Ethnobotany. Lecture 1

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Outline

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Course in general
Description

Course description

The field of ethnobotany studies the uses of plants by humans. This course will focus on the diversity of plant uses, covering approaches of diverse cultures, including plant uses specific to North Dakota, especially plant uses of Native Americans. Objectives are that students:

- will have integral picture of plant uses and their respective cultural background/histories;

- will be able to analyze information accompanying different plant-based products (including pharmaceutical);

- will know basic principles of plant cultivation, useful plant identification and survival based on plant use.

Students will demonstrate this knowledge in a classroom presentation at the beginning of each lab. Laboratories will concentrate on plant cultivation, collection, identification and databasing.

Instructor

- Dr. Alexey Shipunov
- Office: Moore 229
- Office Hours: Wednesdays and Fridays, 10 a.m. to 11:50 a.m.
- Phone: 858-3116
- E-mail: alexey.shipunov@minotstateu.edu

Lectures Mondays, Wednesdays and Fridays, 9:00 a.m. to 9:50 a.m., Moore 210

Laboratories Thursdays 9:00 a.m. to 11:50 a.m., **Moore 213** (there will be also greenhouse labs and outdoor excursions)

Textbook None. The main source are lectures, some reference texts will be available on-line.

Course Web site

© Shipunov, A. Ethnobotany [Electronic resource]. 2011—onwards.
Mode of access: http://ashipunov.info/shipunov/school/biol_310

BIOL 310: Ethnobotany
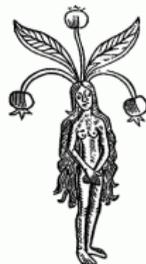
North Dakota Ethnobotany Database

Course materials:

- Syllabus (PDF, 0.14 Mb)
- Old lectures
- Plant list and guidelines for ethnobotany presentation (PDF, 0.1 Mb)

Back

http://ashipunov.info/shipunov/school/biol_310/

Course in general
Grading

Exams

- **Four** exams are given during the semester.
- Only the **three best exams** contribute to the final grade.
- Missed exams count zero points. There are **no make-up** exams.

Labs

- Receiving zero points for more than one laboratory results in a **failed course**.
- Grading of laboratories is based on reports and/or drawings.
- Written reports and/or drawings are prepared and finished during laboratory sessions and passed to the instructor right after the particular laboratory session.

Absence

There are five legitimate reasons for absence:

1. emergency situations,
2. attested medical conditions,
3. military duty,
4. participation in MSU sports events,
5. dependent sick leave.

Absence from exams or laboratories needs to be announced to the instructor in advance **via e-mail**. It is essential to attend lectures since there are no other reference is available at the moment.

Presentations

- Every Wednesday lecture will start from short 10 min / 8 slides presentation and practical testing of some cultivated plant.
- Every student in a class should prepare presentation **individually**.
- Presentation is mandatory and **counted like an exam**.
- List of plants for presentations and guidelines will be available for download on the Web site.

Points

A total of ≈540 points can be earned and are distributed as follows:

Three best exams : ≈300 points

Presentation : 100 points

Laboratories : 240 points (20 points per lab)

Grading points may vary between exams and labs.

Letter grades

- $A \geq 90\%$
- $B \geq 80\%$
- $C \geq 70\%$
- $D \geq 60\%$
- $F < 60\%$

  A **minimum** of one letter grade will be deducted from the grade for academic dishonesty / plagiarism.

Ethnobotany
Introduction

Ethnobotany in general

- Ethnobotany is not a "pure" science, it is a multidisciplinary approach on the boundary of botany, genetics, evolution, history, anthropology and sociology
- It may be taught in strikingly different ways, each ethnobotany course is different
- We will concentrate on plant uses along with evolutionary and historical aspects, and will emphasize the use of plants by Native Americans and useful prairie plants of North Dakota

Ethnobotanical matrix
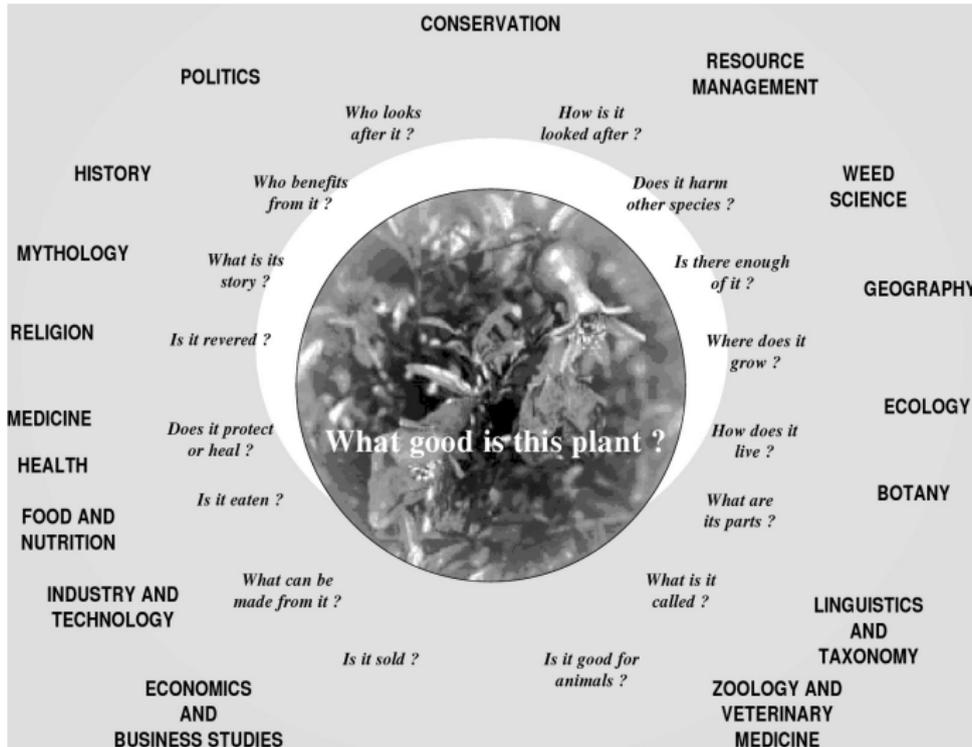
Ethnobotany

Classification

Basics of scientific classification

- Every plant belongs to several embedded taxonomic groups
- Every group has **name** and **rank**
- Names usually are one Latin word, but species have **binary names**: name of genus + species epithet
- Most important ranks are (in sequence from bigger to smaller): **kingdom**, **family**, **genus** and **species***

Taxonomic framework for cultivated plants

- All plants belong to its own kingdom, Vegetabilia.
- Most of cultivated plants are angiosperms (flowering plants, Angiospermae).
- In most cases, we will need to **memorize the family** of plant. This is important characteristic since families are stable natural units of common evolutionary origin.

Summary

- Ethnobotany in a compound science including all aspects of plant use.

For Further Reading

A. Shipunov.
Ethnobotany [Electronic resource].
2011—onwards.
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