ASSIGNMENT 4 OPEN INQUIRY BY GRAD STUDENTS

Learning Goal ***(Graded Learning Activities)***	**Points**	
	Undergrad WFSC422	**Grad WFSC632**
Inquire- open *(grads only: 1 open inquiry individual project @ 100 pts)* *Activity:* practice observation & critical thinking skills via one open-inquiry project *Assessment tool:* manuscript or poster (grad) (elearning assignment A4)	n/a	100
% TOTAL POSSIBLE	0%	25%

Learning Goal

Objective 3. Inquire about the evidence needed to test scientific hypotheses about animal behavior

Learning Activity

In open inquiry, you come up with the questions and plan how to answer those questions. In consultation with the instructor, as a graduate student, you will design and complete an open-inquiry project that meets your personal learning goals for the subject matter. In other words, the "sideboards" are set for you and you decide what goes inside.

- A semester plan must be submitted and approved (this is to protect you from allegations of plagiarism)
- include at least four elements of scientific inquiry, as illustrated in the guided inquiry:
  - observation (may be empirical or synthesis of peer reviewed literature)
  - research question (this should be testable using the data collected; relate to keyword concepts in course)
  - data collection/measurement (results; include enough about procedures to allow replication)
  - synthesis of results and literature in an answer to the research question
- in a format for public report of results (may be a manuscript for a peer reviewed journal, an on-line report series, a poster presentation at a professional meeting).

Examples of options that are "outside" the sideboards of this activity include: (1) submitting a paper written for another class, (2) purchasing or copying a paper written by someone else, (3) a paper that does not show you have personally learned how to use the keyword concepts in the course, i.e. applying the scientific perspective on ethology.

STEP 1. Use the elearning Discussion Tool to brainstorm about potential topics & to dialogue about refining your ideas.

STEP 2. Prepare and upload to A4 a draft semester plan for comment and approval by instructor (see preferred template at end of this document). This will be returned to you in the assignment on-line dropbox.

STEP 3. Implement your plan, using elearning email to dialogue with peers and your instructor as needed to get past sticky points of the process.

STEP 4. The project should be submitted using the elearning Assignment Tool A4 Open Inquiry.

TIPS: The following are examples of scenarios illustrating the flexibility of doing an open-inquiry project:

- *Kim wants to get experience teaching about concepts of natural selection, and decides to do an open inquiry on the chat process. Kim writes up a plan to analyze archived chat logs to observe what is confusing to students about natural selection, and plans to write up a draft manuscript suitable for publication in "American Biology Teacher".*

- *Pat is doing a thesis on marmoset behavior and wants to focus on the peer reviewed literature. Pat's plan is to research the available literature using Web of Science, prepare an annotated bibliography, then write it up in the format for the introductory chapter for a thesis.*

- *Les has collected field data and wants to take the first step of analyzing and writing it up. Les plans to use this data for the first draft of a thesis chapter. The chapter will likely be revised several times before it is submitted to the graduate advisory committee for approval.*

- *Lee wants some hands-on experience observing animals, so proposes to participate in an ongoing project at Fossil Rim and prepare a powerpoint presentation suitable for delivery at a professional meeting such as AZA.*
- *Chris wants to go into more depth on the red-deer project, and proposes to process the videos and prepare a web-based ethogram. This will be published online as part of the Report Series of the Biodiversity Stewardship Lab.*

Suggested Template for Semester Plan

GENERAL INQUIRY TOPIC:
TARGET AUDIENCE AND PRODUCT:
SPECIFIC OBJECTIVES:
INQUIRY QUESTION(S):
APPROACH FOR COMPILING & INTEPRETTING EVIDENCE:
KEYWORD CONCEPT(S) FROM THIS COURSE:
TIMELINE:

When? Date	What? How?
Week 1	Understand assignment by reading links on Obj. 3. Inquiry. Dialogue in class, online chat or by email to clarify expectations.
Week 2	**MILESTONE:** use elearning discussion tool to list 2-4 ideas about potential topics
Week 3	**MILESTONE:** dialogue with instructor & peers to refine and choose a topic
Week 4	**MILESTONE:** submit this semester plan on elearning assignment A4
Week 5	
Week 6	
Week 7	
Week 8	**MILESTONE: Midterm product(s)**
Week 9	
Week 10	
Week 11	
Week 12	**MILESTONE:** draft write up
Week 13	
Week 14	**MILESTONE:** submit final product on assignment A4