

Plant Physiology- BCMB 321

Fall 2009

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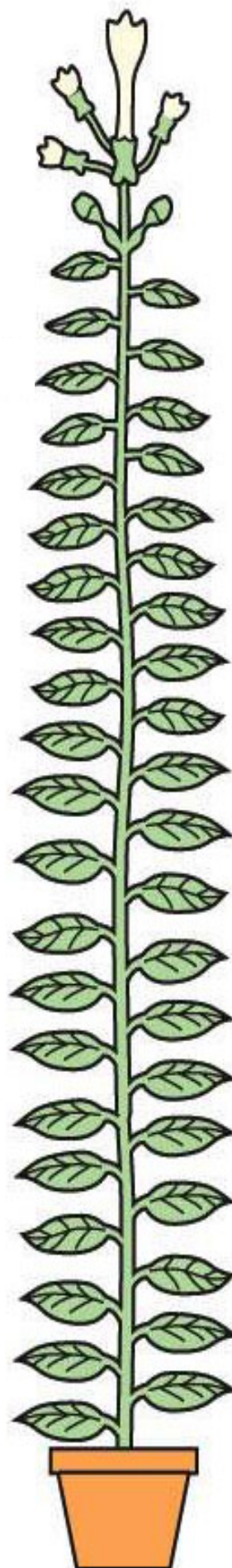
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Text: **Introduction to Plant Physiology 4th Edition – Taiz & Zeiger**
Lecture: Room 427 Hesler Biology Building MWF 11:15-12:05
Lab: Room 207 Hesler Biology Building T 2:10-5:10

Part 1- Metabolism and Nutrient Assimilation

Date		Ch.	Lecture Topic
Aug.	19 th	W 1	Plant Cells
	21 st	F 1	Plant Cells cont.
	24 th	M 2	Enzymes (http://www.plantphys.net/chapter.php?ch=2)
	26 th	W 3	Water and Plant Cells
	28 th	F 4	Water Balance of Plants
Sept.	31 st	M 5	Mineral Nutrition
	2 nd	W 6	Solute Transport (Quiz 1)
	4 th	F 7	Photosynthesis: The Light Reactions
	7 th	M	NO CLASS (Labor Day)
	9 th	W 7	Photosynthesis: The Light Reactions
	11 th	F 8	Photosynthesis: Carbon Reactions
	14 th	M 8	Photosynthesis: Carbon Reactions
	16 th	W 9	Photosynthesis: Physiological and Ecological Aspects (Quiz 2)
	18 th	F 10	Translocation in the Phloem
	21 st	M 11	Respiration
	23 rd	W 11	Lipid Metabolism
	25 th	F 12	Assimilation of Mineral Nutrients (Quiz 3)
	28 th	M 13	Secondary Metabolites and Plant Defense
	30 th	W 13	Secondary Metabolites and Plant Defense
Oct.	2 nd	F 15	Plant cell walls
	5 th	M	Catch-up
	7 th	W	Review
	9 th	F	EXAM



Part 2 – Plant Growth and Development

	12 th	M	14	Gene Expression and Signal Transduction
	14 th	W	16	Plant Growth and Development
	16 th	F		NO CLASS (Fall Break)
	19 th	M	17	Phytochrome and Light Control of Plant Development Part I
	21 st	W	17	Phytochrome and Light Control of Plant Development Part II
	23 rd	F	18	Blue-Light Responses: Stomatal Movements and Morphogenesis – Part I
	26 th	M	18	Blue-Light Responses: Stomatal Movements and Morphogenesis – Part II
	28 th	W	19	Auxin: The Growth Hormone (Quiz 4)
	30 th	F	19	Auxin: The Growth Hormone
Nov.	2 nd	M	20	Gibberellins: Regulators of Plant Height
	4 th	W	20	Gibberellins: Regulators of Plant Height
	6 th	F	21	Cytokinins: Regulators of Cell Division
	9 th	M	22	Ethylene: The Gaseous Hormone (Quiz 5)
	11 th	W	23	Abscisic Acid: A Seed Maturation and Anti-stress Signal
	13 th	F	24	Brassinosteroids
	16 th	M	25	The Control of Flowering Part I
	18 th	W	25	The Control of Flowering Part II
	20 th	F	26	Stress Physiology (Quiz 6)
	23 rd	M		Class Presentations
	25 th	W		Class Presentations
	27 th	F		NO CLASS (Thanksgiving Holiday)
Dec.	30 th	M		Review
	9 th	W		FINAL EXAM 12:30-2:30 Wednesday Dec. 9

Evaluation

Quizzes	15% (6 quizzes)
Class Participation	5%
Exam I	20%
Presentation	10%
Final Exam	25%
Lab	25%

Class Participation Expected: Come to class, be alert, attentive and participate in class discussions.

Quizzes: Announced 10-15 minute quizzes.

Exams: Short answer or essay. Not multiple choice.

Presentation: 15-minute presentation on the Arabidopsis mutant that was studied in lab (experiment #9). Presentation should be based on a paper describing this mutant and it also needs to present experimental data obtained during the lab.