

Introductory Botany

SPRING 2026

1. Course Basics

Introductory Botany

BIO 210

Canvas Page: <https://bsu.instructure.com/courses/183084>

CRN: Section 3: 32790, Section 4: 33019

Class meeting days and times, building and room are posted on Canvas

2. Instructor Information

Jessica Peebles-Spencer, Ph.D.

Associate Teaching Professor

Department of Biology

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Office Phone: 765-285-1137

Drop-In Office Hours: Monday 11 AM – 2 PM and Friday 1-2 PM

Emails and Canvas messages are my preferred methods of contact. Please include your course and section number in your message (e.g., Bio210 S1). Appointments for office hours are encouraged but not required, and meetings can be arranged in person or on zoom at other times if you cannot attend my regular drop-in office hours.

3. Course Information

Course Description and Rationale

Examines evolutionary solutions to problems of survival and reproduction faced by plants and their allies (fungi, algae & protists). Problems are investigated from a structure-function basis in an evolutionary-phylogenetic survey. Physiological processes are emphasized, including the selective pressures involved in the evolution of these mechanisms. Lecture and laboratory.

The course is intended to strengthen the students' understanding of plant biology, primarily from a structure-function basis in an evolutionary-phylogenetic survey. This course will focus on problems that plants must solve to stay alive. This approach is based upon the idea that the survival of any organism on a day-to-day basis is dominated by its efforts and activities to solve a basic, common set of dilemmas.

Prerequisites

Bio 112. Recommended: Bio 111

Course Objectives

Upon completion of this course, students should be able to:

- A. Describe the events surrounding the evolutionary origin of the major phyla of protists, fungi, and plants, including their probable ancestors (as currently understood), major morphological changes, and the

ecological challenges posed by an aquatic environment, transition from an aquatic to a terrestrial environment, and a terrestrial environment.

- B. Describe primary and secondary characteristics used in the classification of protists, fungi, and plants (primarily to phyla, but where appropriate to the level of class, order, or family).
- C. Compare and contrast the three basic eukaryotic, sexual life cycles and be able to apply these life cycles, when provided certain basic characteristics, to unknown organisms.
- D. Describe the major patterns of reproduction and reproductive strategies used by plants and their allies.
- E. Describe the following physiological processes in plants and how plant structure relates to these processes:
 - a. How energy is acquired and transformed by plants;
 - b. How plants procure and process nutrients, including nitrogen;
 - c. How plants exchange gases with the environment;
 - d. How plants transport water and nutrients;
 - e. How plants regulate their internal environment using both internal and external stimuli;
 - f. How plants defend themselves from herbivores
- F. Describe the structure and development of the angiosperm plant body.
- G. Further develop critical thinking skills through problem-solving exercises based upon concepts in organismal biology.

Course Modality/Structure

Face-to-Face, 3 Credit Hours

4. Course Materials

Recommended

Raven Biology of Plants, Evert and Eichhorn, 2012 or 2004

Required

Lab Manual. Purchase from BSU Bookstore.

For more information about obtaining required course materials, see [Ball State First Day](#).

5. Course Assignments and Assessments

Course Assignments

Assignment details, including instructions, relevant readings, due dates, and grading criteria/rubrics will be posted and updated on Canvas. Please check Canvas regularly to stay informed and on track.

Notes Guides – 5 points each. Worksheets to fill out that accompany each lecture topic. When filled out, these serve as study guides for each exam. ~95% of each exam's material will come from the Notes Guides. The more effort you put into these, the more prepared you will be for the exam. Graded for completeness not correctness.

Thinking and Application Discussions – 5 points each. A question will be posed in discussion thread, related to a lecture topic. Students are expected to give a thoughtful answer, as well as reply to another student's response. Graded for completeness not correctness, as many of these questions will not have right or wrong answers.

Lecture Exams – Approximately 50 points each. Closed note, closed book, requires Respondus Lockdown Browser (without monitor), will be given during class time in our classroom and proctored by your professor and/or your teaching assistant. Mostly multiple choice with an assortment of labelling images, matching, true or false, short answer, and essay questions. You will not be provided a separate study guide, as the notes guides are designed with this function in mind. You will be provided a breakdown of points by question type for each exam.

Oral/Poster Presentation (format TBD)– This assignment will occur in three parts. (1) Select a topic related to botany or anything we've discussed in our lecture material. Select one or two partners to complete this project with, or complete on your own. 5 points. (2) Complete an Annotated bibliography. Choose 5+ sources, depending on the number of people in your group, and explain both what they say and how you will use them in your presentation. 25 points (3) Presentation. 50 points.

Practical Lab Quizzes – Approximately 25 points each. Closed note, closed book, requires Respondus Lockdown Browser (without monitor), will be given during lab time in our classroom and proctored by your professor and/or your teaching assistant. Multiple choice questions where you will be shown an image of something that we've discussed in the lab material and primarily asked to identify parts, or functions of those parts, though questions may vary. You will be provided with a study guide and a practice quiz of 5-7 sample questions for each practical quiz. Practical Quizzes will be open for approximately 2 days.

Other Small Assignments - Other small assignments that do not fit into any of these other categories will be described as they are assigned.

Course Grading

Weighted Grade Calculation

Percentages are subject to *slight* change

20% - Homework, Discussion, Attendance/Participation, other Activities

40% - Lecture Exams

15% - Presentation and Annotated Bibliography

25% - Lab Quizzes, Participation, and Activities

Course Change / Withdrawal:

Change-of-course period (add/drop) ends 1/11/26. Course Withdrawal deadline is 3/19/26.

Grading Scale

Pluses and Minuses may be added at the tops and bottoms of these ranges at the professor's discretion.

A 90 – 100%

B 80 – 89%

C 70 – 79%

D 60 – 69%

F 0 – 59%

6. University Policies and Statements

University Statement

We are committed to ensuring that all members of the community are welcome, through valuing the various experiences and worldviews represented at Ball State and among those we serve. We promote a culture of respect and civil discourse. If you need course adaptations or accommodations because of a disability, please contact the instructor of record as soon as possible. Ball State's [Disability Services Office](#) coordinates services for students with disabilities; documentation of a disability needs to be on file in that office before any accommodations can be provided. Disability Services can be contacted at 765-285-5293 or dsd@bsu.edu.

Freedom of Expression

In this course, we are committed to fostering a learning environment that values intellectual diversity, encourages free expression, and promotes open inquiry. As members of the Ball State Community, we treat each person in the Ball State community with civility, courtesy, compassion, and dignity and respect and learn from differences in people, ideas, and opinions. Please review Ball State University's [Statement on Freedom of Expression](#), the resources on Ball State's [Freedom of Expression webpage](#), and [Ball State's Beneficence Pledge](#).

Attendance Policy

This class is designed for collaboration, discussion, and hands-on engagement, so you are expected to attend all scheduled lecture and lab sessions and participate fully in in-class and online activities. See [this study](#) on the link between attendance and student success. We use **APlus+ attendance software**, which requires students to enter a code at each class session to record attendance. Attendance is important for your learning and is required for financial aid reporting.

Unexcused Absences

You are permitted up to **two unexcused absences** without penalty. These are meant to cover occasional personal reasons (illness, transportation issues, etc.). Additional unexcused absences will reduce your attendance/participation grade.

Excused Absences

- Excused absences are determined in accordance with **Ball State University policy**. Please refer to the [University policies regarding student absences](#) for details.
- Absences will be excused for the following: funeral and bereavement leave, jury duty, late course addition, military absences, observance of religious holidays, pregnancy leave, student-athletes participating in University- or department-approved activities, and university advisories.
- Other situations (e.g., illness, car accidents, job interviews) may also be excused at my discretion, especially with timely notice and documentation.

Communication Expectations

- **Planned absences:** Notify me in advance if you know you will miss class (e.g., funeral)
- **Unexpected absences:** You do not need to email me for every missed day. Please notify me as soon as possible after the absence begins (e.g., unexpected injury or illness) if your absence will extend beyond **two consecutive class days** or if you need flexibility on an assignment or assessment.
- **You are responsible** for entering the attendance code at the beginning of class while the window is open. If you realize you missed it, you may speak to me **immediately after class** to correct it. Once you leave the classroom, attendance cannot be adjusted.
- In general, students are expected to notify all their instructors once they anticipate being absent for any reason (e.g., funeral) or as soon as possible after the absence begins (e.g., unexpected injury or illness). The student may need to provide documentation (with confidential information redacted when appropriate) to each instructor if requested.

Illness & Well-being

If you have a **contagious illness**, do not attend class. You will not be penalized for illness-related absences as long as you follow the communication expectations above.

Responsibility for Missed Work

If you miss class—whether excused or unexcused—it is your responsibility to:

- Get notes or updates from a classmate
- Check Canvas and email for announcements
- Complete any assignments by the deadline (unless other arrangements are made)

University Grade Appeal Policy

If you believe you received a final course grade that does not reflect your performance due to fairness or a procedural issue, you have the right to file an appeal within 5 school days after final grades are posted by the Office of the Registrar. Review the [University Grade Appeal Policy and Process](#).

Student Academic Ethics Policy

Honesty, trust, and personal responsibility are fundamental attributes of the university community. Academic dishonesty and other forms of academic misconduct threaten the foundation of an institution dedicated to the pursuit of knowledge and will not be tolerated. To maintain its credibility and reputation, and to equitably assign evaluations of scholastic and creative performance, Ball State University is committed to maintaining a climate that upholds and values the highest standards of academic integrity. Visit the VPAA's [academic integrity website](#) (Students tab) for resources on understanding academic integrity, citing sources properly, and avoiding inadvertent academic dishonesty. To learn about BSU's academic integrity expectations and students' rights, please read the University [Student Academic Ethics Policy](#).

If an ethics violation occurs, Instructors are required to follow university reporting procedures. Claiming that you did not understand the assignment, plagiarism or the academic ethics policy is not an acceptable excuse, so please be sure to ask questions if you are unsure about this issue.

Academic integrity violations include giving or receiving an unfair academic advantage (cheating), presenting someone else's ideas or work as your own (plagiarism), and falsifying academic records. Any such inappropriate behavior will result in penalties ranging from a "0" for the assignment, failure of the course, or expulsion from the university. Unless otherwise indicated, you must work independently by yourself. Check with me if you are unsure whether something constitutes academic dishonesty.

Examples of academic integrity violations include but are not limited to:

- Using resources not authorized by the faculty member (including devices, AI tools, hidden notes, and open books)
- Using commercial study websites to find answers to graded assignments (Chegg, Course Hero, StudyPool, OneClass, etc.).
- Without the instructor's written permission, giving away, buying, or selling graded assignments class notes, exams, study guides, or other course materials to other students or to third-party vendors (Course Hero, Chegg, 24HourAnswers, etc.).
- Sharing or allowing others to access your files, whether done with permission or not.
- Reusing your own work from another semester, course, or section.
- Sharing answers with others during exams (passing notes, texting, whispering, gesturing)
- Discussing exam questions and answers with students who have not taken the exam.
- Soliciting others to complete work for you.
- Impersonating someone else or having them impersonate you.
- Making fraudulent or dishonest statements regarding your work.
- Submission of material from ChatGPT or other AI authoring software as your own, in whole or in part, without attribution. See Generative AI statement below for more information.

Generative AI Statement

Some Use of Generative AI Permitted Within Defined Guidelines

In this course, you may use generative AI tools (e.g., ChatGPT) for select purposes such as brainstorming ideas, organizing your thoughts, or revising drafts. You may also use writing support tools such as Grammarly or AI components built into applications like Microsoft Word for grammar correction, spelling, and minor wording improvements. You will receive guidance on when and how generative AI is appropriate, as well as expectations for proper attribution. Using AI to produce entire assignments or bypass the learning process is not permitted. Any AI-generated content that contributes meaningfully to your work must be cited. Failure to follow these guidelines constitutes a violation of the Ball State University [Student Academic Ethics Policy](#).

7. Student Support Services

The Learning Center

The Learning Center offers free Tutoring and Academic Coaching for many courses at Ball State. Students can make appointments for online (Zoom) or in-person (NQ 350) appointments. To make an appointment, visit myballstate.bsu.edu and click on “Navigate” in the Academic Tools section, or just go directly to bsu.navigate.eab.com. Testing accommodations for students with disabilities are available for students who have received the appropriate documentation from Disability Services. Tests may be administered in the Learning Center. For more information about Learning Center programming, visit bsu.edu/learningcenter or call 765-285-1006.

The Basic Needs Hub

If you are having difficulty affording enough food, do not have a safe and reliable place to sleep, and/or experiencing an emergency or crisis, help is available through the [Basic Needs Hub](#). The Basic Needs Hub has information, resources, and provides individualized support to students. To talk with a supportive staff member about your experience, receive one on one assistance, or learn more about resources, you can submit a [Basic Needs Assistance Form](#).

The Counseling Center

The Ball State University Counseling Center offers free and confidential services to all students. The Counseling Center is located in Lucina Hall, Room 320. To schedule an appointment, you can contact us at 765-285-1736. Ball State also offers a 24/7 Crisis Line, which can be reached at 765-285-HOPE (4673). The Crisis Line is a mental health resource for those who are struggling with any mental health concerns, including thoughts of self-harm and/or suicide. We assist students with getting connected to therapy at our Center as well as connecting students to self-help resources, other on-campus resources, and community-based resources. All of these resources, including a direct link to our website, can be found [here](#).

The Speaking Center

The [Speaking Center](#) is a free resource available to all members of the BSU community wanting to improve their public speaking abilities. We offer personalized coaching designed to help you become a more confident and effective speaker. Our trained coaches provide constructive feedback and support throughout the entire speech preparation process, whether you are in the early stages of brainstorming ideas and organizing your thoughts, or you need to practice your delivery and refine your message. The Center is in the David Letterman Communication and Media Building, room 302. To schedule an appointment, please access us through your Navigate app or use this [direct link](#) to sign up for a time. Appointments are available both in person and on Zoom. Appointments are available in person, on Zoom, and in virtual reality (VR) for those interested in practicing in an immersive speaking environment.

8. Canvas and Student Privacy

Canvas Accessibility

Canvas provides a user experience that is easy, simple, and intuitive. Special attention has been paid to making Canvas screen-readable. The Rich Content Editor encourages users to create accessible content pages (i.e. text formatting is accomplished using styles). Canvas is designed to allow limited customization of colors and schemes to be accessible for all users. The National Federation of the Blind granted Canvas the Gold Level Web Certification in 2010. **Find more information by visiting the [Canvas Voluntary Product Accessibility Template \(VPAT\)](#).**

FERPA and Privacy

As a student, your educational records are considered confidential. Under FERPA (Family Educational Rights and Privacy Act), your records are confidential and protected. Under most circumstances, your records will not be released without your written and signed consent. However, some directory information may be released to third parties without your prior consent unless a written request to restrict this is on file. You can learn more about student rights to privacy by reading [Ball State's FERPA and Privacy and Protection](#).

Plagiarism Detection

The campus subscribes to Turnitin, a plagiarism prevention service, through Canvas. You may need to submit written assignments to Turnitin. Student work will be used for plagiarism detection and for no other purpose. The student may indicate in writing to the instructor that he/she refuses to participate in the plagiarism detection process, in which case the instructor can use other electronic means to verify the originality of their work.

Proctoring

This course will require the use of the Respondus LockDown Browser for online exams. [Watch this short video](#) to get a basic understanding of LockDown Browser. Instructions for obtaining the software can be found on canvas.

9. Course Expectations and Policies

General Comments

My goal is to facilitate your understanding and learning of the material you need to be successful in this course and in further course work in this department. I will give freely of my time and will work diligently to help you during the semester, but your success will depend on the amount of time and effort you are willing to put into the course.

The text in this course is to be used as a supplement to the lectures. You will also be given various websites to read during the semester. Between the lecture, the websites, and the text information, you are exposed to a greater amount of subject content than with any of these alone. Exams will draw mostly on information from lecture, but other sources such as other assigned readings and handouts may be included.

A good hint – If I repeat something more than once, you're more likely to see it on the exam.

Course Participation Expectations

- You are expected to be an active participant in the course.
- This course is designed to include discussion and other forms of collaboration and communication. You should be willing and ready to regularly communicate with me and your classmates in person and/or online. You will participate in weekly activities in this course. You will need to log into your course several times a week and check your official BSU University email account daily. Doing so will allow you to view announcements, participate in class activities, assignments, online discussions, and complete assessments.
- **Your attendance in lecture and lab is necessary for your success in the course.** See Attendance Policy above for more information.
- Complete all assignments, quizzes, tests, and any other activities by the stated due dates.

Feedback and Grading Policy

- I will do my best to respond to email from your official Ball State email address within 48 hours during week days (Monday-Friday) and within 72 hours on the weekend. If you have not received a response from me either by email, by course announcement, or in person, **please reach back out or talk to me before or after class!**
- I will grade your quizzes, assignments, and discussions no later than within 5 school days of submission.
- It is my policy that appropriate evaluation of your academic performance is an integral part of your learning experience.
- I am the key decision-maker on the assignment of grades. In the lab section of this course, and very occasionally in lecture, some grading may be delegated to our teaching assistant. In that case, I am still the key decision-maker relative to grades.
- Contact me directly if you have questions or concerns about your performance in class.

Late Assignment Policy

- All assignments are due by **5 PM EST/EDT** time on the due dates indicated.
- **Late assignments will be docked 10% of the total possible points per day they are late,** in addition to the grade you receive on the assignment (Ex. A 20-point assignment turned in 2 days late where you earned 15 points would receive a grade of 11 of 20).
- Internet connectivity and technical issues may occur and impede you from turning in work on time. Turn in work early and often, and set up a back-up plan, such as visiting a local library or borrowing a peer's computer. Technical issues are not valid excuses for late work unless the problem stems from Ball State or Canvas servers. You can [check system statuses here](#).
- Canvas will not accept assignments for grading after 11:59 pm EST/EDT on the final day of class.

Assignment Submission Policy

- All assignments should be submitted as Word documents with extensions of .doc or .docx unless otherwise indicated in the assignment description.
- Assignments, unless otherwise indicated, should be submitted using the assignment link in the module.
- **Assignment submission via email is not a valid form of submission.**

Time Commitment

- In order for you to be successful in your studies, it is essential that you plan your schedule to include at least **2-3 hours per week of schoolwork for every credit in which you are enrolled.**

Engagement Expectations

To support a respectful and engaging academic community that encourages the free exchange of ideas and civil discourse, we will follow these ground rules:

- **Respect different perspectives.** Share your ideas and let others share theirs.
- **Challenge ideas, not people.** Disagree respectfully. No personal attacks or put-downs. Focus on exploring ideas critically and constructively.
- **Listen to understand.** Stay curious, ask questions to understand, and give others space to speak.
- **Assume good intentions.** Approach discussions with curiosity and compassion.
- **Keep it private.** What is shared in class stays in class. Do not share others' words or work without permission.
- **Be respectful.** Avoid hurtful language, stereotypes, or content that may demean others. Keep feedback constructive.

10. Technology

Hardware Requirements

- Mac, PC, Chromebook or iPad access to view and interact with our Canvas course.
- Internet Access: High-speed internet connection, such as DSL or a cable modem. Your internet connection is critical for viewing videos and other supplemental videos in Canvas.
- Audio: A working sound card and speakers will be required.

Software Requirements

(see Canvas for more information)

- Microsoft Office 365
- Adobe Acrobat Reader
 - See our canvas site for more information.

Computer/Internet Failure

- If your computer fails, or you lose Internet access, you need to have a back-up plan. Examples might include using the computers/Internet on campus, a friend's computer, or a computer at work or in your local library.
- Additionally, laptops are available to be checked out by students for up to four days at a time from the BSU library ([more information here](#)).

Technology Help

The Ball State Technology Helpdesk can be accessed at www.bsu.edu/helpdesk. There, you may access the IT knowledge base, find answers to frequently asked questions, report a technology issue or request assistance, check on the status of your ticket, review your ticket history, join a remote assistance session and much more.

Technology HelpDesk and Desktop Support
Bracken Library (BL) 101
Ball State University
Muncie, IN 47306
765-285-1517

11. Course Schedule

To support a learning experience that is responsive to the needs, interests, and pace of our class community, the course schedule may shift over the semester. The most current version of the schedule will always be available on Canvas. Check Canvas regularly for updates and contact me if you have any questions.

12. Subject to Change Statement

This syllabus is subject to change in the event of extenuating circumstances.