BI 448/548 Field Botany
Summer 2017

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Béla Kapelka (Lab Assistant) bkapelka@uoregon.edu

Lecture/Lab: Monday & Wednesday 13:00 - 16:50. Meet in 112 Huestis.
Field Trips: Fridays (7/27-8/11) 8:00 – 18:00. Meet in the parking lot at Onyx and Franklin Blvd (behind the Science Library).
Please arrive a few minutes early for an 8:00 departure.

Course Objectives:
Through lectures, laboratories, field trips, and scholarship you will learn:
  1. How to describe and classify plant diversity
  2. Identification of plants using dichotomous keys
  3. Recognition of common angiosperm and gymnosperm families
  4. Recognition of local flora
  5. Field sampling methodologies
  6. Collecting and preparing botanical specimens
  7. Plant ecology

REQUIRED BOOKS & SUPPLIES:
OSU Press. ISBN 978-0870714900
OpenStax. 2013. Biology. (Plant science chapters - Available for download on Canvas)

“Botany Kit”: 10X hand lens, probe and/or forceps, retractable razor knife, metric ruler, drawing paper and pencils/pens, ziploc bags (qt. & gal.) for keeping things dry and for collecting samples, a Rite-in-the-Rain notebook and pencils (pen is not water resistant!).
RECOMMENDED (but optional) RESOURCES:
Jensen, E. 2010. Trees to know in Oregon. OSU Extension, Corvallis, OR.

FIELD TRIP PACKING LIST:
‘Gilkey’
Hand-lens & ‘botany kit’
Lunch
Water
Snacks
Field notebook (& pencil)
Field guides (optional)
Wear long pants (we may hike off-trail or kneel in rough terrain)
Hiking boots or tennis shoes (NO SANDALS – this is a safety issue!)
Hat and sunscreen
Rain gear (you never know!)
Dress in layers (the day may start out cool and then warm up, or vice versa)

ASSIGNMENTS:
Exams: will cover subjects and vocabulary presented in lecture, lab and field, whether that material is in the textbook or not. Furthermore, you are expected to know what is in the assigned reading, even if we don’t cover that material in lab or lecture. Questions may be multiple choice, short essay, fill in the blank, or true/false format.
Final Practical: The Final Practical will focus on family recognition, species ID, and keying unknowns.
Lab Quizzes: There will be two lab quizzes. The lab quizzes will focus on family recognition, species ID, and keying, however they may also include questions based on reading assignments; points will be deducted for misspelling.
Plant Collections: Each student will be responsible for submitting six dried, mounted and labelled specimens at the end of the term. These should all be correctly identified.
Labs: During each session you will turn in an activity or worksheet. These will largely be graded based on participation and effort. You will be responsible for making sure that you understand the material covered regardless of the grade you receive on the lab worksheets.

Bring your Gilkey and your hand lens/botany kit to every class meeting!
Field Trips: Since this is a ‘Field Botany’ class, the field trips will be critical to your success in the course. ATTENDANCE IS REQUIRED and make-ups are not possible due to logistics
**Readings:** Readings should be done prior to the day that they are listed in the schedule. They are chosen to support the material that we will cover in class. The contents may form part of the questions on exams.

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<thead>
<tr>
<th>Assessment</th>
<th>#</th>
<th>% Each</th>
<th>Total</th>
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<tbody>
<tr>
<td>Final Exam</td>
<td>1</td>
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<tr>
<td>Midterm Exam</td>
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<tr>
<td>Final Practical</td>
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<td>Lab Quizzes</td>
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<td>Field Trips</td>
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<td>47</td>
<td>140</td>
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<td>Collections</td>
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<td>15</td>
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<tr>
<td>Labs</td>
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<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPIC</th>
<th>READING</th>
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<tbody>
<tr>
<td>1</td>
<td>7/24</td>
<td>Introduction to Field Botany; non-flowering plants; dichotomous keys: <em>plant walk</em></td>
<td>Gilkey pp.1-3; O.S pp.672-701,875-876</td>
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<tr>
<td>1</td>
<td>7/26</td>
<td>Taxonomy; describing angiosperm diversity QUIZ 1</td>
<td>Gilkey pp.4-5; O.S pp.701-707,711-717,926</td>
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<td>1</td>
<td>7/28</td>
<td>FIELD TRIP: CASCADLES</td>
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<td>2</td>
<td>7/31</td>
<td>Monocots: Liliaceae, Iridaceae, Orchidaceae; making plant collections; <em>plant walk</em></td>
<td>Gilkey pp.65,80,83; Kelch 2002; ‘The use and methods of making an herbarium specimen’; ‘MOBOT Field handbook’</td>
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<td>2</td>
<td>8/2</td>
<td>Biogeography; Dicots: various families. QUIZ 2; Field Trip Report 1 Due</td>
<td>O.S pp.1288-1300; Olmstead 2002</td>
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<td>3</td>
<td>8/7</td>
<td>Dicots continued MIDTERM EXAM</td>
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<tr>
<td>3</td>
<td>8/9</td>
<td>Vegetation sampling methods; <em>plant walk</em> Field Trip Report 2 Due</td>
<td>Reading TBA</td>
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<tr>
<td>3</td>
<td>8/11</td>
<td>FIELD TRIP: TBA</td>
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<td>4</td>
<td>8/14</td>
<td><em>Wetlands Fieldtrip</em>; graminoids</td>
<td>Gilkey pp.60-61,65; O.S p.1307</td>
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<td>4</td>
<td>8/16</td>
<td>Field Trip Report 3 &amp; Collections Due; FINAL EXAM &amp; PRACTICAL</td>
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COURSE POLICIES

Classroom Conduct
I expect everyone to follow University rules and guidelines for behavior. Academic dishonesty, which includes cheating and plagiarism, is a serious offense and will be treated according to the guidelines in the student conduct code (located at http://dos.uoregon.edu/conduct). This doesn't mean you shouldn’t talk with other students about what you are thinking or writing; it does mean that when you write something, it should be in your own words, not copied from someone else.

I ask that we all do our best to be intellectually honest while also being tolerant of personal differences. I welcome and encourage intellectual controversy -- I think it is essential to real learning. At the same time, I ask that we all respect the rights of others to hold different opinions, even as we challenge the ideas supporting those opinions. I promise to value each of you as individuals; I view the grade you earn to be a reflection of the quality of work you have done, but not of you as a person.

I ask that you not interfere with the ability of other students to learn by making noise, talking, texting, checking email, etc. when someone else (instructor or classmate) is talking.

Electronic Devices
Please turn off cell phone ringers during lecture, lab and field trips. Electronic devices may not be used during a quiz or test. It is understood that many people will use their phones as cameras in a class like this. This of course is permissible, however if it is apparent that texting, chatting or other activity is becoming a distraction you will be asked to refrain from said activity.

Crises Happen
If you have problems that interfere with your ability to do the work in this class, please let me know promptly. I am willing to make special arrangements when the need is real and when you have done your best to deal with the situation in a timely manner.

The University of Oregon Counseling Center, provides students with confidential consultation 24 hours a day, 7 days a week. From 8-5 Monday through Friday you will be connected with the front desk, and after hours, the same number connects to their support line. Their number is 346-3227. Students often believe that their issues are not “severe” enough for them to call, but at the Counseling Center, no problem is too small. If you miss a class, it is your responsibility to contact a classmate to get lecture notes.

Accessible Education Center
If you have a documented disability and anticipate needing accommodations in this course, please make arrangements with me soon. The University of Oregon is working to create inclusive learning environments (more info at http://aec.uoregon.edu). Please notify us if there are any aspects of the instruction or design of this course that results in barriers to your participation. If you have a documented disability and anticipate needing accommodations in this course, please talk to your instructors during the first week of classes. Please request that the AEC Counselor send a letter verifying your need. Please call 541-346-1155, email uoaec@uoregon.edu, or drop by 164 Oregon Hall to schedule an appointment.

Please be aware that the accessible tables and chairs in this room should remain available for students who need to use this furniture.