INTRODUCTION TO ETHNOBOTANY
EBOT 100
May 19th – 30th, 2014
3 credits

Course Information:

Location: Sitka, AK

Instructor: Kevin Jernigan; (907) 543-4576
Mailing Address: Kuskokwim Campus UAF
P.O. Box 368
Bethel, Alaska, 99559
Professor, Ethnobotany

Lecture Times:
The class will officially meet 9:00A.M. – 12:00 P.M. and 1:00 – 4:00 P.M., Monday – Friday. Some days may run longer especially on days that we do longer hikes and travel out of town. There may also be additional meeting times, depending on the availability of elders at other times, as well as the possibility of weekend excursions. Students should expect to be busy most of the day.

Office Hours:
Arranged by appointment.

Other Presenters:
Guest Elders, TBA

Course Description:
This course surveys basic concepts of botany and ethnobotany, with emphasis on the native flora of Alaska and how people use these plants. Students will gain a basic understanding of plant biology and taxonomy; scientific methods of plant collection, including identification and curation; as well as the use of native Alaska plants for food and medicines, ethnobotanical methods of collecting plant-use information from indigenous cultures, and ways that this information contributes to other fields of study, such as resource management, community development, and human health.

Course Objectives:
Upon successful completion of this course, the student will:
- Be familiar with basic botanical terms and concepts in the following areas: plant morphology, anatomy, taxonomy and ecology; field collection methods and non-vascular plants
- Be familiar with basic ideas in folk taxonomy and cognitive ethnobotany
• Recognize regionally-important plant families based on field characteristics and by using scientific keys
• Collect and identify plants using scientific methods
• Set up a small teaching plant collection and voucher specimens
• Understand the impact of invasive plants on the local native flora and on wildcrafting activities
• Explore the general principals of ethnobotany, including its history and importance in traditional and modern culture
• Better understand the cultural relevance of the native flora to the indigenous cultures of the Alaska
• Become familiar with standard ethnobotanical survey techniques
• Create their own ethnobotanical field notebook
• Learn about medicinal, food and other uses of Alaska native plants
• Better understand the importance of ethnobotanical knowledge in community decision-making processes

Required Texts:

Readings will be assigned from the following:


2. *Introduction to Ethnobotany* (reference packet given to all students).

Optional Texts:
These or similar titles will also be provided to students for use during class time.


*Guide to the Ethnobotany of the Central Yup’ik Region.* 2014. Jernigan *et al.* (editors)

*Land of the Eskimos,* Lyudmila Ainana & Igor Zagrebin

*Plants That We Eat.* Anore Jones. 2010


*Medicinal flora of the Alaska natives: A compilation of knowledge from literary sources of Aleut, Alutiiq, Athabascan, Eyak, Haida, Inupiat, Tlingit, Tsimshian, traditional healing methods using plants.* Ann

The Boreal Herbal: Wild Food and Medicine Plants of the North – Beverly Gray


*How to Know the Lichens (The Pictured Key Nature Series)* by Mason E. Hale

*Make Prayers to the Raven: A Koyukon View of the Northern Forest* by Richard K. Nelson

*Botany in a Day: Thomas J. Elpel's Herbal Field Guide to Plant Families*

*How to Identify Plants* - Harrington

*North Pacific Seaweeds* - O'clair, Lindstrom

*Alutiiq Plantlore* - Russell

The Instructor may also provide handouts for students containing additional readings. Readings from texts and supplementary materials provided by the instructors are to be read as assigned, and completed by the next class period.

**Instructional Methods:**
This course is being offered face-to-face in Sitka, Alaska. Students taking this class are required to have an email address, basic computer skills.

**Course Content:** See Lecture Schedule (page 6)

**Evaluation & Grading:** Elements of Grades for EBOT 100:

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<thead>
<tr>
<th></th>
<th>Number</th>
<th>Points Each</th>
<th>Total Points</th>
<th>Percent of Grade</th>
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<tbody>
<tr>
<td>class participation</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>15%</td>
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<tr>
<td>lab notebook first review</td>
<td>1</td>
<td>40</td>
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<td>10%</td>
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<td>lab notebook final</td>
<td>1</td>
<td>80</td>
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<td>20%</td>
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<td>1</td>
<td>100</td>
<td>100</td>
<td>25%</td>
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<tr>
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<td>total</td>
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Grading Scale: (based upon the percentage of total possible points):

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<tbody>
<tr>
<td>A</td>
<td>90% or higher</td>
<td>Distinguished Achievement</td>
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<tr>
<td>B</td>
<td>80 – 90%</td>
<td>Outstanding Achievement</td>
</tr>
<tr>
<td>C</td>
<td>70-80%</td>
<td>Satisfactory Competence (Average Performance)</td>
</tr>
<tr>
<td>D</td>
<td>60-70%</td>
<td>Below Average Performance</td>
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<tr>
<td>F</td>
<td>less than 60%</td>
<td>Failure to satisfactorily meet course requirements</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>(the university has policies that govern incomplete grades)</td>
</tr>
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</table>

Policies & Procedures:

Time Commitment: College level science courses customarily require at least 2 to 3 hours of time outside of class (for reading, study, and preparation) for each hour spent in class. Students whose schedules cannot accommodate this level of commitment for whatever reason (work, family obligations, etc.) are unlikely to be successful in this class.

Attendance: Student attendance and participation are necessary to learning the material in this course. Each student is expected to attend each class session, to be on time, and to remain for the entire session. Late arrivals and early departures are disruptive and unfair to other students.

Exams and quizzes missed because of an excused absence, must be taken within one week after a student’s return to school. Because of logistical difficulties, some sessions and assignments may be difficult to make up, so be sure and talk with the instructor when you know that you will have to miss class(es).

Should school or class be officially cancelled (because of inclement weather, etc.), exams, quizzes, or assignments due during that cancellation will be given or due the next scheduled class session.

Assignments submitted late without an authorized excuse will be subject to a 10% grade reduction for each class period that the submission is delayed. Any make up work not completed by 12/14/07 will receive a grade of zero (0) and this will be factored into your final grade.

- General Information –

Student Behavior: Students at this institution are expected to contribute to the maintenance of an environment that is conducive to learning and respectful of others. Consequently, they are required to behave in accordance with acknowledged societal norms and are prohibited from engaging in behavior that is distracting to themselves or to others. Inappropriate behavior will result minimally in being asked to leave class immediately. In extreme cases, this could result in students being dropped from the class. Refrain from talking or making noise during lectures, laboratory sessions, and exams, although all
contributions to and with the class are encouraged, with participation highly valued as part of your final grade.

Study Skills: This class requires good reading and study skills. If a student feels that he or she is falling behind, he or she should contact the instructor immediately and we will work with you directly. Issues of this type seldom resolve unless specific measures are taken in a timely fashion.

Harassment: CRA and UAF have specific policies regarding harassment, and harassment will not be tolerated. Anthropology students address subjects that are considered to be delicate by many individuals and cultures. Both students and faculty are expected to act and speak with sensitivity and respect.

Use of College Equipment: Students are expected to use their utmost care to assure the continued availability of campus resources.

Safety: Any accidents or injuries are to be reported to the instructor immediately.

Please Note: This class can only be taken for credit
COURSE OUTLINE: LECTURE TOPICS and LAB ACTIVITIES BY DAY
Each day has 6 teacher/student hours divided between lecture and lab

Please Note: This is an approximation, the schedule may vary due to rain, the availability of elders and transportation, etc. But all attempt will be made to cover all topics, regardless.

Day 1

Lecture
Introduction to the class, objectives, and expectations.
Overview of scope of botany and ethnobotany to be covered.
general housekeeping issues
How to Gather Plants Respectfully
Botanical taxonomy (including scientific names) and folk taxonomy.
Overview of ethnobotany and economic botany and the many related disciplines.

Lab
Notebooks will be handed out and students will begin learning how to keep notebook/journal for class.
Discuss individual plant profile for final project.
Walk around and look at plants close by (or further out depending on conditions).
Discuss issues for interviewing local people

Read for Tomorrow:
Balick and Cox Ch. 1 and 5

Day 2

Lecture
Basic plant morphology, belowground systems, shoots, leaves, flowers and fruits/seeds. Focus on structures critical for plant identification.
Utility of ethnobotany in cultural preservation.

Lab
Being prepared (what does an ethnobotanist take into the field?).
Identify plant parts from wild collected plants.
During lab time, we will seek out examples of morphological diversity in plants and learn the identification of a few common local species.

Read for Tomorrow:
Balick and Cox Ch. 2 (especially pp.25 –46)
Class lab book— Flip through the pages and learn where each section is for further reference.
Day 3

Lecture
Introduction to medical ethnobotany, and ethnopharmacognosy.
Plant identification using technical keys
cooking with wild plants activity

Lab
Freelisting.
Review of plant morphology in the field.
Preparation of herbarium specimens.
Preparation of ethnobotanical specimens.
**TURN IN YOUR IDEA FOR YOUR FINAL PROJECT**

Read for Tomorrow:
Catch up on previous readings

Day 4

Lecture
Ethnobotany and Ethnoecology of the Amazon
Field characteristics for some basic plant families common to area.
Invasive plant concerns.
salve making activity

Lab
Qualitative and research method, including participant observation and interviewing.
Overview outline and structure of ethnobotanical surveys (looking at some examples)
Observation (sketching, photographing, recording in the field)

Read for Tomorrow:
Balick and Cox: Chapter 6

Day 5

Lecture
Basic plant chemistry
Plant reproductive and dispersal methods.
Plant dyeing activity

Lab
Recognizing some families in the field.
Practice with keys, collecting, learning morphology in the field.
Turn in lab notebook for initial comments.
**TURN IN LAB NOTEBOOK FOR INITIAL REVIEW**
Day 6

Lecture
Introduction to more plant families in the area.
Ethnobotany and history.
Indigenous Plant Knowledge of AK and the circumpolar region.
Social History, Lore and stories.

Lab
More on Ethnobotanical Interviewing and research techniques
Group exercise to practice methodologies
Learn more local plant species

Read for Tomorrow:
Balick and Cox Ch. 4

Day 7

Lecture
Introduction to lichens and mosses.
Historical and cross-cultural overview of medicinal plant use.
hydrosol activity

Lab
More trips to field with elders to look for useful plants.
More practice with keying, collecting in field.
Students given time to work on individual plant profile.

Read for Tomorrow:
Balick and Cox Ch. 3. (especially 70-81),

Day 8

Lecture
Historical and cross-cultural overview of food plants.
Catch up time for topics not yet covered.
Review for Exam

Lab
Ethnobotanical data analysis.
Peer and instructor counseling on individual projects.

Day 9

Lecture
Building materials, poisons and miscellaneous plant uses.

Lab
Student oral presentations of plant profiles

Day 10
Lecture/Group Discussion
Ethnobotanical contributions to the modern world.
Broader impact of ethnobotany on Alaskan communities.
Areas needing future research. Time for catch up.

Lab
Final Exam
Turn in Lab notebook for final grading. (100 points)