

SCHEDULE for LICHENOLOGY
Biology 4350/8356
Fall 2009

Instructor: Dr. Robert S. Egan Class: TR 12:00-12:50 AH314
 Allwine Hall 514F Lab: F 1-3:50 AH525
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DATES	CLASS	READINGS	LAB
Aug. 24-28	Introduction, Vegetative Morphology I, Field Techniques	Chapter 1 Chapter 2	Collecting Equipment Field Trip Preparation Growth Forms etc...
Aug. 31-Sept. 4	Herbarium Techniques, Vegetative Morphology II	Chapter 13 (in part) Chapter 2, 4	Vegetative Characters
Sept. 5-8			FIELD TRIP TO COLORADO
Sept. 14-18	Reproductive Morphology Photobionts and Mycobionts	Chapter 3	Reproductive Structures Specimen Processing
Sept. 21-25	Lichen Chemistry I	Chapter 6, Chapter 13 (in part)	Chemical Techniques
Sept. 28-Oct. 2	Lichen Chemistry II	Chapter 6	Specimen Processing and Identification
Oct. 5-9	Review TEST 1 (100 points)		No Lab on Friday
Oct. 10-11			FIELD TRIP TO MISSOURI
Oct. 12-16	Lichen Physiology I	Chapter 5	

Oct. 19-20	FALL BREAK		NO CLASSES
Oct. 21-23	Lichen Physiology II	Chapter 5	Specimen Preparation
Oct. 26-30	Lichen Ecology	Chapters 7-9	Specimen Identification
Nov. 2-6	Air Pollution and Biogeography	Chapter 11	Specimen Identification
Nov. 9-13	Review TEST 2 (100 points)		Specimen Identification
Nov. 16-20	Uses of Lichens Lichen Diversity I	Chapter 10	Specimen Identification Begin Practical Exam
Nov. 23-27	THANKSGIVING VACATION		NO CLASS OR LAB THIS WEEK
Nov. 30-Dec. 4	Lichen Diversity II		Specimen Identification Herbarium Techniques
Dec. 7-11	Lichen Diversity III Lichen Nomenclature		Final collection preparation
	Final Practical Exam Due		
DEC. 17	FINAL EXAM 11:30 -1:30		
Thursday			

GRADING

Test No. 1	100 points
Test No. 2	100 points
Final Test	100 points
Collection	200 points
Final Lab Practical	50 points
TOTAL	550 points

Required Materials:

Brodo, I. M., S.D. Sharnoff and S. Sharnoff. 2001. *Lichens of North America*. Yale University Press, New Haven.

Egan, R. S. 2007. *Outline of PowerPoint Presentations for Lichenology*. Available at the UNO Bookstore.

Graduate Students: I will loan copies of *Lichen Biology*, edited by T. H. Nash, for additional reading on topics discussed in class.

PLANT COLLECTION (200 points)

Each student will assemble a ***lichen collection of 50 lichen species***. This collection should be arranged alphabetically by genus and species and have typed (or printed) labels which include **chemical determinations for at least 5 specimens**. Ten species must be crustose lichens and include appropriate spore drawings. Names must follow the latest edition of the North American Lichen Checklist as published on the WWW by Dr. Ted Esslinger. Points will be given for the collection based on the **correctness** of identifications, **quality** of the specimens, **care and neatness** in specimen preparation, and **accuracy** in presentation of label information.

GRADUATE STUDENTS

Graduate students will be required to have a collection of **at least 65 different species**. Fifteen specimens must be crustose/squamulose lichens with spore drawings, and 10 chemical determinations are required from the 65 specimens.

LABORATORY PRACTICAL (50 points)

Toward the end of the semester each student will be given a packet with **10** unknown lichen specimens to identify. You will have 2-3 weeks to identify these specimens using all available references, chemical techniques and the lichen herbarium. Grading will be done based on 2 points for each correct genus and 3 points for each correct species.