

BOT2011C (Online - Asynchronous)
Plant Diversity – Spring 2022
(4 credit hours)

I. Instructors information

INSTRUCTOR	Email / Website	Student hours*	Zoom link and info
Paul T. Corogin, Ph.D.	pcorogin@ufl.edu	pm pm	_____ _____ _____ Meeting ID: Passcode:

TEACHING ASSISTANT	Email / Website	Student hours*	Zoom link
Thomas Murphy	tmurphy1@ufl.edu		https://ufl.zoom.us/j/6925139102

*If you cannot make it to the student hours, please set up an appointment with your instructor or TA using the Canvas mailbox system.

II. Course description

The earth today contains a tremendous diversity of photosynthetic organisms - what processes explain how they evolved and why they persist? In this class we survey the biological diversity of modern algae and land plants, with an eye toward understanding why studying plant diversity is important in our modern society. We consider first the traditional classification of plants, and how this system has been revolutionized by phylogenetic analyses of genetic and now genomic data. We then turn to study the evolutionary processes that generate biodiversity and the ecological processes that shape this diversity. Finally, we turn to critically evaluating perceived threats to biodiversity, including invasive species, nitrogen deposition, global warming, and transgenic crops. Throughout the semester we read a mix of journal articles from the primary literature and as well as popular science pieces. In the laboratory students will see examples of the species we discuss in class and learn to identify key traits and species. After completing the course students will develop a timeline of the main events in the history of photosynthetic organisms, an overview of their diversity, and a conceptual understanding of the processes that generate and maintain this diversity.

III. Course goal and/or objectives

By the end of this course, students will develop a timeline of the main events in the history of photosynthetic organisms, an overview of their diversity, and a conceptual understanding of the processes that generate and maintain this diversity.

A. Instructional methods:

The course consists of 13 modules. The modules will present information in video lectures and readings, and the coursework will consist of assignments, reflections, discussions, group work, online laboratories, and end of module quizzes. The modules are to be completed in the order that they are presented.

B. Module overview:

Every week a module opens. We will briefly introduce the main focus of the modules and provide the objectives you are working toward as you learn the new content for that week.

C. Learning activities:

This page will outline the items that are due that week. Typically, you'll find quizzes of short answer/multiple choice questions, discussions, and assignments that are based on the lectures, readings, websites, and other resources. Do the assignments in the order they are outlined. In order to post a thoughtful, relevant, content-based discussion post, you'll need to have a good handle on the content for that week. These are **REQUIRED** readings, lectures, websites, databases, videos, and other resources that will prepare you to demonstrate your understanding in the quizzes, assignments, and discussions. Be sure to take notes!

IV. Course information

A. Required textbook

Demons in Eden: The Paradox of Plant Diversity, Jonathan Silvertown, Cambridge Univ. Press, 2008.

Additional resources: You may find *Principles of Life, second edition*, by Hillis et al. (Sinauer / Macmillan), or *Biology of Plants*, by Raven et al., (Freeman / Macmillan) to be a useful supplement, as well as *Stern's Introductory Plant Biology*, James Bidlack and Shelley Jansky, McGrawHill Press, 15th Edition, 2020.

B. Course communication

This is an online asynchronous class, and most of the materials will be available online through the course CANVAS website. You can directly access the Canvas login at <https://elearning.ufl.edu/>.

CANVAS: BOT 2011C will use the Canvas classroom management system to distribute and store the course syllabus along with any syllabus updates, providing access to course materials, administering quizzes, scheduling Zoom meetings, maintaining student grades, and regular communication with students. These practices will help ensure that all the class participants who may be geographically dispersed and taking courses asynchronously have access to course content. Canvas also will facilitate the process of making up of course work missed because of illness, periods of self-isolation, and other excused absences. Find additional information on using CANVAS (<https://elearning.ufl.edu/>).

All e-mail correspondence to course instructors must originate from your ufl.edu account, have your full name in the body of the e-mail, and contain your course number in the subject line. E-mails not meeting these requirements may not be recognized by our e-mail filters, and thus may not be answered. For the timeliest responses, use the Inbox Tool in Canvas. Your email will be answered within 24 hours, with exception of weekends when it might take up to 48 hours, please plan accordingly.

ZOOM: Zoom is an easy-to-use video conferencing service available to all UF students, faculty, and staff that allows for meetings of up to 100 participants. You can find resources and help using Zoom at <https://ufl.zoom.us> .

C. Course technology requirements

It is the responsibility of the student to maintain a functioning computing system and internet connection that can meet the minimum technical requirements of the course. Computing/internet connectivity issues will NOT be acceptable excuses for missed deadlines unless they are brought to the attention of the instructor at least 48 hours prior to the deadline and accompanied by the ticket number from technical support.

For issues with technical difficulties for Canvas, please contact the UF Help Desk at <http://helpdesk.ufl.edu> or (352) 392-HELP (4357). Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from the Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

V. Course Outline

Please visit the Syllabus page in Canvas to see the full schedule. In this table you will find the topics we will be studying each week and the instructor that will be in charge of grading your assignments and that you should contact in case you have questions.

Week	Lecture Topic (Online- subject to change)	Instructors to contact
<u>January</u>		
11-19	Course Orientation Module 1. Convergent Evolution	Dr. Paul Corogin
18-24	Module 2. Introduction to Taxonomy and Phylogenetics	Dr. Paul Corogin Thomas Murphy
25-31	Module 3. Biogeography and Speciation	Thomas Murphy
<u>February</u>		
1-7	Module 4. Cyanobacteria	Dr. Paul Corogin
8-14	Module 5. Endosymbiosis	Dr. Paul Corogin
15-21	Module 6. The Diversity of Algae	Thomas Murphy
21-*28	Module 7. Symbiosis and parasitism	Dr. Paul Corogin
<u>March</u>		
1-7	Module 8. The Maintenance of Species Diversity	Thomas Murphy
8-14	Module 9. The Colonization of Land	Dr. Paul Corogin
15-21	Module 10. The Evolution of Vascular Plants	Dr. Paul Corogin
22-*28	Module 11. The Evolution of Seed Plants	Dr. Paul Corogin
<u>April</u> 29 Mar-4 Apr		
5 - 11	Module 12. The Evolution of the Angiosperms	Thomas Murphy
12-19	Module 13. Plant Domestication	Dr. Paul Corogin

* Recharge days: Thursday, February 24th and Wednesday, March 23rd

Disclaimer: This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

VI. Grading policies and rubrics

This course is designed to be as flexible as possible to accommodate the variation of schedules typical of a remote student. For that reason, all content for each week will open on Sunday at 5:00 p.m. and all assignments will be due eight days later on Monday at 11:59 p.m. **Beware!** With flexibility comes the temptation to put off assignments until the last minute. **Please do not wait until the last minute!** Mastering the content of this course will require that you take careful notes during lectures and while reading, to prepare for each week's quiz. It is very important that you follow the sequence of the instructional materials and assignments in order to be successful.

There is no "grading curve" for this course.

Activity	Points each	Contribution	Max points	Details	Due
Quizzes	1.5	Best 10 of 13	15	3 attempts, highest score counted.	Sunday 11:59pm
Group work assignments	3	4 of 4	12	On-time participation is mandatory	Module 5: Friday 11:59pm and Sunday 11:59pm Module 7: Thursday 11:59pm and Sunday 11:59pm Module 8: Sunday 11:59pm Module 12: Thursday 11:59pm and Sunday 11:59pm
Assignments	2	Best 15 of 18	30		Varies. Check Canvas
Discussions	2	Best 5 of 6	10		Initial post: Thursday 11:59pm Replies: Sunday 11:59pm
Lab Journals	2	Best 8 of 9	16		Sunday 11:59pm
Peer reviewed activities	1	Best 5 of 6	5	You must do both the assignment and the peer review to get the credit.	Original submission: Thursday 11:59pm Peer review: Sunday 11:59pm
Peer-reviews from group work assignments	1	2 of 2	2	Mandatory activities to complete the assignment.	Module 5 and Module 12: Sunday 11:59pm
GoFlag activities	2	3 of 3	6		Varies. Check Canvas
Reflections	1	4 of 4	4		Varies. Check Canvas
Total			100		

*See the rubric details for the availability of partial credits

RUBRICS

Rubric for Discussions

Criteria	Points
Accuracy and completeness of the post*	1
Initial post on time	0.5
Replies on time**	0.5
Total	2

* Professional tone is also important regarding the completeness of the answer **if there is not any reply in your group, you still get 0.5 regardless.

Rubric for Assignments

Criteria	Points
Accuracy and completeness *	1.5
Submission on time	0.5
Total	2

*If a student does not complete all parts of the assignment, they receive 0.5, all questions complete but some inaccurate answers = 1, answers are correct (or very nearly so) and all complete = 1.5)

Rubric for Lab Journals

Criteria	Points
Accuracy and completeness *	1.5
Submission on time	0.5
Total	2

*0.2-0.3 points per station since there's often 5-6 stations. If a student does not complete all parts of the assignment, they receive 0.5, all questions complete but some inaccurate answers = 1, answers are correct (or very nearly so) and all complete = 1.5)

Rubric for peer-reviewed activities

Criteria	Points
Accuracy of the answer Peer review completed Submission on time	Overall grade
Total	1

Rubric for Go-Flag activities

Criteria	Points
All questions/activities completed	1.5
Submission on time	0.5
Total	2

Rubric for Reflections

Criteria	Points
Accuracy of answer	0.5
All questions/activities completed	0.25
Submission on time	0.25
Total	1

Rubric for the group work assignments

Criteria	Points
Accuracy / completeness	1.5
Submission on time	0.5
Total	2

*If a student does not complete all parts of the assignment, they receive 0.5, all questions complete but some inaccurate answers = 1, answers are correct (or very nearly so) and all complete = 1.5)

Rubric for Reflections

Criteria	Points
Accuracy / completeness	1.5
Professional tone	0.25
Submission on time	0.25
Peer review	1
Total	3

Grading Scale

Point Range (%)	Letter Grade
≥ 90.00	A
≥ 86.66	A–
≥ 83.33	B+
≥ 80.00	B
≥ 76.66	B–
≥ 73.33	C+
≥ 70	C
≥ 66.66	C–
≥ 63.33	D+
≥ 60	D
≥ 56.66	D–
< 56.66	E

VII. UF Course policies

UF Online students are bound by the same UF policies as on-campus students. Please read through this section in full.

A. Attendance

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

If you are experiencing COVID-19 symptoms ([click here for guidance from the CDC on symptoms of coronavirus](#)), please use the UF Health screening system and follow the instructions on whether you are able to attend class. [Click here for UF Health guidance on what to do if you have been exposed to or are experiencing Covid-19 symptoms](#). Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work. Refer to the above link for more information on the university's attendance policy.

This course is asynchronous. One module will be opened and due each week of the course. Deadlines are set for completion of modules, labs, assignments, quizzes, and discussions, but they may be completed in advance of the recommended schedule.

B. Quiz/Exam Policy

Quizzes are based on lectures, readings, and/or Labs delivered in each module. Make sure that you have viewed the lectures, read the readings, and taken notes so that you are prepared for the quiz. Once you start a quiz, you will have limited time to complete it (10 minutes per quiz), and you may not exit and return later. Quiz deadlines are set according to the weekly module schedule. All module quizzes will be available starting on the first day the module opens. The module quiz must be completed prior to the weekly scheduled deadlines.

C. Make up policy

Make-up or extensions on online assignments will only be offered in extreme circumstances if a valid and documented excuse is provided through the Dean of Students' office or the Student Health Care Center. Every effort should be made to complete the modules on a timely manner, as online assignments are available for multiple days, you should have plenty of time to complete them. There are no make-ups available for technical difficulties (unless accompanied by a ticket number) or missing a deadline. Be sure to check your tech well ahead of deadlines.

D. Accommodations

Students who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

E. Assignment policy

Assignments submitted one week late will receive 50% of the total score achieved on the assignment. For example, for an assignment that was 100% correct but submitted a week late, 50% of the total points will be awarded towards your final grade. Assignments submitted two or more weeks late will receive no points.

F. Course Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at gatorevals.aa.ufl.edu/public-results/.

VIII. UF Policies:

A. Academic Integrity

“UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honorcode/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

B. Academic Honesty Policy

All students registered at the University of Florida have agreed to comply with the following statement:

“I understand that the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University.”

In addition, on all work submitted for credit the following pledge is either required or implied:

“On my honor I have neither given nor received unauthorized aid in doing this assignment.”

If you witness any instances of academic dishonesty in this class, please notify the instructor or contact the Student Honor Court (392-1631) or Cheating Hotline (392-6999). For additional information on Academic Honesty, please refer to the University of Florida Academic Honesty Guidelines at:

<https://catalog.ufl.edu/ugrad/current/advising/info/student-honor-code.aspx#honesty>.

Remember, plagiarism is also a violation of the Academic Honesty Policy. Please see above for a source on how to avoid plagiarism.

Important – Plagiarism

Plagiarism is a serious violation of the Student Honor Code. It includes:

- Submitting all or part of someone else's work as if it is your own
- "Borrowing" without crediting the source
- Submitting duplicate assignments
- Collaborating or receiving substantive help in writing your assignment unless I require such collaboration as part of the work
- Failing to cite sources, or citing them improperly

Consequences of plagiarism in BOT2011C –

- Failing grade on assignment AND
- Course grade penalty of one letter grade AND
- Report to the Office of the Dean of Students.

Please review plagiarism and how to avoid it:

<http://web.uflib.ufl.edu/msl/07b/studentplagiarism.html>

C. Netiquette: Communication courtesies

All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. If you find something wrong with the material, Canvas functionality, or grading, please let us know. We will do everything that we can to see that students are not punished for errors in the course functionality. Please, however, remember that the TAs are real people, and most likely these errors are not their fault, and they want you to succeed!

D. Procedure for Conflict Resolution

Any classroom issues, disagreements or grade disputes should be discussed first between the instructor and the student. If the problem cannot be resolved, please contact the (Under)Graduate Coordinator or the Department Chair. Be prepared to provide documentation of the problem, as well as all graded materials for the semester. Issues that

cannot be resolved departmentally will be referred to the University Ombuds Office (<http://www.ombuds.ufl.edu>; 392-1308) or the Dean of Students Office (<http://www.dso.ufl.edu>; 392-1261). For further information refer to https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf (for residential classes) or <http://www.distance.ufl.edu/student-complaintprocess> (for online classes).

IX. Resources Available to Students

Many resources are available on campus if you need help in different aspects of your health, wellness and career goals:

Health and Wellness:

- U Matter, We Care: If you or someone you know is in distress, please contact <mailto:umatter@ufl.edu> , 352-392-1575, or visit umatter.ufl.edu to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: Visit counseling.ufl.edu or call 352-392-1575 for information on crisis services as well as non-crisis services.
- Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need or visit www.shcc.ufl.edu .
- University Police Department: Visit police.ufl.edu or call 352-392-1111 (or 9-1-1 for emergencies).
- UF Health Shands Emergency Room/Trauma Center: For immediate medical care in Gainesville, call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; www.ufhealth.org/emergency-room-trauma-center .
- *Basic Needs:* Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support – see <http://www.umatter.ufl.edu> . Please notify the professor if you are comfortable in doing so, and visit The Field and Fork Pantry <https://pantry.fieldandfork.ufl.edu> for additional resources

Academic Resources:

- *E-learning technical support:* Learningsupport@ufl.edu; <https://lss.at.ufl.edu/help.shtml>; 352-392-4357 (opt. 2)
- Career Connections Center: Reitz Union; <http://www.crc.ufl.edu/>; 352-392-1601. Career assistance and counseling services www.career.ufl.edu .
- Library Support: Various ways to receive assistance with respect to using the libraries or finding resources: www.cms.uflib.ufl.edu/ask
- Teaching Center: 352-392-2010 General study skills and tutoring: teachingcenter.ufl.edu/
- Writing Studio: 352-846-1138. Help brainstorming, formatting, and writing papers: www.writing.ufl.edu/writing-studio/

Should you have any complaints with your experience in this course please visit <http://www.distance.ufl.edu/student-complaints> to submit a complaint.

X. Accommodations for students with disabilities

Students who will require a classroom accommodation for a disability must contact the Dean of Students Office of Disability Resources, in Peabody 202 (phone: 352-392-1261). Please see the University of Florida Disability Resources website for more information at:

<http://www.dso.ufl.edu/drc/>. Note that the student should provide documentation of a requirement for accommodation **as soon as possible**. No accommodations are available to students who lack this documentation. It is the policy of the University of Florida that the student, not the instructor, is responsible for arranging accommodations when needed. Once notification is complete, the Dean of Students Office of Disability Resources will work with the instructor to accommodate the student.