

Syllabus for UGS 302 (#61960)
HIDDEN TREASURES OF PLANTS: fuel, food, meds, money
FALL 2016

Instructor : Dr. Stan Roux; BIO 9; Phone: 471-4238; e-mail: sroux@austin.utexas.edu

Office Hrs: MWF 9-10 AM, or by appt.

Mentor: Gabe Borg; gabriel.borg@utexas.edu Office Hrs.: 10-11 AM F

Class meeting time and place: TTh 2:00-3:15; MAI 220B

Web page: <https://sites.cns.utexas.edu/roux>

PROPOSED COURSE SCHEDULE §

DATE	TOPIC
Aug. 25	Course introduction
Aug. 30	Extracting treasures from algae
Sept. 1, 6	Plants as medicine
8	Library tools; Primary references; Databases
13	Plants as climate changers
15-20	Plants as nutrition (<i>Essay #1 due 11:59 PM Sept. 15</i>)
22	Plants as biofuels
27	Plants as structural materials
29	Test
Oct 4	Plants as poisons and hallucinogens
6	Virtual tour of the National Wildflower Center
11-13	Plants as models for sensing & communicating (<i>Essay #2 due Oct. 13</i>)
18	Useful Wild Plants field trip
20	Plants as landscape treasures
25	Plant Economics; Plants as entrepreneurial opportunities
Oct 27 to Nov 29	Student presentations [2 each class] (<i>Essay #3 due Nov. 3</i>)
Dec 1	New insights on plant treasures; Course evaluation
2	Final essay due at 11:59 PM
14	Final Exam [15 min. meeting with Dr. Roux to discuss final paper]

§Can be modified by input from students.

*The URL for library help is: <http://www.lib.utexas.edu/services/instruction/studentindex.html>

This resource will be extremely valuable for the writing assignments

TEXT: *The Useful Wild Plants of Texas. Volumes 1, 2 and 3* (Cheatham, Johnston, & Marshall)

Other Reading Assignments will be handouts, or articles kept on reserve in the Life Science Library.

GRADING: Overall: Writing = 50%; Speaking/discussing/attending = 40%; Testing = 10%. No +/-

CLASS DISCUSSIONS: 10%; ATTENDANCE: 10%. More than one unexcused absence will lower attendance grade.

WRITING ASSIGNMENTS: Three 3 pg. papers; total worth 30%; final research paper (8-10 pgs): 20%. Students will revise each of the 3-pg. papers. Final grade will reflect both the original and revised versions. (See details, page 2).

This course carries the **Writing Flag**. Writing Flag courses are designed to give students experience with writing in an academic discipline. In this class, you will write regularly during the semester, complete substantial writing projects, and receive feedback from your instructor to help you improve your writing. You will also have the opportunity to revise three of your assignments. 50% of your grade will come from your written work. Writing Flag classes meet the Core Communications objectives of Critical Thinking, Communication, Teamwork, and Personal Responsibility, established by the Texas Higher Education Coordinating Board.

ORAL PRESENTATIONS: 20%; For their main oral presentation, students will choose a topic related to native or cultivated plants that most interests them. Course lectures, discussions and textbook should provide ample material to choose from. Presentations will be 20-30 min, followed by ~10 min discussion, using PowerPoint for visuals. In addition to the main oral presentation, for nine of the classes a team of two students will be asked to give a 10 min powerpoint presentation highlighting information relevant to that class. Thus every student will participate in one of these short presentations during the semester.

TESTS: The test on Sept. 29 will be short essay style and open book. It will emphasize discussion of the main themes of the course material rather than regurgitation of facts. It will afford students an opportunity to express their insights on class topics extemporaneously and in a clear and concise fashion. The Final Exam will be an oral exam based on the final research paper turned in.

Course Description

Course Aim: The course aims to enable you to develop your writing and speaking skills while learning fascinating information about the diverse valuable uses of wild plants.

Course Content:

Plants have been used as treasures by civilizations for eons, but this course will focus on surprising, undervalued treasures of plants in today's world, including their increasing use as biofuels, their little-known value as wild sources of food and medicines, and their potential as money makers for entrepreneurs. The course will also explore how animal-like features of plants, such as movements, communication with animals, and the ability to anticipate future events reveal the value of plants for understanding the evolution of complex sensing and response systems in living organisms.

The course will use as its primary literature resource the renowned set of volumes called *The Useful Wild Plants of Texas*, which thus far has covered over 250 native species, most of which grow throughout not only Texas and the Southwest, but in many other regions of the U.S. and Mexico. These volumes include a bibliography of numerous other related references. The text for the course will be Volumes 1, 2, 3, & 4 of the series, which will all be on reserve in the Life Science Library, so they do not have to be purchased.

The text and handouts should help you advance your ability to read and understand scientific writing. The course carries the Writing Flag. As detailed below, it has substantial writing assignments, so it should help you improve your writing skills. Because the course will encourage active participation in the informal discussions that will characterize every class, and because every student will give a presentation on a topic that interests them, the course should also promote fluency in expressing ideas in speech.

Native and cultivated plants enrich our lives in a dazzling diversity of ways. This is the take-home message of the course--one that should both inspire and be enjoyable to learn.

Reference Texts: Volumes 1, 2, 3, and 4 of the *Useful Wild Plants of Texas*

- Highly praised (see reviews)
- Still under construction (Volume 5 in preparation)
- Authors will give class, tour of research and publishing headquarters and short field trip (10/ 18)
- Your final paper will research potential new entries in future volumes

Class Discussions: Each class period will focus on one valuable use of wild and cultivated plants. Starting August 30, about half of each class will consist of students discussing some aspect of the topic featured in the lecture given that day. One resource for this discussion can be information found in Volumes 1, 2, 3, or 4 but other resources would be readings recommended for that class, or other scientifically credible references found in a library or web search. Most students will be given a chance to "teach" for few minutes on the topic for that day.

Oral presentations: Help in preparing your talk will be gladly given by Dr. Roux. You should plan to meet with him to get that help.

Writing assignments**

1. Three 3-pg. papers (double-spaced). The first one will be due **September 15**, and its topic will be: Your starting point in this course. That is: What did you know about the value of plants before the course? and What documentation can you provide to support what you knew about plant values? The next two papers will be due on **October 13** and **November 3**, and your assignment for each of these will be to elaborate on one or more "uses" of a wild or cultivated plant that is not described in Volume 1, 2, 3, or 4 of the *Useful Wild Plants of Texas*. In addition to documenting valuable uses of the plant, the paper should include a picture of the plant and some information on its distribution, and its findings should be supported by at least two primary references (not web pages) published between 2005 and 2016. Papers will be read and critiqued by an editor and returned with comments. A revised version of the paper will be due one week after they are returned. Expectations will be higher for the revised version, for we value helping you progress in your writing. The same editor will grade the revised version, and the final grade for the paper will be the average of the 2 grades.

2. Final 10-pg. paper on a useful wild plant that you select and that is not described in Volumes 1, 2, 3, or 4 of *Useful Wild Plants of Texas*. Paper will be due **December 2**, and students will schedule a 15 min meeting with Dr. Roux to discuss the paper during the scheduled Final Exam period on Friday, **December 14**. Final grade for paper will depend both on quality of paper and quality of discussion.

Format instructions and guidelines for writing assignments are on the course Web page, and will be discussed in class on August 30.

NOTE on Plagiarism: If you use words or ideas that are not your own you must cite your sources. Otherwise you will be guilty of plagiarism. We will discuss this important topic briefly in class on September 3. Before this discussion please read the web text from the Student Judicial Services, which investigates charges of plagiarism: http://deanofstudents.utexas.edu/sjs/acint_student.php

**** Writing Center**

I strongly encourage you to use the Undergraduate Writing Center (UWC), FAC 211, 471-6222; <http://uwc.utexas.edu/home>. This year the UWC will provide a Course Specialist Consultant (CSC), Kasandra Lund, a senior English major, to offer free, individualized, expert help with your writing any of the assigned essays. I will introduce her to the class on the first class day, August 25. Her services are not just to help students overcome writing "problems". Getting feedback from an informed audience is a normal part of a successful writing project. As the writing consultant for the course, she will help students develop strategies to improve their writing. The assistance she will provide is intended to foster independence. You should consider how you might benefit from her advice. She is trained to help you work on your writing in ways that preserve the integrity of your work. More information on the CSC is on page 4 of this Syllabus.

Other important notes:

1. You will be expected to attend one of the **University lectures**, which will be held in Bass Concert Hall on September 19 and 20, and then discuss it in class. Information on the lectures may be found at:

<http://www.utexas.edu/ugs/uls>

2. **Religious holidays.** University policy is to respect religious holidays.

3. **Field trip on October 18.** In past years students have considered this trip a highlight of the course. The site of the field trip is 15 min by car from campus, but a UT bus will be also be available for transportation to and from the site. Please plan ahead to allow time to go to and return from the field trip site on this class day.

4. **Cell phones and computers.** Plan to turn off your cell phones during class. Your laptops may be used only for note-taking. If we learn you are using your phone/computer for non-class related activities, you will be marked absent and asked to leave for the remainder of that class.

The University Writing Center and Your Course Specialist Consultant (CSC)

In the University Writing Center (UWC), consultants offer free, individualized, expert help with writing for any UT undergraduate by appointment. Your Course Specialist Consultant (CSC) is a special kind of UWC consultant who is dedicated to helping you and your classmates with writing in this particular course. You will have priority when scheduling consultations with your CSC in the UWC so long as you schedule consultations well in advance—if you wait until the week-of or the day-of, the UWC cannot guarantee your CSC's availability.

The CSC for our UGS 302 course is Kasandra Lund. To schedule a consultation with her, first remind yourself of her hours—she'll announce these in class and share them through in-class handouts or other means, such as Canvas. You can also consult uwc.utexas.edu/course-specialist-consultants. Next, visit uwc.utexas.edu/appointments and log into UT's new appointment-scheduling system, Symplicity. Once there, follow these steps:

1. Click the “Appointment” tab at the top of the page;
2. On the next page, click the “Request a New Appointment” button;
3. On the next page, use the drop-down “Type” menu to select “Writing Center” and “Undergraduate Writing Appointment,”
4. Set a “Date Range” and “Time Range” that correspond with your availability and your CSC’s hours,
5. Look for and select your CSC’s name;
6. A “Confirm Appointment” box will pop up—in the “Note” area, indicate that you’re requesting an appointment with your CSC, so UWC staffers know not to transfer your appointment to another consultant;
7. Click “Confirm Request.”

If you have trouble, you can call the UWC Front Desk at [512-471-6222](tel:512-471-6222). If you call the UWC Front Desk, be sure to state that Kasandra Lund is your CSC. Please schedule consultations with her only in regard to writing assignments for this class. For consultations about writing projects outside this class, schedule consultations with other UWC consultants using the same system outlined above. If your CSC will not be available when you want an appointment, ask them or the Front Desk to recommend other UWC consultants.