

NOTE to prospective students: This syllabus is intended to provide students who are considering taking this course an idea of what they will be learning. A more detailed syllabus will be available on the course site for enrolled students and may be more current than this sample syllabus. Summer term courses may be accelerated – please check the Ecampus [Schedule of Classes](#) for more information.

BOT 220

INTRODUCTION TO PLANT BIOLOGY (4)

COURSE CREDIT:

(4) This course combines approximately 120 hours of instruction, online activities, and assignments for 4 credits.

PREREQUISITES, CO-REQUISITES AND ENFORCED PREREQUISITES:

None.

COURSE DESCRIPTION:

A Baccalaureate Core Perspectives course for Physical/Biological Science. Emphasis is on an introduction to plant biology that includes an overview of major groups of plants, cell structure and behavior, anatomy and form of roots, shoots, and flowers, and plant physiology. The roles of plants in the environment are emphasized throughout the course. Lab activities and a phylogeny project build on the lecture themes and provide hands-on learning experiences including self-guided field trips. **Lecture/Lab.**

Baccalaureate Core Course Attributes:

Core, Pers, Biological Science

CONTACT INFORMATION:

For more information, contact: LYNDA CIUFFETTI, 2082 CORD, 541-737-3451.

Instructor: Dr. Marc Curtis; 541-737-5287
email: curtism@science.oregonstate.edu

Sample syllabi may not have the most up-to-date information. For accuracy, please check the [ECampus Schedule of Classes](#) to see the most current instructor information. You can search for contact information by name from the OSU Home Page.

LEARNING RESOURCES:

Biology of Plants, 8 ed., Raven, Evert & Eichhorn

Online student resources are available: <http://bcs.whfreeman.com/raven8e>

NOTE: For textbook accuracy, please always check the textbook list at the [OSU Bookstore website](#). Sample syllabi may not have the most up-to-date information.

Students can also click the 'OSU Beaver Store' link associated with the course information in the [Ecampus schedule of classes](#) for course textbook information and ordering.

STUDENT LEARNING OUTCOMES:

BOT 220 Student Learning Outcomes

At the end of this course, students will be able to:

1. **List** the major groups of plants.
2. **Recognize** and **articulate** the characters that distinguish them.
3. **Discuss** the differences and similarities with other major forms of life.
4. **Interpret** phylogenetic trees as to origins of characters and relations among lineages.
5. **Predict** and **sketch** how cells account for the structure and function of tissues and organs.
6. **Analyze** how tissues and organs develop.
7. **Comprehend** how plants acquire, and use, photons and inorganic compounds to build and maintain a body.
8. **Assess** the ecological roles of plants and their connection to major Earth processes.

Baccalaureate Core Perspectives Learning Outcomes:

1. Recognize and apply concepts and theories of basic physical or biological sciences.
2. Apply scientific methodology and demonstrate the ability to draw conclusions based on observation, analysis, and synthesis.
3. Demonstrate connections with other subject areas.

COURSE CONTENT AND POLICIES:

Course Credits:

3 hours/week spent on lecture; listening and taking notes. 4 hours/week spent on the lab project and lab report. 4 hours/week spent reading, completing study questions, and participating in discussion forums.

Lecture Topics

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|---------|---|
| Week 1 | Diversity: Systematics, evolution and origins of diversity |
| Week 2 | Diversity: Origins of plants, Bryophytes and Pteridophytes |
| Week 3 | Diversity: Gymnosperms and Angiosperms (Exam1 : Wednesday of Week 4) |
| Week 4 | Development: Plant cells and mechanisms of development |
| Week 5 | Development: Anatomy and early development |
| Week 6 | Development: Roots, stems, leaves and flowers. |
| Week 7 | Development: Hormones and external factors (Exam2 : Monday of Week 8) |
| Week 8 | Physiology: Energy and respiration |
| Week 9 | Physiology: Photosynthesis and plant nutrition |
| Week 10 | Water and solute transport |
| Week 11 | Final Exam |

Lab Topics

| | |
|---------|---|
| Week 1 | Begin phylogeny project; classification using seed characters; Report 1 (15 pts) |
| Week 2 | Bryophyte and pteridophyte form and function; Report 2 (20 pts) |
| Week 3 | Gymnosperm and angiosperm form and function; Report 3 (20 pts) |
| Week 4 | Field Trip; Report 4 (10 pts) |
| Week 5 | Anatomy; Report 5 (20 pts) |
| Week 6 | Hormones or external factors; set up experiment, collect data; And distance matrix for phylogeny project; Report 6 (15 pts) |
| Week 7 | Finish Collecting data from hormone experiment; Report 7 (20 pts) |
| Week 8 | Mega analysis for phylogeny project; Report 8 (10 pts) |
| Week 9 | Field Trip; Report 9 (10 pts) |
| Week 10 | No Lab |

Evaluation of Student Performance

Lecture: There will be two midterms and a final exam (each worth **90 pts**). Exams include multiple-choice, explaining why a statement is false, short answer questions and interpreting data. There is also a weekly discussion forum (**5 pts** each; total of **45 pts**).

Lab: There will be 9 reports (see **Lab Topics** for points).

Grade: Approximately 2/3 of the grade (**305 points**) will be based on lecture material and 1/3 of the grade (**140 points**) will be based on lab performance.

The total points possible are **445**. The Grading Scale will be posted before the final exam.

Course site login information

Information on how to login to your course site can be found [HERE](#).

Statement Regarding Students with Disabilities

Oregon State University is committed to student success; however, we do not require students to use accommodations nor will we provide them unless they are requested by the student. The student, as a legal adult, is responsible to request appropriate accommodations. The student must take the lead in applying to Disability Access Services (DAS) and submit requests for accommodations each term through DAS Online. OSU students apply to DAS and request accommodations at our [Getting Started with DAS](#) page.

Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Additionally, Canvas, the learning management system through which this course is offered, provides a [vendor statement](#) certifying how the platform is accessible to students with disabilities.

Academic Integrity and Student Conduct (OSU policy)

Students are expected to be honest and ethical in their academic work. Intentional acts of academic dishonesty such as cheating or plagiarism may be penalized by imposing an “F” grade in the course.

Student conduct is governed by the universities policies, as explained in the Office of the Dean of Student Life: Student Conduct and Community Standards. In an academic community, students and faculty, and staff each have responsibility for maintaining an

appropriate learning environment, whether online or in the classroom. Students, faculty, and staff have the responsibility to treat each other with understanding, dignity, and respect.

Students are expected to conduct themselves in the course (e.g. on discussion boards, email postings, etc.) in compliance with the university's regulations regarding civility. Students will be expected to treat all others with the same respect as they would want afforded to themselves. Disrespectful behavior (such as harassing behavior, personal insults, inappropriate language) or disruptive behaviors are unacceptable and can result in sanctions as defined by Student Conduct and Community Standards.

For more info on these topics please see:

- [Statement of Expectations for Student Conduct](#)
- [Student Conduct and Community Standards - Offenses](#)
- [Policy On Disruptive Behavior](#)

Plagiarism

You are expected to submit your own work in all your assignments, postings to the discussion board, and other communications, and to clearly give credit to the work of others when you use it. Plagiarism includes but is not limited to representing the words or ideas of another person or presenting someone else's words, ideas, artistry or data as one's own, using one's own previously submitted work, copying another person's work (including unpublished material) without appropriate referencing, presenting someone else's opinions and theories as one's own, or working jointly on a project and then submitting it as one's own. Academic dishonesty will result in a grade of "F."

- [Statement of Expectations for Student Conduct](#)
- [Avoiding Academic Dishonesty](#)

Turnitin Plagiarism Prevention

Your instructor may ask you to submit one or more of your writings to **Turnitin**, a plagiarism prevention service. Your assignment content will be checked for potential plagiarism against Internet sources, academic journal articles, and the papers of other OSU students, for common or borrowed content. Turnitin generates a report that highlights any potentially unoriginal text in your paper. The report may be submitted directly to your instructor or your instructor may elect to have you submit initial drafts through Turnitin and you will receive the report allowing you the opportunity to make adjustments and ensure that all source material has been properly cited.

Papers you submit through Turnitin for this or any class will be added to the OSU Turnitin database and may be checked against other OSU paper submissions. You will retain all rights to your written work. For further information on Turnitin please click [HERE](#).

Technical Assistance

If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact the OSU Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the [OSU Computer Helpdesk](#) online.

- [COURSE DEMO](#)
- [GETTING STARTED](#)

Tutoring

For information about possible tutoring for this course, please visit our Ecampus [NetTutor](#) page. Other resources include:

- [Writing Center](#)
- [Online Writing Lab](#)

Student Evaluation of Teaching

The online Student Evaluation of Teaching form will be available in week 9 and close at the end of finals week. Students will be sent instructions via ONID by the Office of Academic Programs, Assessment, and Accreditation. Students will log in to “Student Online Services” to respond to the online questionnaire. The results on the form are anonymous and are not tabulated until after grades are posted. Course evaluation results are very important and are used to help improve courses and the learning experience of future students. Results from questions are tabulated anonymously and go directly to instructors and unit heads/supervisors. Unless a comment is “signed,” which will associate a name with a comment, student comments on the open-ended questions are anonymous and forwarded to each instructor. “Signed” comments are forwarded to the unit head/supervisor.

Refund Policy information

Please see the [Ecampus website](#) for policy information on refunds and late fees.