

Botany 422, Plant Geography – course syllabus

Course page in Canvas https://canvas.wisc.edu/courses/128024

Credits: 4

Level: Intermediate

Breadth: Biological Science

L&S Credit Type: Counts as LAS credit (L&S)

Meeting Time – synchronous lectures online

Lecture - 9:55-10:45 a.m. Monday, Wednesday, & Friday

Instructional Mode

Synchronous lectures but lectures video-captured for Canvas; independent project and virtual greenhouse tours

How Credit Hours are met by the Course

This class meets for a total of 3 class lecture hours [M, W, F] each week over the spring semester and carries the expectation that students will work on course learning activities (reading, writing, studying) for about 2 hours out of classroom for every class lecture period. Additional hours over the semester include three virtual greenhouse tours (3 hours total) and an independent term paper or project (minimum of 10 hours). The syllabus includes additional information about meeting times and expectations for student work.

INSTRUCTOR

Professor Ken Sytsma

Office hours - by zoom appointment or email Preferred contact – *mailto:kjsytsma@wisc.edu*

COURSE DESCRIPTION

Biogeography of plants and associate animals. Relationship to climate and geology; paleobiogeography, vicariance and island biogeography; history and distribution of floras of North America and Wisconsin; lecture and demo lab; open to advanced students in the natural sciences.

Requisites

None.

COURSE LEARNING MANAGEMENT SYSTEM and INSTRUCTIONAL TOOLS

The course will use various UW learning management systems. <u>Canvas</u> contains the majority of class material and it is strongly suggested that students explore and become familiar not only with Canvas' site navigation but with content and resources available for the course. As necessary, the course may resort to other university instructional tools or platforms (e.g., <u>Blackboard Collaborate</u>, <u>WebEx Meetings</u>, <u>Zoom</u>).

LEARNING OUTCOMES

- 1. Demonstrate knowledge about how features of earth's rotation, revolution, and seasonality, of atmospheric and oceanic currents, and of latitude and elevation drive the patterns of vegetation and associated animals seen across the globe today
- 2. Become familiar with the evolution of earth and of life and its impact on the distribution of floras and faunas through time
- 3. Acquire insight into the history and assembly of the North American, and specifically Great Lakes, biota from the Cretaceous through the Pleistocene and Holocene
- 4. Develop appreciation for how present accelerated changes in climate, land use, and invasive species affect distribution patterns of native flora and fauna

GRADING

3 lecture exams @ 100	300 points
1 term paper OR	
research project @ 100	100 points
Total possible points	400 points

LECTURE EXAMS

Lecture exams #1 & #2 during lecture hour - Wed., Feb. 24 & Wed., Mar. 31; #3 during finals exam week hour - XXX. No Cumulative Final exam

Exam Proctoring

Remote proctoring will be required for lecture exams. Digital exam proctoring will utilize <u>Honorlock</u>, a campus-supported proctoring tool in Canvas. See <u>FAQ's</u> about Honorlock.

TERM PAPER OR PROJECT

The other major source of your grade (worth one exam) will be from your term paper or project (the latter for more advanced students and **required for graduate students** - please talk to me if you are interested). Details about the term paper or project are available in separate documents provided. The **term paper** or **project** will be due **Friday**, **April 23**.

GREENHOUSE TOURS

Three times during the semester, you will take a self-guided "virtual" tour (using a "Greenhouse Tour" packet) of the Botany Department greenhouses and gardens to learn plants relevant to biogeographical topics being discussed in lecture. Questions from each of the three greenhouse tours will appear in the three lecture exams.

REQUIRED TEXTBOOK & OTHER COURSE MATERIALS

Optional textbook

Lomolino, M.V., Riddle, B.R., R.J. Whittaker, Brown, J.H. *Biogeography, 4th ed.* 2010. Sinauer Associates

The optional text covers most of the topics on which I will be lecturing, so most of the readings will come from the 4th edition of *Biogeography*. This text is fairly well written and understandable even if you do not have a strong natural history course background.

Selected required and optional readings are available via CANVAS as pdf.

Video lecture capture via Kaltura will be made available on CANVAS as well as a pdf of each lecture's powerpoint.

TAKING NOTES

Attend the synchronous lectures - it is the best way to understand the material.

Concentrate on the major points of the lecture. Do not get swamped in the details that are just used for illustration. Lecture pdfs will be available via the course webpage, and you may want to have them prior to each class. I will hand out a review sheet about 10 days before each exam period that lists the terms, concepts, etc. with which you should be becoming familiar.

Many (most) of the plants discussed will not be familiar to you, but that is not the problem you might think it to be. You do NOT need to have a strong background in botany or ecology to be successful in this class.

RULES, RIGHTS & RESPONSIBILITIES

• See the Guide's <u>Rules, Rights and Responsibilities</u>

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." <u>https://diversity.wisc.edu/</u>