

**Draft Syllabus
PB/HCS 604.2; Winter 2005**

Week 1

Tuesday, January 4: Introduction, lab safety, keeping a notebook, making solutions, the importance of controls, etc.
Thursday, January 6: Protein extraction, purification and analysis

Week 2

Tuesday, January 11: Affinity purification of histidine-tagged proteins
Thursday, January 13: PAGE-SDS of purified proteins

Week 3

Tuesday, January 18: Western blot
Thursday, January 20: Functional assay of the purified proteins

Week 4

Tuesday, January 25: Finish protein analysis and visit 2-D facility at PMGF
Thursday, January 27: Plant tissue culture & plant transformation

Week 5

Tuesday, February 1: Introduction to Phytochemicals/Analysis of phytochemicals
Thursday, February 3: Analysis of Phytochemicals

Week 6

Tuesday, February 8: MIDTERM
Thursday, February 10: Introduction to plant cell biology

Week 7

Tuesday, February 15: Maize protoplast transient assay
Thursday, February 17: Maize protoplast transient assay

Week 8

Tuesday, February 22: Visualization of plant cells and gene expression
Thursday, February 24: Visualization of plant cells and gene expression

Week 9

Tuesday, March 1: Visualization of plant cells and gene expression
Thursday, March 3: Visualization of plant cells and gene expression

Week 10

Tuesday, March 8: Visualization of plant cells and gene expression
Thursday, March 17: 11:30 AM - 1:18 PM FINAL