GEOG * 3110 - BIOTIC AND NATURAL RESOURCES

Class Meetings: Monday, Wednesday, & Friday 8:30 – 9:20, Room TBA
Instructor: Ze’ev Gedalof (zgedalof@uoguelph.ca)
Office Hours: TBA (HUTT 356).
Graduate Teaching Assistant: TBA
Therapy Dog: Keep your fingers crossed..

REQUIRED TEXT
There is no required text for the course. Readings will be taken from journal articles, technical reports, and books, and will be made available via CourseLink.

OVERVIEW
This course is the third in a sequence of four related courses in Physical Geography. The first course (GEOG*1300/1350) laid the foundations with an introduction to the processes and resulting patterns in the physical environment. The second course (GEOG*2110) examined biophysical processes (energy, water and nutrient flows) in more detail as well as relationships between the components (climate, soils, vegetation) of the biophysical environment. This course (GEOG*3110) provides a more detailed overview of biogeography – the study of the distribution of plants and animals across the Earth’s surface. This field borrows and expands upon principles from Ecology, Biology, and Physical Geography. We will spend considerable time learning about ecosystem processes that impact both fauna and flora. Topics covered in this course include succession, disturbance, old-growth forests, biodiversity, island biogeography, habitat fragmentation, species introductions and biological control. For each topic, we will be examining past and current theories, controversies, empirical evidence and implications for resource management. By the end of this course, each of you should have a working knowledge of Biogeography that will broaden your scope of knowledge in the Geosciences, and I hope you will gain a better understanding of the natural world around you. The final course in the sequence is GEOG*4110 Environmental Systems Analysis – which synthesizes ideas from biogeography, hydrology, geomorphology, and climatology.

OBJECTIVES
- To learn and critically evaluate the basic principles of biogeography
- To develop literacy in biogeographical concepts as they apply to current environmental issues
- To learn basic quantitative techniques for the analysis of biogeographical data.

APPROACH
Each topic will be covered through a combination of readings, lectures, discussions, and individual assignments.
EXPECTATIONS
Since class discussions and written assignments will be based on the assigned readings, students are expected to have done the appropriate readings prior to the start of each topic. Discussions may involve students being called on to read prepared answers to questions on the readings. All assignments and final exam questions will be based on text readings, lectures and class discussions.

The use of personal computers for any purpose other than note-taking is not permitted during class time unless you are sitting where no other students can see your screen. This is because the science shows that you distract the people around you more than you distract yourself and that’s just not fair to them.

See here for details:

COURSE EVALUATION
- **Short Written Assignments.** Students will be required to submit four short (2-3 page) expository essays based on assigned readings and in-class discussions, of which the best three will contribute to your final grade.
- **Laboratory Exercises.** Students will be required to complete two laboratory exercises, and submit a report documenting their analyses and discussing the findings.
- There will be a *Midterm Examination* composed of short answer questions, and a *Final Examination* composed of essay questions. The midterm exam will be held in class on Wednesday, November 2\textsuperscript{nd}. The final exam is Wednesday, December 7\textsuperscript{th}, 2:30-4:30 PM. Room TBA.

GRADING

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<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Written Assignments</td>
<td>30 %</td>
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<tr>
<td>Laboratory Exercises</td>
<td>30 %</td>
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<tr>
<td>Mid-term Examination</td>
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<td>Final Examination</td>
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All assignments must be submitted through Dropbox on Courselink. Late assignments (without prior approval) will be penalized at a rate of 10 percent of the value of the assignment per class day. This course uses Turnitin to help encourage academic integrity.
COMMUNICATION

This course uses WebCT Blackboard D2L CourseLink as the primary tool for communication and distribution of course material.

All email correspondence will be sent to your University of Guelph email address. I normally will respond to student inquiries during my office hours. I do not normally reply to messages from off-campus email addresses. Only messages and postings that are appropriately professional will be responded to. I do not normally answer to emails that begin “Hey,” or that include texting lingo; I’m too old for that.

University of Guelph Policy Statements:

E-mail Communication
As per university regulations, all students are required to check their <mail.uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

When You Cannot Meet a Course Requirement
When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the undergraduate calendar for information on regulations and procedures for Academic Consideration.

Drop Date
The last date to drop one-semester courses, without academic penalty, is Friday November 4, 2016. For regulations and procedures for Dropping Courses, see the Undergraduate Calendar.

Copies of out-of-class assignments
Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Accessibility
The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Student Accessibilities Services (SAS) as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: http://www.uoguelph.ca/csd/


**Academic Misconduct**

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisort.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar.

**Recording of Materials**

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

**Resources**

The Academic Calendars are the source of information about the University of Guelph’s procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.
1) **Introduction.**
None

2) **Science and resource management**

3) **Physical and biological controls on species distributions**

4) **Biodiversity**

5) **Island Biogeography**

6) **Species introductions**

7) **Community organization**

8) **Succession**
9) Disturbance

10) Old-growth

11) Climatic change