**Introduction to Ethnobotany**

Fall 2021

**Instructor:** Dr. Nanci J. Ross, 117 Olin Hall, ph. 271-2036, nanci.ross@drake.edu

 \*\*the best way to contact me is by email

**Office hours: (in person or on Zoom)** M**/**T 2:00-3:30pm and Wed 2-4pm or by appointment

**Meeting time and place:** Olin Hall 234, TR 3:30-4:45pm

**Required book:** this is available in paperback or kindle, but I would strongly suggest buying it in paperback to make it easier to read and annotate. We will also be reading several papers from the scientific literature. Those papers will be posted on Blackboard in pdf form unless otherwise stated in class.

Wall Kimmerer, Robin (2013). *Braiding Sweetgrass*. Milkweed Editions, Minneapolis, MN.

**Course content and rationale:**

Relationships between human and plant populations have played a critical role in shaping both human behavioral and biological adaptations as well as plant community structures. Ethnobotany is a multidisciplinary field of study that investigates these relationships by combining the anthropologist's emphasis on the cultural context of plant use with the botanist's understanding of the ecological and biological traits of useful plants and plant communities. This course provides an introduction to the science of ethnobotany. Methods of data collection and analysis will be considered, but greatest emphasis will be placed on understanding the breadth of ethnobotanical study, investigating our relationship with the plant world (both personally and as part of human society), the current state of ethnobotanical knowledge and what this all means. Topics to be addressed touch on different uses of plants (as food or medicine, in ritual, and in manufacture), how people think about plants and the natural world, the origins of agriculture, ecological relationships between humans and plants, and the relevance of ethnobotany to contemporary global issues.

**Course objectives:**

Upon completion of this course students will be able to:

1. describe the historical development of the field of ethnobotany.
2. define the diverse perspectives that contribute to the interdisciplinary character of ethnobotanical research.
3. describe the universal characters found in Western and folk classification systems.
4. discuss the stages of plant domestication and be able to list the morphological changes that generally accompany domestication.
5. Identify the major theories with the field of ethnobotany and evaluate diverse approaches to investigating them.
6. Compare/contrast the Western scientific and Non-Western biocultural approaches to plant-human relationships in regards to social and environmental challenges.
7. analyze the cultural and biological significance of plants in everyday life both locally and globally.

**Grading and Attendance:**

You will need to regularly attend class and participate in class discussions to succeed in this course. In this challenging time of Covid-19, we will all be working extra hard to juggle both synchronous and asynchronous classwork. I will work hard to try to stick to the schedule as listed in this syllabus, but this semester is our first pass at conducting primarily in-person classes. It is your responsibility to pay close attention to BOTH the schedule as listed on the syllabus and what we discuss in class. *Please do not hesitate to ask me in class or via email if you are unsure.*

Exams will cover material discussed in lecture and lab as well as in assigned readings. Grading will follow a +/- standard scale (94%-100%= A, 90-93%= A-, 89.9-88% = B+, 84-87%= B, 80-83% = B-,…below 60% = F).

**Assignments: *570 points possible***

100 pts = Exam 1

100 pts = Exam 2

100 pts = Exam 3

70 pts = Reading questions (10 pts. each x 3 course readings; 10 pts. x 4 Eminent Ethnobotanist readings)

100 pts = Eminent Ethnobotanist reflection essays (4 x 25 points)

100 pts = Final Paper

**Eminent Ethnobotanists in our (virtual) class!**

The goal of this class is to introduce you to the field of Ethnobotany as a science. As you will learn, a significant challenge (and a strength) for our young discipline is the diversity of approaches and perspectives within the field. The course is organized around four main research approaches with the discipline of Ethnobotany. My research approaches the field from the perspective of a community/landscape ecologist, but my goal is to give you a taste of many different approaches. So, we will be reading literature from a diversity of ethnobotanists who are experts in different sub-disciplines. Still, the best way to understand a paper is to talk to the author…so we will!! We are incredibly lucky that you will have the opportunity to learn “in person” about different approaches and perspectives from several well-known Ethnobotanists working in different areas around the world. We will read a paper by that author and then meet with them in a zoom chat during class. Our distinguished guests will be happy to answer questions about their work as well as discuss their research in general, their approach to the field, and topics relevant to our class discussions. Your responsibilities are:

* Come prepared! Be sure to give yourself plenty of time to read and absorb the papers prior to meeting with our guests. I will provide a “reading questions” template for you to help organize and record the ideas you find in the paper. It will include space to write out *one(or more!) meaningful question or observation* *that can promote the class discussion with our guest*. Bring the completed template to class with you.
* Participate! Speaking up in a crowd can be intimidating, but we need everyone to provide the diversity and depth of perspectives that make a discussion really interesting. You have a unique perspective and I look forward to learning from your ideas.
* Ask questions! Our Speakers have very different histories and experiences. They would love to discuss their path to ethnobotany; personal philosophies; their perceptions of strengths/challenges in the discipline; methodologies; how they develop their research questions; goals; and more!
* Have fun! Our Speakers are excited to meet you all and talk about the work they love.

**Reflection essays assignment**:

After those discussions, **each student will write a two-page reflection essay on what they gleaned from the experience**. This essay will include *i) short, one-paragraph summary of the paper focusing on the significant theories tested and results; ii) analysis of how this paper represents one of the four main approaches in Ethnobotany; iii) exploration of how this scholar and their work advances the field of Ethnobotany; and iv) discussion of what you learned, new ideas, questions, surprises, and your experience of the discussion*.

Formatting: default line spacing in Word which is 1.15 spacing with an extra space after each paragraph. Also, please do not waste a bunch of space at the beginning for multiple header rows. The first line should have "Intro to Ethnobotany 2020" on the left and your name on the right. The second line is the title "EE Reflection Essay: Dr. Maria Fadiman, Anthropological approach". The third line is the beginning of your essay.

Essays will be due one week after the zoom meeting. You will submit the essay on Blackboard.

**Reading questions (for course readings):**

For this course we will be reading and discussing multiple articles from the ethnobotanical literature. The articles will cover a variety of topics and different people will find different ideas and questions in their reading. To facilitate our discussions, it is essential that everyone carefully reads and thinks about each assigned article prior to coming to class. Scientific literature is often a challenge since it is notoriously content dense. In every paper, however, there are a few key things to look for. So, for the readings indicated in the schedule below, each student must complete a “Reading question sheet”. *You will bring the sheet to class and turn it in at the end of class (on Blackboard)*. The goal is to use the questions to help jump start our discussions.

**Final Paper:**

One of the most challenging and important skills to develop, both as a scientist and a layperson, is the ability to synthesize information we learn from specific events, references, or experiences, to address broader questions. That is the goal of this paper assignment*. I want you to compare/contrast the contributions of the different ethnobotanical approaches to the development (past, present, and future) of the discipline of Ethnobotany. How is each approach important in filling the space that ethnobotany aims to fill: as a bridge between applied and theoretical sciences to address real-world issues?* In 2007, a group of ethnobotanical scholars and practitioners created the Kaua’i Declaration to address how ethnobotany can help address the losses of social, cultural, and biodiversity. The document labeled ethnobotany as “the science of survival”.

[https://www.researchgate.net/publication/261175618\_Ethnobotany\_the\_science\_of\_survival\_a\_declaration\_from\_Kaua'i](https://www.researchgate.net/publication/261175618_Ethnobotany_the_science_of_survival_a_declaration_from_Kaua%27i)

Your paper should address at least two of the following issues:

* Social justice
* Environmental perceptions/awareness (ex., place-based identities)
* Cultural recognition and/or loss of cultural identity (and the concomitant loss of biodiversity)
* Conservation and sustainability approaches from different cultural perspectives

The papers we discuss in class will be an essential component to your arguments! They will form the backbone of your paper references. Your reflections from our class discussion can also be very helpful in laying the groundwork for this paper. *The paper will be turned in via Blackboard*. *Length 6-8 pages (references separate).*

**A few policies to make everyone’s life a bit easier…**

1. Examinations *may* be given in advance of the test date by prior arrangement. Exams may be taken late, but *only* if the instructor is informed within **48** hours of the test date *and* a valid excuse is provided. Any change in exam time or date is at the professor’s discretion.
2. Late assignment will result in one letter grade penalty per day late.
3. **NO** **cell phones** on the desk or used in any way during class.

**Camera Use for Virtual Attendees:**

A substantial part of your learning in this course will depend on your active and attentive engagement in class discussions and other collaborative learning opportunities. On the days where you are attending class virtually, I strongly encourage you to turn on your camera during collaborative exchanges to help sustain a sense of community and co-presence as we learn together. However, doing so is not required; if you have reservations about doing so, please let me know in advance so I can plan accordingly.

**Academic misconduct:**

The Drake statement on academic honesty is found in the Drake student handbook (<http://www.drake.edu/dos/handbook/academic.php>). The College of Arts and Sciences also has a statement outlining our position on academic dishonesty on the College webpage (<http://artsci.drake.edu/acadreg#dis>). Students are responsible for understanding what constitutes academic dishonesty and the consequences. Cheating and/or plagiarism in any form can result in a zero for a class, an assignment, or an F for the course depending on the level of severity and at the instructor’s discretion.

*\*\*Helpful note…*in academia, what we work to produce are ideas which are shared in written articles and books. Therefore, plagiarism is one of the most serious crimes a person can commit in the academic world. Unfortunately, it is also VERY common and is often unintentional so be sure to carefully read the policy statements at the above links to figure out what constitutes plagiarism and check with your instructor BEFORE handing your paper in, just to be sure. **All cases of plagiarism will result in a zero** **for that assignment** **and, once it is handed in, there are no second chances!**

**Masks and Social Distancing:**

When we do meet in person, we will all wear masks and maintain social distance to minimize the likelihood of the spread of the novel coronavirus. Doing so is not only a requirement in my class, but is also a campus-wide policy. I will ask those who choose not to wear a mask to leave the classroom and, following guidance from the Provost’s office, I will alert the dean of students’ office. As a last resort, if a student without a mask refuses to leave class, I will contact Drake Public Safety.

**Instructions for Students who Test Positive:**

If you test positive for Covid-19 or have been exposed and need to isolate yourself, please send an email to dos@drake.edu from your Drake email account and include your full name and student ID along with information about your situation. College and schools’ deans’ offices will then contact your professors, who will work with you to provide fully virtual learning opportunities during your quarantine and/or recovery. Please also alert me directly that you will begin attending virtually, and I will work with you to help you make the transition to that modality. You do not need to tell me why you need to move to a virtual experience.

**Instructions for Students about Self-Monitoring and Experiencing symptoms:**

Please carefully monitor your own health and wellbeing throughout the semester, including frequently taking your own temperature. If you experience [Covid-19 symptoms](https://nam03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fsymptoms-testing%2Fsymptoms.html&data=02%7C01%7Cnanci.ross%40drake.edu%7Cc5bcbc043d3547be0b9a08d83b1debf2%7C6f028129009c4b33b633bbfc58bbd960%7C0%7C0%7C637324346990405602&sdata=Ie69dVqzhnRIFLpI2tzqa4y%2Fwi7ABtY4SHSze%2B3YwPo%3D&reserved=0) or a fever, even if you do not test positive, *please do not come to an in-person class meeting*. Please alert me that you will be attending virtually.

**Additional campus support resources:**

If a student has a disability and requires special accommodations or additional assistance that student must contact the Student Disability Services Coordinator, Michelle Laughlin at 271-1835 or Michelle.Laughlin@drake.edu. The website for the Center for Disability Services (CDS) is <http://www.drake.edu/acadassist/disability>. Michelle and I will then work to find appropriate solutions. If a student does not contact Michelle Laughlin within the first week of classes to discuss any necessary accommodations that student may need in the classroom, they cannot expect such accommodations to be made. Talk to me if something comes up after the first week and I will see what I can do!

**Course schedule:**

This schedule is a “best-estimate” and may change at the discretion of the professor. In addition to those listed below, readings may be assigned throughout the semester. Readings will be posted on blackboard one week before they are due.

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| Date | Ethnobot Approach | Topic | Notes |
| 31-Aug |  | The Science of Ethnobotany |  |
| 2-Sept |  | Ethnobotany: history and theory | Due: Braiding Sweetgrass, pp.3-10 |
| 7-Sept  |  | Ethnobotany: history and theory |  |
| 9-Sept | Anthropological | Cosmologies; Place and identity |  Due: Braiding Sweetgrass pp. 205-215 |
| 14-Sept |  | Emic vs Etic: Ethnobotany research ethics  |  |
| 16-Sept |  | linguistics | Due: Braiding Sweetgrass pp.48-59 |
| 21-Sept |  | Plant classification systems |  |
| 23-Sept |  | ***Dr. Maria Fadiman, Florida Atlantic University***  | Due: EE Reading Qs 1 (reading on blackboard) |
| 28-Sept |  | **Exam 1** |  |
| 30-Sept | Botanical | plants & evolution |  |
| 5-Oct |  | The Three Sisters: origins of agriculture  | Due: Braiding Sweetgrass pp.121-134, 341-347 |
| 7-Oct |  | domestication |  |
| 12-Oct |  | conscious & unconscious selection |  |
| 14-Oct |  | ***Dr. Allison Miller, St. Louis University and the Donald Danforth Plant Science Center*** | Due: EE Reading Qs 2 (reading on blackboard) |
| 19-Oct |  | Crop plant genetics |  |
| 21-Oct |  | **Exam 2**  |  |
| 26-Oct | Medicinal | Cultural concepts of health |  |
| 28-Oct |  | Ethnomedicine/ ethnopharmacology | Due: Reyes-Garcia (2010) & reading Qs (course reading on Blackboard) |
| 2-Nov |  | Ecology of Secondary plant compounds |  |
| 4-Nov |  | Phylogenetics and evolution of 2dary compounds |  |
| 9-Nov |  | ***Dr. Cassandra Quave, Emory University*** | Due: EE Reading Qs 3 (reading on blackboard) <https://youtu.be/ll1OESsXGl8> |
| 11-Nov |  | Bioprospecting |  |
| 16-Nov | Ecological/Environmental | Landscape Legacies  |  Due: Ross & Stevens (2019) & reading Qs (course reading on BB) |
| 18-Nov |  | TEK/IK, resilience |  |
| 23-Nov |  | Thanksgiving Break |  |
| 25-Nov |  | Thanksgiving Break |  |
| 30-Nov |  | ***Dr. Janelle Baker, Athabasca University*** | Due: EE Reading Qs 4 (reading on blackboard) |
| 2-Dec |  | Ethnobotany and conservation |  |
| 7-Dec |  | Ethics  | Due: Braiding Sweetgrass pp. 310-340 |
| 9-Dec |  | Ethnobotany & environmental justice | Due: Gavin et al. (2015) & reading Qs (course reading on BB) |
| 10-Dec |  | (no class) | **Research Papers due by 11:59pm** |
| FRIDAY 17-Dec |  |  FINAL 9:30-11:20am: **Exam 3** |  |