Colorado State University

Syllabus

HORT 401: Medicinal and Value-Added Uses of Plants

Instructors

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Office hours by appointment
Responses to email will be provided within 36 hours during weekdays.

Technical Support

Need technical assistance with your online course? Try the following:

- Visit the Canvas Student Resources for guides and videos.
- Visit Central I.T. Technical Support Helpdesk for technical support.
- Call 970-491-7276.
- Email Help Desk Support.

Summary

This is a 3-credit hour course offered at the 400 level, and is designed to provide a broad perspective on the development of agriculture and more recent value-added uses of plants. More than just conventional lecturing, this interdisciplinary course is supplemented with lively discussions, scientific paper readings, invited speakers, and peer research presentations. This course is designed to demonstrate the alternative uses of plants in our society, with active student participation in the learning process. In addition, the course will present an introduction to agricultural sustainability. Finally, through invited presentations given by visiting professors and company scientists the student will get a perspective on the range of cutting-edge research on medicinal and value added-uses of plants, as well as on methodology, techniques and politics related to the course. Course materials will be available on Canvas.

Course Objectives

Upon completion of this course, the successful student will achieve:
1. An interdisciplinary overview of the value-added uses of plants.
2. An understanding of unique biochemical processes in plants.
3. The ability to integrate related knowledge from different disciplines.

Assignments

Exams

The two exams will be writing-intensive, with a few definitions of terms and several questions that will ask you to integrate different topics covered in the course and formulate and defend your own opinion on the subject.

Reflection Papers

This course will feature two recorded guest speakers with unique perspectives and experiences. You will be asked to write a brief reflection paper on each presentation. More guidance is provided in Canvas.

Student Presentation

Due to the range of subjects covered in the class, it is difficult to conduct an in-depth critical analysis of every single topic. In order to provide hands-on experience in journal-quality data analysis and class delivery, each student will be required to prepare a critical review of current refereed journal articles and books related to a given topic and conduct a 20-minute presentation on the topic in class. This assignment will be completed in several steps, as described in more detail in Canvas.

Discussions

The success of this course depends on student participation in the class discussions. Students from a range of departments and academic backgrounds enroll in this course, providing a unique opportunity for students to contribute valuable, diverse, and complementary input during discussions. Therefore, students will be strongly encouraged to ask questions and participate on the Canvas discussion board.

Assignments

Throughout the course, you will be asked to submit several short writing assignments to demonstrate your understanding of course concepts.

Grading

First exam   20%
Reflection papers (2) 20%
Final exam   25%
Student presentation   25%
Discussions   5%
Assignments   5%

Scale

A: 90-100%
B: 80-90%
C: 70-80%
D: 60-70%
F: below 60%

Prerequisites

This is a reading-intensive and discussion-oriented course which assumes basic knowledge of biology/botany (BY 103, BZ 120, BZ CC 120) and/or chemistry (CCC 107, CCC 108, CCC 111, CCC 113 or BC 351). Students with minimal background in any of these areas are strongly encouraged to consult introductory textbooks in order to become familiar with the basic concepts and vocabulary.

Required Textbook

Simpson, B.R., and M. Conner Ogorzaly. 2014 *Economic Botany: Plants in Our World*. McGraw-Hill, New York, 640 pp.

Academic Integrity Policy

This course will adhere to CSU's [Academic Integrity/Misconduct](#) policy as found in the General Catalog and the [Student Conduct Code](#).

CSU Honor Pledge

Academic integrity lies at the core of our common goal: to create an intellectually honest and rigorous community. Because academic integrity, and the personal and social integrity of which academic integrity is an integral part, is so central to our mission as students, teachers, scholars, and citizens, I ask you to reflect on the CSU Honor Pledge as part of completing your work in this course:

"I have not given, received, or used any unauthorized assistance."

Further information about Academic Integrity is available at CSU's [Practicing Academic Integrity](#).

Universal Design for Learning

I am committed to the principle of universal learning. This means that our virtual spaces, our practices, and our interactions will be as inclusive as possible. Mutual respect, civility, and the ability to listen and observe others carefully are crucial to universal learning.

If you are a student who will need accommodations in this class, please contact me to discuss your individual needs. Any accommodation must be discussed in a timely manner prior to implementation. A verifying memo from [Resources for Disabled Students](#) may be required before any accommodation is provided.

System, Multimedia, and Software Requirements

Having trouble with the multimedia in this course? See the solutions below. Also, it is highly recommended that you access your course via a **high-speed Internet connection**.

- Problems with opening PDFs?
  - Download [Adobe Acrobat Reader DC](#).
- Canvas acting funny?
  - Review Canvas guide for [Which browsers does Canvas support?](#).
- YouTube videos not playing?
  - Download [Adobe Flash Player](#).
- Still having issues?
  - Call the **CSU Help Desk at 970-491-7276** or Email [Help Desk Support](#).

You must have speakers installed and working properly on your computer before beginning the course.

You may need access to Microsoft Word, PowerPoint, and/or Excel to complete assignments. If you do not already have access to Microsoft Office-compatible applications, you may use one of the following free resources:

- [Google Apps for CSU](#)—a free, outsourced communications suite endorsed by The University Technology Fee Advisory Board (UTFAB)
- [Microsoft Office Professional / Office 365 for Students](#)—the full version of Microsoft Office free of charge for CSU students.

Third-party Tools/Privacy

Please note that this course may require you to use third-party tools (tools outside of the Canvas learning management system), such as Skype, Big Blue Button and others. Some of these tools may collect and share information about their users. Because your privacy is important, you are encouraged to consult the privacy policies for any third-party tools in this course so that you are aware of how your personal information is collected, used and shared.

Copyrighted Course Materials

Please do not share material from this course in online, print, or other media. Course material is the property of the instructor who developed the course. Materials authored by third parties and used in the course are also subject to copyright protections. Posting course materials on external sites (commercial or not) violates both copyright law and the CSU Student Conduct Code. Students who share course content without the instructor's express permission, including with online sites that post materials to sell to other students, could face appropriate disciplinary or legal action.

Suggested Study Methods

Online education requires skills and habits that may be less essential in traditional courses. In order to be successful in your online course, you will need:

- Space—Establish a comfortable and well-organized physical workplace.
- Time management skills—Set personal study and "classroom" time as you would do for a traditional course.
- Organization skills—Print out all class material (modules, PowerPoints, assignments, additional resources, and any work you generate) and keep everything in a single location. Maintain electronic backups of all class materials.
- Communication skills—Demonstrate a willingness to interact with your instructor and classmates through email, phone calls, discussion boards, and active participation in all class activities.
- Initiative—Seek help from your instructor and classmates, ask questions as they arise.
- Discipline—Pace yourself, complete all activities and assignments before the due date, follow through on all class requirements to completion.

The more closely you adhere to the recommendations above the greater your chances of having a successful semester and a rewarding online experience.