**ESM 101 LABORATORY SYLLABUS**

**FALL 2013**

**Science Research & Teaching Center - 149**

*Lab Instructors:*

Alex Staunch: staunch@pdx.edu

Office: Cramer Hall-287.

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Office: Science Building 1-341

*Lab Sections:*

TUES 9 – 9:50a, WED 4:20-5:10p, THUR 9-10:00a, FRI 2-2:50p

*General Course Expectations:*

Attendance and participation is MANDATORY. Role will be taken at the beginning of each lab section. Each lab and field trip will begin exactly at the starting time. This means that you must be in lab or at the designated field trip site before starting time in order to get prepared for lab/field work. Full attention is also expected during the labs (this includes involvement in the discussions and group work).

There will be two required field trips during the term. Be prepared to walk and record your observations. You will need to have good walking shoes or boots and be dressed appropriately for the weather (field trips will NOT be cancelled due to rain)! You will need to have a small notebook of some kind that you can write in while in the field. You may want to bring a light pack.

All assignments have a due date and will be due in lab at the beginning of the lab period on the due date. **NO LATE WORK WILL BE ACCEPTED.** This means that if you are absent or late, your work that is due that lab period will not be accepted for credit.

\*Note: Since lab participation in the lab is crucial, if you miss more than two labs (3 or more) you will not receive credit for ANY lab points (that is a score of zero for that lab portion of your grade). If you miss one or two labs, you will still receive points for the lab class but you will miss the participation and assignment points for the lab(s) that you missed.

*Learning Objectives:*

* Address urban issues of nature and humans
* Identify particular spots of high biodiversity in Portland and measure the biodiversity
* Understand that individual habitats are connected in a regional context
* Address hypotheses for processes that are limiting biodiversity
* Learn how to share results in a format that is useful to many stakeholders

*Grading:*

There will be five (5) assignments throughout the quarter. Each of these assignments will be worth ten (10) points. You will receive 10 points each lab period for being in lab on time and working the entire lab period. You will receive 20 points each for showing up on time and participating in each of the two mandatory field trips. Your final project grade (70 points) will be inclusive of your group presentation, group paper, and team member evaluations. We will discuss your responsibility to differentiate between your own work and group work. This is an interesting component of collaborative research.

**Point Category Points each Total lab points**

Lab participation 9@10 points 90

Field trip participation 2@20 points 40

Assignments 5@10 points 50

Paper 1@50 points 50

Presentation 1@10 points 10

Student Evaluation 1@10 points 10

**Total**

 **250**

*Weekly Schedule:*

|  |  |  |  |
| --- | --- | --- | --- |
| **Lab #/ Week of…** | **Topics** | **Assignment** | **Things Due…** |
| #1 / Sept 30-Oct 4 | Introduction, basics of biodiversity presentation, Portland plant guide, field trip sign up (BOTH TRIPS) | Study for plant quiz |  |
| #2 / Oct 7-11 | Define & discuss the scientific method, determine groups for project & field trip. Describe group projects & hand out rubric. Intro to Invasive and Native Species. |  |  |
| #3 / Oct 14-18 | Field trip prep, prepare to pick site for group projects | Assignment #1 – Determine hypothesis for group project |  |
| Oct 17th, 18th, 19th  | FIELD TRIP #1 – Vans or carpoolThurs 10-1p; Fri 3:30-6:30p; Sat (bike option) 9a-1p | ATTENDANCE IS MANDATORY |  |
| #4 / Oct 21-25 | Field trip analysis, spatial distribution lab | Assignment #2 – Spatial distribution worksheet | Assign. #1 & excel field trip data sheet |
| #5 / Oct 28-Nov 1 | Edge effects & human caused stress presentation | Assignment #3 – Corridors | Assign. #2 |
| #6 / Nov 4-Nov 8  | Field trip prep, discuss group presentation & project expectations.  | Assignment #4 – Project 2 pager | Assign. #3 |
| Nov. 5th, 6, 7th | FIELD TRIP #2 – Walking from CampusThurs 10-1p; Fri 3-6p; Sat 9-12p | ATTENDANCE IS MANDATORY |  |
| #7 / Nov. 11-15 | Restoration, environmental degradation. Outline of paper expectations.  | Assignment #5 – Group presentation outline | Assign. #4 |
| #8 / Nov. 18-22 | Group project work |  | \*Assign. #5 |
| #9 / Nov. 25-29  | Thanksgiving Week – NO LAB |  |  |
| #10 / Dec. 2-6 | FINAL PRESENTATIONS, Student/TA evaluation |  | FINAL PAPER |
| #11 / Dec. 9-13 | NO LAB. FINALS WEEK FOR LECTURE. |  |  |

\*On Nov 11 the campus is closed for Veterans Day. The Monday lab groups will not meet during lab this week, but they need to work on their projects and update the TA via email during the week (by Thurs 10am) about their project progress and turn in their assignment 4 during lecture on Tuesday Nov 12.