Botany 401, Vascular Flora of Wisconsin – Course Syllabus, Summer 2023

Course Session: Summer ADD session (May 30, 2023 – June 25, 2023)

Credits: 4.0

Course Designations and Attributes:

Breadth - Biological Science
Level - Intermediate
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement.

Meeting Time and Location:

Lecture: Monday-Friday, 11:00-11:50am (remote, synchronous*, **Zoom**)
Lab: Tuesday & Thursday, 2:00-4:00pm (in-person, **Birge 243** OR in-field, see schedule)
Field Trip: Monday, June 12 – Friday, June 16 at **Kemp Station** (transport provided)
*with recordings

Instructional Modality:

Lectures are remote, synchoronous (recordings will be available); labs are in-person and either in Birge Hall, UW-Madison Campus or in Madison at an accessible location. It is our intention to be as flexible as we can with your schedule and location so please contact us for arrangements.

Instructors:

Brandon Corder (he/him), instructor
Department of Botany, UW-Madison
Birge 156 | bcorder@wisc.edu

Office Hours:
M/W 10:00-11:00am
Birge 156 (or by appt.)

Patty Chan (she/her), TA
Department of Botany, UW-Madison
Birge 301 | pwchan@wisc.edu

Office Hours:
W 12:00-2:00pm
Online (Zoom) (or by appt.)

Requisites:

Sophomore standing; Biology/Botany/Zoology 151, Biology/Botany 130, Biology/Zoology 101, Biology/Biocore 301, or Biology/Biocore 381 (or special permission).

Course Description:

A taxonomic survey of the vascular plants of Wisconsin. Lecture and lab emphasize major plant families found in Wisconsin including their biogeographical and systematic characteristics and practical identification. Familiarization with technical keys, manuals, and other resources, as well as plant collection and identification of community types.

Course Learning Management and Instructional Tools:

Course materials, recordings, schedules, and grades will be available on Canvas. If needed, we may also use other platforms for meeting including Zoom.

How Credits Hours are met for this course:

The credit standard for this course is met by an expectation of a total of 180 hours of student engagement with the course learning activities (at least 45 hours per credit), which include regularly scheduled weekly lecture and lab meeting times as described in the syllabus. Additional study, reading, and meeting with instructors is expected to amount to approximately 40 hours over the course of the semester, with an additional 45 hours estimated for daily post-lecture assignments and all other course assignments.

Learning Outcomes:

1. Become familiar with the local flora of Wisconsin including major community types, important species or families and their biogeographical patterns, and major invasive plants.
2. Learn skills to identify plants in the field or in the lab, including the use of keys and technical manuals, including some practical botany and terminology – applicable anywhere in the world.
3. Utilize and contribute to community science platforms such as iNaturalist and natural history collections (e.g., herbarium specimens).

Laboratory Sessions:

The lab sessions for this course will meet either in Birge 243 or in the field (see schedule below). During lab, we will emphasize practical identification of plant characteristics both in the lab (i.e., with a microscope) or in the field (i.e., with a handlens or using gross morphology or habitat characteristics). In some cases, we may also make pressed plant collections. For labs that meet off-campus, we will provide instruction on accessing it via your own transportation (car, bus, bike, etc.), and in each case also a time to "bus-pool" from campus with the instructors. Off-campus labs will meet in the Madison area.

Field Station Component:

Between Monday, June 12 and Friday, June 16, we will be lodging at Kemp Natural Resources Station, a UW System field station in Woodruff, Wisconsin. Costs for transportation (via van) and lodging in the station cabins are provided by the UW-Madison Humboldt fund. Cooking responsibilities and cost of food will be split among the class attendees.

A packing list and itinerary will be distributed in the week before the trip. During this time, expect full days of experiencing the flora of Northern Wisconsin, and lots of fun!

Required Textbooks:

There is <u>no required text</u> for this course but there are several recommended resources (some are available for free online) on the course Canvas homepage and below:

Black, M.R. and E.J. Judziewicz. 2009. Wildflowers of Wisconsin and the Great Lakes Region A Comprehensive Field Guide. 2nd edition. Univ. Wisc. Press.

Harris, J. G. and M. W. Harris. 2001. Plant Identification Terminology. An Illustrated Glossary. 2nd edition. Spring Lake Publ. Spring Lake, Utah.

Voss, E.G. & Reznicek, A.A. 2012. Field Manual of Michigan Flora. University of Michigan Press. Ann Arbor.

Grading and Assignments:

This fast-paced course covers a semester-worth of material in just several weeks – it'll be crucial to stick with it and reach out to the instructors if you need additional time or support.

Grading will consist of the following components:

Lab field notes completion	60 points
Lecture follow-up Q's	40 points
Assignments (2)	100 points
Field exam	100 points
Collections project	75 points
Participation	25 points
TOTAL	400 points

GRADING SCHEME

A	100% to 90%
AB	<90% to 85%
B	<85% to 80%
BC	<80% to 75%
C	<75% to 70%
D	<70% to 60%
F	<60%

Lab field notes (60 points). Students will keep a physical field notebook formatted in such a way that it is usable to the student after the conclusion of the course. Field notebooks may include: drawings, descriptions, field notes, glossary, etc. Collected following end of Week 3.

Lecture follow-up Q's (40 points): Following each lecture, there will be 2-3 short questions in the Canvas Assignments tab that reinforce the materials of that lecture. Due by the end of the class day following the lecture.

Assignments (2) (100 points, 50 points each): Two independent assignments will be completed, one due Wednesday, June 7 and the second due Wednesday, June 21. See assignments tab in Canvas (TBA).

Collections project (75 points): Two components: 1) Utilizing iNaturalist to make natural history collections; 2) generating useful labels for herbarium specimens using field notes. See assignments tab in Canvas (TBA).

Field exam (100 points): At the conclusion of the field component at Kemp Station, we will do a field practicum. Emphasizes field recognition of Wisconsin plants.

Participation (25 points): Showing up, asking questions, and enjoying our local Flora!

Graduate Coursework Requirement

Graduate student enrollees are required to submit an additional term paper on a topic relevant to Wisconsin's flora, designed in concert with the intructors of the course.

Rules, Rights, and Responsibilities

See the Rules, Rights and Responsibilities on the UW-Madison page.

Course Evaluations

Students will be provided with an opportunity to evaluate this course and your learning experience. UW-Madison uses a digital course evaluation survey tool called AEFIS. For this course, you will receive an official email two weeks prior to the end of the semester, notifying you that your course evaluation is available. In the email you will receive a link to log into the course evaluation with your NetID. Evaluations are anonymous. Your participation is an integral component of this course, and your feedback is important to US. We strongly encourage you to participate in the course evaluation!

Academic Integrity

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to studentconduct.wiscweb.wisc.edu/academic-integrity/.

Accommodations for Students With Disabilities

McBurney Disability Resource Center syllabus statement: "The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA."
http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php

Diversity & Inclusion

Institutional statement on diversity: "Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world." https://diversity.wisc.edu/

Botany 401, Vascular Flora of Wisconsin – Course Schedule, Summer 2023

LECTURE SCHEDULE

Week	Date	Lecture Topic
1	Tues, May 30	Intro, Wisconsin Flora Overview
	Wed, May 31	Nomenclature, Taxonomy
	Thurs, June 1	Practical Botany, Morphology
	Friday, June 2	Plant Community Types of Wisconsin
2	Mon, June 5	Non-Flowering Plants
	Tues, June 6	Monocots
	Wed, June 7	Magnoliids, Eudicots I
	Thurs, June 8	Eudicots II
	Fri, June 9	Eudicots III
3	Mon, June 12	(Travel to Kemp Station)
	Tues, June 13	Carex workshop, N Wisconsin communities I
	Wed, June 14	Aquatic Plants, N Wisconsin communities II
	Thur, June 15	N Wisconsin communities III, Field exam
	Fri, June 16	(Return to Madison)
4	Mon, June 19	Eudicots IV, Winter Plant ID
	Tues, June 20	Focus on Invasive Species
	Wed, June 21	Lecture TBA
	Thurs, June 22	Lecture TBA
	Fri, June 23	(time for independent work)

LAB SCHEDULE

Week	Date	Meet	Topic
1	Tues, May 30	Birge 243	Herbaria, iNaturalist
	Thurs, June 1	Birge 243	Morphology & Keys
2	Tues, June 6	Picnic Point Bus Stop	S Wisconsin Prairies
	Thurs, June 8	Picnic Point Bus Stop	S Wisconsin Forests
3	Tues, June 13	(Kemp Station)	(N Wisconsin communities)
	Thurs, June 15	(Kemp Station)	(N Wisconsin communities)
4	Tues, June 20	(at home)	Independent assignment
	Thurs, June 22	(at home)	Independent assignment