Web Topic 17.3	
Apr 15	Plant Hormones: lecture		
Apr 17, 22	Student lectures on plant hormones		
Apr 24	Odds-n-ends; turn in Portfolios		
April 29	Exam 3, 12:00-2:00 pm		