

# **Biology 321**

## **Structure and Evolution of the Bryophytes, 2015**

**Instructor:** Shona Ellis (office: Rm. 2523, phone: 604-754-7725,  
e-mail: shona@interchange.ubc.ca)

**Office Hours:** Friday 12:00 - 1:45 or by appointment (room 2523)

**Lecture:** Biological Sciences 2200, Monday & Wednesday @ 2:00 – 2:50  
(unless otherwise indicated)

**Lab:** Rm 3067, Monday and Wednesday @ 3:00 - 5:00

**Lab Teaching Team:** Melissa Chen  
Rachel LeBlanc

**Open Lab:** Rm 3065, Thursdays and Fridays for working on projects/collections

**Website:** [www.connect.ubc.ca](http://www.connect.ubc.ca)

### **Required Fees and Books:**

Course Fee: \$30.00 - includes Lab Manual, Moss Keying Guide (Schofield, 1992), small notebook, hand lens, forceps, downloadable liverwort key (Wagner, 2013), and photocopies

Moss Keying Guide: *Some Common Mosses of British Columbia*, 1992, (part of course fee)  
Dr. W. B. Schofield

Textbook: *Introduction to Bryophytes*  
Alain Vanderpoorten and Bernard Goffinet

Recommended: *Field Guide to Liverwort Genera of Pacific North America*,  
Dr. W. B. Schofield (copies available for loan)

Paper: Shaw, J. *et.al.* 2011 (hand-out)

**Required Supplies:** Hand lens, one shoe box (for your collection), paper for "bryophyte packets" (recycled is just fine!), paper lunch bags for collecting, scraper for collecting mosses firmly stuck to substrate, notebook for field notes.

### **Other Reference Books:**

*Introduction to Bryology*, Dr. W. B. Schofield

A number of copies will be available as this used to be the course textbook.

While parts are outdated it is a very useful reference.

*How to Know the Mosses and Liverworts*, Conrad and Redfearn

There will be a couple of copies available in lab. There is a copy in Woodward Library and in the Vancouver Public Library (main branch)

- mainly used for liverwort identification

*Plants of Coastal British Columbia*, Pojar and MacKinnon

Many of you probably have this wonderful field guide. There are a few copies available in lab. Most libraries carry it.

*Moss Flora of the Pacific Northwest*, Eva Lawton

There are a few copies available in Woodward Library

**Grades:**

Lab Quizzes (3%)  
Assignments (7%)  
3-minute Short (1%)  
Clickers/Participation (2%)  
Lecture Midterm (10%)  
Collection (10%)  
Field Project Write-up (8%)  
Field Project Presentation (4%)  
Final Lab Exam (25%)  
Final Lecture Exam (30%)

**Code of conduct**

1. Cell phones and similar devices must be turned off and put away during class. If you do not follow these instructions I reserve the right to answer your phone and talk to your friends....
2. You are expected to be actively engaged in learning while in the classroom. Laptop computers and iPads etc. can only be used for lecture-related activities. Playing computer games, checking your email, texting etc. are not acceptable.
3. Please respect the learning environment of your fellow students. Get actively involved in the class discussions when appropriate.
4. Academic integrity is expected. Cheating and plagiarism in any form will not be tolerated. See the following resources for details:  
<http://science.ubc.ca/students/new/conduct>  
<http://vpacademic.ubc.ca/integrity/ubc-regulation-on-plagiarism/>

**Required Resources:**

**1. Textbooks:** Each week there are assigned pre-readings from the textbook (Vanderpoorten and Goffinet) which are often followed by online quizzes.

You must purchase or have access to a copy of this book to complete these assignments.

**2. Discussion Board**

The discussion board is the main way to work through questions about lecture content. There are two good ways to use the discussion board:

1. Post your question to the discussion board. If there is something you are having trouble with, it is likely that others are having trouble as well. By posting your questions, you will be helping out both yourself and others. You will find this very useful when preparing your “study question” answers.

2. Answer a question posted on the discussion board. Answering other student's questions is an excellent way to review material. If you can explain it (accurately), then you know it well!

Shona will monitor the discussion board regularly for quality control. The discussion board helps to identify any topics that need additional time in class.

3. Study Question Blog – There is discussion space set aside for addressing Study Questions

### **A Few Tips for Doing Well in Biology 321**

1. Use the learning objectives, guiding questions that accompany readings, and study questions to help frame your learning. They are intended to help focus your studies.

2. **Do** the pre-readings. They are designed to help you get the most out of lecture and lab.....and of course will help you do better on the online quizzes.

3. Attend class and engage actively. Data shows that class attendance and grades are highly correlated. The most important thing you can do to maximize your chances of doing well in the course is to show up for class and engage with the material while you are there.....and attending some of the optional fieldtrips is also a good idea.

3. Reviewing material from class helps you retain information and have a deeper understanding. Forming a study group can help with this. You can also use your study group to review notes, lab, and field activities as well as work on study questions. Sharing your ideas is a great way to clarify your understanding.

4. Use active methods for review. Don't just read and re-read your notes and the textbook. Taking notes and framing information into questions engages you with the content (that is why I have you develop your own study questions).