Introduction and Schedule to BIOLOGY 513

Terrestrial Ecology - Grasslands

Grasslands rarely get the attention that lakes or forests do. But are grassy areas really that boring? What is the difference between the grass in your lawn and the bunchgrass in a field? Why are grasslands of any size important? How does land use change community composition? In this course we will take a closer look at one or two grass communities near your home or school and address these questions and others.

You will complete five components in this course:

- 1.) <u>Placed Based Science</u>: Locate and describe one or two study areas for your class project that could be used for your own classroom activities. (This could be a state park.)
- 2.) <u>Botany</u>: Examine the main structures making up grass plants. Learn about grass biomes and the factors impacting them.
- 3) <u>Identification</u>: Identify 8 to 10 major plants in your study areas. Construct a dichotomous key to the plants <u>or</u> generate an identification guide.
- 4) Ethnobotanical Research: Identify 5 indigenous plants in your study site(s) and discuss the early uses.
- 5) <u>Scientific Inquiry</u>: Design and carry out a field investigation Compare ecological features in your study site(s).

This course will get you outside, investigating areas you find interesting and relevant to you and your students. It may be combined with BIOL 519, *Biology of Riparian Zones and Wetlands*, for observing similarities and differences between drier and wetter communities.

The only book you may need to purchase is a guide to the local flora for your area. Access to a thermometer to measure soil temperatures will be helpful, and you will need a rope or hula hoop for your final project.

Schedule

Introduce yourself in the *Bio* Topic.

Complete and submit Assignment 1 part two: Describe a local grassland area of interest. Submit by Friday. Respond to others.

Complete and submit Assignment 2 by Sunday: Botany and Grassland Biomes. Submit a response to Discussion Topic 2 by Wednesday of the week. Respond to others.

Complete and submit Assignment 3 by Sunday: Dichotomous Key to Plants of Study Area or Identification Guide. Submit a response to Discussion Topic 3 by Wednesday of this week. Respond to others.

Complete and submit Assignment 4 by Sunday: Ethnobotanical Research - Indigenous Plants and Native Uses. Submit a response to Discussion Topic 4 by Wednesday of this week. Respond to others.

Begin Assignment 5: <u>The Field Investigation</u> - "Comparing Ecological Features in your Study Site(s)." Submit a response to Discussion Topic 5 by Wednesday of this week. Respond to others.

Submit Assignment 5, <u>The Field Investigation</u> by Sunday, July 26. Discussion submissions are not required during this last week.

Assignments:

Details for all assignments are in the Weekly Assignments link on the Home Page. <u>Please submit all weekly assignments to me using the **D2L DROPBOX** by Sunday of each week. You should expect to see a grade and comment for your completed assignment no later then Tuesday of the following week. Assignments can be completed in a word doc. or .html.</u>

Expectations for Weekly Discussions:

Each week you will respond to a discussion topic. I will post the topic under the "Discussions area. Plan to post your discussion by Wednesday and then respond to your classmates' comments toward the end of the week. Follow up responses are comments made responding to postings made by others. Do NOT post all of your responses in one day. We are attempting to build a learning community that requires participation and interaction from everyone. Furthermore, remember that part of your grade is determined by providing substantive responses to your fellow learners. If you wait until the last minute to post, your colleagues are left hanging. You can expect the instructor to read all postings.

Grading

Assignment 1 (Bio 5pts. + A description of local area 25 pts.)

Assignment 2 (Botany and Biomes 50 pts.)

Assignment 3 (Dichotomous key or I.D. Guide 50 pts.)

Assignment 4 (Ethnobotanical Research 25 pts.)

Assignment 5 (Field Investigation 50 pts.)

Participation/Discussion (10 points each week... 50 pts. total)

255 Total Points

I will keep track of the number and quality of your submissions. Pretend you're in a class, talking with your colleagues. Ask questions. Bring up new points.

You will be divided into discussion groups. You are required to submit only to your own group, but

2/1/2016 biology513_intro

discussions will be open to everyone for reading and commenting. Feel free to bring ideas back to your own discussion group from another group.

Substantive Comments

Part of establishing a learning community is opening and facilitating multiple channels for the communication of ideas. The discussion forum provides a wonderful medium for ideas to be discussed. The more you and your classmates participate, the richer the class will be. A substantive comment is a comment that contains an idea relevant to the topic and facilitates others to express their relevant ideas.

Communications

Post all questions in the discussion area unless it is a private message intended only for the instructor or another learner. For private messages use the "Course Email" function. Post your initial posting using Compose a Message, then use the reply feature to participate in discussions so there is a "threaded" conversation. Be sure to set the arrow to the left of a posting to down so you see the entire thread. When replying to a message, type in a new subject that describes your response. Last, but not least, please preview and edit before posting. After clicking "Post" you will be taken back to the previous screen where you will click "Update listing."

Civility

All students are expected to exercise self-discipline and respect for the rights of others at all times. Flaming (Posting personal attacks) and other disruptions that interfere with the business of the classroom or with an individual's ability to learn will not be tolerated. Remember treat others as you wish to be treated. Also, remember that smart people speak about ideas not other people—this includes administrators and teachers you have worked with.