Winter 2019 Instr.: Dr. D. Duffus

DTB B113a

Geography 274 Biogeography

Course Objectives

This course is an introductory level science course that will help develop your understanding of the principles of biogeography. We will concentrate in the lectures on learning five to six "first principles" of biogeography, what they mean, and how they work. These will provide a foundation for further learning about

why plants and animals are distributed in the manner we find them.

A second objective is to familiarize students with the scientific thinking process that is used to try and understand the complexity of the natural world. Towards the end of the course we will look at some examples of application of this sort of science in the area of wildlife research to help students develop links between

theory and practice.

A third goal for this class is to provide the student with basic tools used by natural scientists in most disciplines. You will gain a basic knowledge of biology, for instance scientific nomenclature, the basic concepts of evolution and ecology as starting points for much of the course material. The lab exercises expose the students to a suite of techniques and concepts commonly used to measure the

distribution of plants/animals in space.

Teaching/Learning Method

This course is a lecture and lab course. There is one weekly lecture that is reinforced in a weekly lab where the students will use various techniques linked to the principles discussed in the lecture. The lectures are significant, as it is the

only route to gaining access to material for the exams. You should come prepared to take notes using the field tested method involving a notebook and writing utensil. Much of the lab work will be undertaken out of the classroom, indeed, even outside of the buildings. The lab exercises culminate in an exercise that employs your new skills to assess campus wildlife (not including *Felicitas*, that would read wild life).

## Assessment

Your level of understanding of the course material will be assessed through two exams and lab assignments. During the term, a midterm worth 30% of the final grade, and at the end of the course a there will be a final exam worth 40% of the grade. The lab assignments are worth 30% of the grade, if you do not produce the lab assignments by the prescribed deadlines they will not contribute to your grade.

## Caveats

There will be no text requirement, any basic biogeography or ecology text can provide reference material for the class, although your course notes and the lab handouts will form the foundation of your study material. There is a **Math Warning** in effect for this class. Although you will not be expected to derive the equations, you will be expected to understand them as they are used to show theoretical principles. In this classroom the use of laptop computers, cell phones, or other like devices is not permitted.

## Grading standards as noted below

## **Undergraduate Grading\*\***

| Passing Grades | Description   |
|----------------|---|
| A+<br>A<br>A-  | <b>Exceptional, outstanding and excellent</b> performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter.  |
| B+<br>B<br>B-  | Very good, good and solid performance. Normally achieved by the largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area. |
| C+<br>C        | <b>Satisfactory, or minimally satisfactory</b> . These grades indicate a satisfactory performance and knowledge of the subject matter.  |
| D              | Marginal Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.  |
| СОМ            | Complete (pass). Used only for 0-unit courses and those credit courses designated by the Senate. Such courses are identified in the course listings.  |

<sup>\*\*</sup> As per stated in the calendar