Dr. Jim Dyer  
GEOG 4712/5712 (9970/10142)  
122 Clippinger  
Fall 2015-2016; 3/4 credits  
Office Hours: T&Th 10:30-11:30, W 10-noon  
E-mail: dyer@ohio.edu  
103 Clippinger  
This course uses Blackboard

† Activities will occasionally require some work outside of scheduled class time.

Field Methods in Geography

The intent of this course is to expose you to all phases of conducting fieldwork. Our emphasis will be on physical geography, but the methods extend to other applications.

Learning Objectives

1. Students will learn fundamentals of research design and basic surveying.
2. Students will actively participate in a number of field techniques, with assignments emphasizing fundamental principles of research design, basic surveying and mapping, and data analysis.
3. Students will apply the principles discussed in the course to a small but original research project.

Textbook and supplies

There is no required textbook for the course; readings will be made available on Blackboard. Some assignments and materials will be available either as class handouts, or on Blackboard to print out and bring to class. A small three-ring binder is highly recommended for compiling the “book” that will develop over the semester; it also will provide a hard surface for writing in the field. You can insert blank paper in the three-ring binder for taking notes, or you may prefer to use an additional field notebook. A calculator is also recommended. Wear appropriate dress for working outdoors, taking the weather into consideration.

Grading

Active class participation in the collection of field data (that serve as the basis for the exercises) is considered to be part of the assignments. Since this class relies heavily on group-compiled data, the expectation of punctuality, attendance for the entire period, and quality work holds for all students. Unless other arrangements have been made in advance, final course grades will decrease by 3% for each absence after the first two. If for any reason you have to miss a class, please let me know as soon as possible so that we can plan accordingly.

Exams will cover lecture material and will include use of instruments and procedures treated in class. They are designed to test your comprehension of both the theory and practice of field methods. The project is discussed on a separate handout.

Final grades will be based on the percentage of points you earn on the class activities. It is a good practice to save all of your graded and returned assignments until you receive your grade for the course. All requirements must be met to pass the course. In addition to differences in course requirements (outlined below), graduate students will be held to a higher standard in their class work. Students having any special needs or disability that might affect their performance in this
class are encouraged to speak to me at the start of the semester to discuss necessary arrangements.

**Assignments (150 points) Points:**
- Methods Critique 25
- Biogeography Exercise 50
- Hydrology Exercise 25
- Surveying Exercise 50

**Exams (100 points)**
- Exam #1 50
- Exam #2 50

**Project (50/100 points)**
- Written Proposal
  - Original submission 30
  - Revised submission 20
- Oral Project Presentation 50
  *(Grad students only)*

**Miscellaneous (20-50 points)**
- Data analysis preparatory exercises, in-class activities on the use of air photos in field research, basics of soil analysis

**Grading scale:**

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<th>A</th>
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<th>B+</th>
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<th>B-</th>
<th>C+</th>
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<td>%</td>
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A word on the exercises …

An effective field-based project includes not only the proper data-collection technique, but analysis of data, and clear presentation of results. To this end, assignments that you turn in must report your findings neatly (ideally typed), and clearly (with questions presented in numerical order, with work and relevant data plainly shown). Do NOT turn in loose pages of raw data or spreadsheet pages, or questions out of sequence – i.e., do not turn in a “draft” of the report. Papers that do not meet these criteria will be returned ungraded, and a late penalty will accrue until a proper report is turned in.

It is expected that students will work together to understand the material and to complete some of the tasks. However, assignments turned in for credit should reflect the individual student’s knowledge, comprehension, and abilities. Simply copying material from another student is considered plagiarism. Any form of academic dishonesty will result in a “0” for that assignment, and may be reported to the Office of Community Standards and Student Responsibility for further action.
SCHEDULE OF COURSE ACTIVITIES

Be aware that we are subject to the vagaries associated with any field-based research (including the weather!); this schedule is a “best guess” for the semester, but subject to change.

I. Introduction to course and field methods

II. Vegetation analysis: sampling (quadrats, point-centered quarter method), vegetation data analysis; tree-ring analysis

READINGS (on Bb): *Basic Principles of Sampling; Vegetation Attributes; Density*

Exam #1 (focusing on vegetation analysis) – *around October 13<sup>th</sup>, but exact date to be announced in class*

III. Hydrologic sampling (determination of velocity, cross-sectional area, discharge)

IV. Surveying: use of compass, pacing and chaining distances, determining height and slope, using a level, GPS

V. Soil analysis (determination of soil texture)

VI. Air photo basics

Exam #2 (covering material since midterm) – *December 3<sup>rd</sup> (last day of class)*

FINAL EXAM PERIOD: Thursday December 10<sup>th</sup> @ 8:00 am

Undergraduate proposals due in class; Graduate presentations

**Important Dates**

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<tr>
<th>Event</th>
<th>Undergraduate</th>
<th>Graduate</th>
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<tr>
<td>Exam #1</td>
<td>c. Tuesday October 13&lt;sup&gt;th&lt;/sup&gt;; exact date announced in class</td>
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<td>Exam #2</td>
<td>Thursday December 3&lt;sup&gt;rd&lt;/sup&gt; (last day of class)</td>
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<td>One-on-one discussions with Dr. Dyer about project ideas</td>
<td>August 25&lt;sup&gt;th&lt;/sup&gt; – October 29&lt;sup&gt;th&lt;/sup&gt;</td>
<td>August 25&lt;sup&gt;th&lt;/sup&gt; – October 8&lt;sup&gt;th&lt;/sup&gt;</td>
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<td>E-mail project details to Dr. Dyer (see Guidelines)</td>
<td>Thursday, November 5&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Thursday October 15&lt;sup&gt;th&lt;/sup&gt;</td>
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<td>Proposals due (see Guidelines)</td>
<td>Tuesday, November 24&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Thursday, October 29&lt;sup&gt;th&lt;/sup&gt;</td>
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<td>Revised Proposals due</td>
<td>In class, Thursday December 10&lt;sup&gt;th&lt;/sup&gt; at 8 am (Final Exam period)</td>
<td>Thursday, November 12&lt;sup&gt;th&lt;/sup&gt;</td>
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<td>Project presentation</td>
<td>Thursday December 10&lt;sup&gt;th&lt;/sup&gt; at 8 am (Final Exam period)</td>
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