Bryophytes (Mosses, Liverworts & Hornworts
PBIO 369D/569D

Professor:	Dr. Morgan Vis	
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Office Hours:	By Appointment	
Teaching Assist.	Melanie Schori (ms335704@ohio.edu)	

Lecture & Lab:	M, W, F 12:10-1:00 pm; Tu 12:10-2 pm	Rm. 305 Porter Hall
Text:	*Bryophyte Biology* (ISBN 0 521 660971)	
	Moss of the Great Lakes Region (ISBN 73-620129)	

UG Grading:	20pts	Moss Web page
	25pts	Bryophyte Collection
	25pts	Discussion
	10pts	Class participation
	25pts	Midterm Exam
	25pts	Final Exam
	20pts	Final Lab Practical
	150pts	Total

GS Grading:	15pts	Moss Web page
	20pts	Bryophyte Collection
	20pts	Discussion
	25pts	Presentations
	25pts	Midterm Exam
	25pts	Final Exam
	20pts	Final Lab Practical
	150pts	Total

Grading Scale	93-100%	A	90-92%	A-		
	87-89%	B+	83-86%	B	80-82%	B-
	77-79%	C+	73-76%	C	70-72%	C-
	67-69%	D+	63-66%	D	60-62%	D-
	<60%	F				

Exam Dates:	Midterm Exam	Friday May 2nd
	Lab Final Exam	Friday June 6th
	Final Exam	Tuesday June 10th 2:30pm

Dishonesty: University policy will be followed and violations will result in a lowered or failing grade.

Absences: University policy will be followed. Students are expected to attend all class sessions. Missed work may not be made up without adequate proof of legitimate absence as defined by Ohio University.

Website: http://vis-pc.plantbio.ohiou.edu/moss/bryophyte.htm (Bryophyte Homepage)

Course Calendar (**subject to change**)

Week	Date	Topic
1	Mar 31	Introductions
	April 1	Laboratory- Bryophytes on campus (walls & lawns)
	April 2	Review of Basic Morphology and Life Cycles (Raven Chapter 16 p. 345)
	April 4	Discussion paper – Dr. Vis's choice
2	April 7	Phylogeny of Bryophytes (BB – Chapt. 4)
	April 8	Laboratory - Identification of Bryophytes
	April 9	Classification of Mosses (BB – Chapt. 3)
	April 11	Discussion papers
3	April 14	Classification of Mosses (BB – Chapt. 3)
	April 15	Laboratory - Identification of Bryophytes
	April 16	Physcomitrella – moss house fly (BB – Chapter 6)
	April 18	Discussion papers
4	April 21	Bryophytes and carbon cycle (BB – Chapter 11)
	April 22	Laboratory - Field trip Sells Park
	April 23	Bryophytes and carbon cycle (BB – Chapter 11)
	April 25	Discussion papers
5	April 28	Liverworts (BB – Chapter2)
	April 29	Laboratory- Identification of Bryophytes
	April 30	Liverworts (BB – Chapter2)
	May 2	**Midterm Exam**
6	May 5	Peatlands (BB – Chapter 10)
	May 6	Laboratory - Field Trip to Brush Fork *Sphagnum* dominated wetland
	May 7	Peatlands (BB – Chapter 10)
	May 9	Discussion papers
7	May 12	Mineral nutrition (BB – Chapter 9)
	May 13	Laboratory- Identification of Bryophytes
	May 14	Substratum ecology & Pollution (BB – Chapter 9)
	May 16	Discussion papers
8	May 19	Bryophyte microevolution (BB - Chapter 12)
	May 20	Laboratory- Identification of Bryophytes
	May 21	Hornworts (BB- Chapter 1), **Bryophyte Webpage Due**
	May 23	Discussion
9	May 26	**NO CLASS**
	May 27	Laboratory - Identification of Bryophytes; Critiques Bryophyte Webpages
	May 28	TBA
	May 30	Discussion
10	June 2	Presentation by John Wiley, MS candidate – Moss Ecology
	June 3	Bryophyte Lab Practical
	June 4	Bryophyte presentation by Aliya Donnell
	June 6	Review for Final Exam; **Bryophyte Collection Due at class time**
Finals	June 10	**Final Exam 2:30**

Explanation of Graded Work

Bryophyte Collections

Each student will make a collection of herbarium packets with Bryophyte specimens. Each specimen should be identified to the genus level. Inside the packet there should be a note card with the following information:

Name of specimen	Location of collection	Specific habitat in which collected
Date of collection	Collector	Key used to identify the specimen

Examples will be provided in class. A minimum of 20 bryophyte specimens representing different genera should be handed in on the date specified. In addition, for 10 of the specimens you should have photomicrographs of salient features. Please print them and include them with your collection.

Moss Web Page
Each student will choose one moss taxon to research. Information on the habitat, common name, gametophyte and sporophyte appearance, seasonality, distribution and any other interesting facts should be obtained. This information should come from books and journal articles which should be referenced. The end product will be used to produce a web page about this moss and the student will be noted as the author of the page. Use Word to produce the document since that will be the easiest way to convert to an html file. The report should be written so that it is easy to understand manner and the information is arranged in a logical fashion. Please limit yourself to one page single-spaced. If you can obtain a specimen or a good photograph of the moss, it will be included on the web page. The pages will be peer-reviewed.

Discussion
Each student will be given the opportunity to lead discussions. The student leading the discussion should read the chapter/paper thoroughly before the discussion, investigated background material and have questions ready to stimulate conversation. At the beginning of class the student should present a short over-view of the chapter (5 mins max). Each student will be graded according to his/her preparedness for the discussion, his/her ability to stimulate conversation and his/her participation in (and preparedness for) the discussions prepared by others.

Class Participation
Attendance and overall preparedness for the class will be evaluated and form this part of the grade.

Exams
The exams will have a variety of questions including matching, definitions, short answer and essay. They will cover all aspects of bryophyte biology presented in class, assigned readings and discussion papers.

Final Lab Practical
There will be a lab practical with stations containing a specimen (might be a whole mount or microscope) with 2-3 questions concerning the scientific name, morphology or special feature. In addition, there will be 2-4 unknown specimens that will have to be keyed using Mosses of the Great Lakes Forest.

Graduate Presentations
Each graduate student will give a 30-40 minute presentation. The topic will be chosen in consultation with the instructor and will cover some aspect of bryophyte biology not covered in the course material. The presentation will be a PowerPoint presentation. Please provide the class with 1 to 2 references to be read ahead of time. You will need to prepare questions that will simulate discussion on the topic. The presentation will be graded based on clarity, organization and discussion.