



# Mendocino College

COURSE LEVEL STUDENT LEARNING OUTCOMES

Effective Date: \_\_\_\_\_

9/13/07

Title: Botany  
*(limit to 50 characters including spaces)*

Discipline/Number: BIO 255

Instructor Contact: Alan West

Date Submitted /Modified: 8/23/07

Units Min:	5.0	Units Max:	5.0	Lecture Hours:	68.0	Lab Hours:	51.0
<i>If this is a variable unit course, the relationship between earned units and any difference in expected SLOs should be explained.</i>							

### Student Learning Outcomes:

Upon completion of this course, the student will be able to:

1. design, conduct, analyze and interpret scientific experiments and field studies using the scientific method of problem solving.
2. understand major metabolic processes(e.g. cell respiration, photosynthesis, gas exchange, transport systems, homeostasis, reproduction and osmotic balance).
3. demonstrate skilled laboratory techniques including light microscopy, spectrophotometry, dissection and scientific observation.
4. understand critical environmental issues of the biosphere including accelerated extinction, stability of ecosystems and energy flow.
5. understand the phylogeny of the major groups of multicellular autotrophs.
6. outline the mechanisms of enzymes and ATP in cellular functions.

### Assessment Methods

1. Embedded test questions that directly relate to the SLOs. These questions would address both lecture and laboratory topics.
2. Evaluation of take-home assignments.
3. Successful completion of laboratory exercises and reports.

Instructor(s): \_\_\_\_\_  
*(Signature)*  
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*(Signature)*

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*(Date)*  
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*(Date)*