

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 322

Economic and Ethnobotany: Role of Plants in Human Culture – 3 credits

COURSE CREDIT:

(3) This course combines approximately 90 hours of instruction, online activities, and assignments for 3 credits.

PREREQUISITES, CO-REQUISITES AND ENFORCED PREREQUISITES:

BI 211, 212, and 213, or equivalent introductory biology sequence.

See the Office of the Registrar website for information on Prerequisite Enforcement.

COURSE DESCRIPTION:

Economic botany is the study of plants that are used by humans for food, beverages, medicine, textiles, shelter and other uses. Ethnobotany is the study of how people of a particular culture and region make use of plants indigenous to their region. Both subjects are interdisciplinary and concern the numerous relationships between people and plants. The scope of this course is ambitious in attempting to provide a broad overview of both disciplines. This course will explore the human uses of plants (and certain fungi), including domesticated cultivated plants as well as wild-growing plants, and uses of plants by indigenous cultures.

CONTACT INFORMATION:

email: stonej@onid.orst.edu phone: 541-737-5260

LEARNING RESOURCES:

- **REQUIRED TEXTBOOK:** Plants and Society, 5th Ed. E. Levetin and K. McMahon
- **SUPPLEMENTARY TEXTS:** Ethnobotany: The Evolution of a Discipline, Richard Evans Schultes, Siri Von Reis, Timber Press, 1995
- Ethnobotany, Kim Young, Chelsea House, 2006.
- Food Plants of the World, E. van Wyk, Timber Press, 2005.

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.

COURSE SPECIFIC MEASURABLE STUDENT LEARNING OUTCOMES:

Students completing this course will gain a broad knowledge of the sources of economically important plant products, food, medicines, and fibers, and the sources of domesticated plants. Students will also be introduced to the study of ethnobotany and will learn specific examples of plant uses by indigenous people by geographic region. Students will gain a more specific knowledge of the classification, properties, and uses of economically important plants. Students completing this class will gain an appreciation of the diversity of plant products used by human cultures and their importance to human societies.

COURSE CONTENT AND POLICIES:

Canvas — This course will be delivered via Canvas, your online learning community, where you will interact with your classmates and with me. Within the course Canvas site you will access the syllabus, supplementary reading assignments and learning materials; discuss issues; submit assignments; take quizzes and exams; and communicate with other students and the instructor.

To preview how an online course works, visit the Ecampus Course Demo. For technical assistance, Canvas and otherwise, see <http://ecampus.oregonstate.edu/services/technical-help.htm>

LECTURES AND READING ASSIGNMENTS

An illustrated set of notes (“online lectures”) will be posted for each week of the term to supplement the reading assignments.

Reading assignments for each week are listed in the course syllabus and on Blackboard. The syllabus includes a column labeled “Specifics to know and understand”. This is provided as a guide to the most essential parts of the reading assignments. The syllabus does not list specific dates for the reading assignments. As this is an online course, you are free to cover the material at your own pace.

PART I ECONOMIC BOTANY			
Week	Topic	Reading	Specifics to know and understand
1A	Introduction: plants and people	Chapters 1, 11	The origins of modern cultivated food plants The origins of agriculture Centers of origin theory
1B	Plant structures and life cycles	Chapters 2, 3	Plant Cell structure Plant tissues, vascular systems, plant cell types

2A	Plant evolution and classification	Chapters 8, 9	Plant evolution and classification Plant diversity Characteristics of Gymnosperms and Angiosperms Sporophytes and gametophytes Flower anatomy
2B	Flowers, fruits and seeds	Chapter 6	Flower, fruit and seed anatomy Fruit diversity and structures Monocot and dicot fruits
3A	Fruit and nut crops 1	Chapters 5, 7	Fruits of Rosaceae Plant genetics Importance of ploidy in plant evolution
3B	Fruit and nut crops 2	Chapter 15	Citrus fruits and tropical fruits
4A	Cereals	chapter 12	Evolution and origins of cereal crops Types of cereals Anatomy of cereal grains
4B	Legumes, pulses	Chapters 13	Evolution and origins of legume crops Distribution and uses of legumes Nitrogen fixation
Exam 1			
5A	Foods from leaves, stems and roots	Chapter 14	Evolution and origins of starch plants Brassica food plants Glycosides Sugar cane, sugar beets Roots and tubers as starch sources, food vegetable types
5B	Fibers, textiles, paper, wood	Chapter 18	Plants used for fibers, textiles, and dyes Paper manufacturing
6A	Plant oils, resins, waxes	Chapters 10	Cellulose, lignin structure of plant cell walls Plants used for fibers Plants used for oils, resins, waxes Wood structure
6B	Spices, coffee, chocolate	Chapters 16, 17	Spice plants Origins of coffee, chocolate
7A	Pharmaceutical plants and fungi	Chapters 19, 25	Economic importance of fungi, fungal food and pharmaceuticals
7B	Psychoactive plants and fungi, mycotoxins	chapter 20, 24	Alcoholic beverages Mycotoxin types and what food products they are found in Psychoactive plants and fungi
Exam 2			
Papers			
Part II ETHNOBOTANY			
8A	Uses of indigenous plants	People and Plants Chapter 1	The scope and methods of ethnobotany Ethnobotanical uses of indigenous plants
8B	Medicinal plants	People and Plants Chapter 2	Ethnobotanical uses of medicinal plants Pharmaceutical plants discovered through ethnobotanical study
9A	Food plants	People and Plants Chapter 3	Food plants used by gatherer societies Changes in human diet with plant domestication Domestication of maize and Anasazi culture Breadfruit, sago palm, 'famine foods'
9B	Plants as materials	People and Plants Chapter 4	Plants and exploration/emigration Distribution of sweet potato Arrow poisons Textiles Spices and European exploration

10A	Psychoactive plants	People and Plants Chapter 5	Uses of psychoactive plants Calabar, Ebena, Ayahuasca, Kava, Cannabis, Coca, Opium Psyhoactive plant products
10B	Conservation and ethnobotany	People and Plants Chapter 6	Ethnobotany and plant conservation Ethnobotany and germplasm diversity Economic value of conservation Sustainable management for forest products
Exam 3 (final exam)			

EVALUATION OF STUDENT PERFORMANCE:

1. Exams

Three online exams will be used to evaluate comprehension of the material covered in the readings. The first and second exams will cover the material from weeks 1-4 and 5-7, respectively. The final exam will be comprehensive. Exams will be open-book, open-note and will be available for one week in the weekly module folders in Canvas. You must take the exams during the weeks they are available, no make-ups will be given. You may take the quiz any place you have access to an internet connection, no proctor is required. However, you must complete the exam once you have started it, and there is a time limit of **90 minutes**. Each exam will count as **24%** of the final grade.

2. Short paper

In addition to the three exams, one written assignment is required for this class which will count for **24%** of the final grade. The assignment is described in the BOT 322 Start Here module and has some specific requirements for source materials, so please read the assignment instructions before beginning your paper. The topic of the paper is a single plant, or small group of plants and their economic or ethnobotanical significance. You should research the taxonomy, origins, distribution, uses, economic importance, associated human cultures, chemical properties, etc. as appropriate. The completed paper should be 3 – 6 double spaced pages and should cite 4 – 10 reference sources. You may use web resources as references but they may not be copied and pasted verbatim. All web resources used must be cited. **This assignment is due by May 24.** You may submit it anytime before but not later than Please submit your paper by uploading it using the assignment upload function in Canvas.

Final exam availability dates: From Saturday of week 10 through Thursday of finals week, **Jun 6-11.**

3. Online discussion

Several discussion forums will be posted during the the term in the Discussions section of Canvas. Discussion topics will include material from the readings, lecture notes, and supplementary reading material that will be provided that is relevant to particular reading topics.

Active participation in the online discussion will count for 4% of the final grade.

Extra credit

No papers, projects or other supplementary student work, other than the exams and assignments, will be accepted for extra credit. Extra credit questions will be built into the mid term and final exams. Students who participate actively and thoughtfully in the Discussion

Board forums will be given favorable consideration for increasing a borderline grade to the next higher level.

FINAL GRADES

Final grades will be based on the cumulative weighted percentages at the end of the term. Final grades will be assigned as follows: A, 90-100%; B, 80-89%; C, 70-79%, D, 60-69%; F, <60%.

Incompletes — A grade of "I" (incomplete) will be given only when there is a strong and compelling case for doing so. An incomplete can not be given unless the student has completed more than 50% of the course requirements, e.g. quizzes 1-4, midterm exam, and assignment 1. If an incomplete is requested, the student must make arrangements to remove the incomplete by the end of the next regular term following the term in which the incomplete was given.

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. Academic dishonesty will result in a grade of "F."

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

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.