

Seminars on Science

In the Field with Spiders Assessment

ASSESSMENT COMPONENT: ASSIGNMENTS

Course Assignments introduce processes, tools and technologies that scientists use to ask and answer questions. Assignments engage learners in scientific practices and expose them to scientific processes.

Overall Objective: To build content knowledge.

In the Field with Spiders – Week 2

Spider Observation

Objective	Exceeds course expectations	Meets course expectations	Approaches course expectations	Does not meet course expectations
To observe and describe spiders and evidence of spiders in the field	Observed and described spiders and evidence of spiders in detail from two or more days of fieldwork.	Observed and described spiders and evidence of spiders from two or more days of fieldwork. OR Observed and described spiders and evidence of spiders in detail from one day of fieldwork.	Observed and described spiders and evidence of spiders but lacked detail. OR Observed and described spiders and evidence of spiders from one day of fieldwork.	Did not observe and describe spiders.
To examine the properties of spider webs	Examined properties of spider webs in-depth.	Examined properties of spider webs.	Examined spider webs but lacked detail, was incomplete, or inaccurate.	Did not examine spider webs.
To reflect on the use of field journals to conduct scientific observation	Reflected on the use of field journals to conduct scientific observations in a way that demonstrated mastery of the content.	Reflected on the use of field journals to conduct scientific observations in a way that demonstrated understanding of the content.	Reflected on the use of field journals in a way that did not demonstrate understanding.	Did not reflect on the use of field journals.
To communicate scientific ideas	Description communicated ideas effectively using appropriate course-related language.	Description generally communicated ideas using appropriate course-related language.	Description generally communicated ideas but did not use course-related language. OR Description contained significant errors.	Did not communicate scientific ideas.

In the Field with Spiders - Week 4
Collecting and Identifying Spiders, Part 1

Objective	Exceeds course expectations	Meets course expectations	Approaches course expectations	Does not meet course expectations
To collect spider specimens using methods described in the course	Collected two or three spider specimens and described the method and location of the capture in detail.	Collected two or three spiders and described the method and location of the capture.	Collected two or three spiders but description of the capture was incomplete. OR Collected one spider and described the method and location of the capture.	Did not collect spiders.
To observe and describe features of collected specimens	Described features of collected specimens in detail and illustrated specimens using drawings and/or photographs.	Described collected specimens and illustrated specimens using drawings and/or photographs.	Described specimens but description lacked details or did not include drawings and/or photographs.	Did not describe specimens.
To describe spider collection methods and tools	Described spider collection methods and tools in detail and gave in-depth reasons for selecting these particular methods and tools.	Described spider collection methods and tools and gave reasons for selecting these methods and tools.	Described collection methods but description lacked details or was inaccurate or incomplete.	Did not describe methods.
To communicate scientific ideas	Description communicated ideas effectively using appropriate, course-related language.	Description generally communicated ideas using appropriate, course-related language.	Description generally communicated ideas but did not use course-related language. OR Description contained significant errors.	Did not communicate scientific ideas.
To cite reference sources	Cited all reference sources in an organized manner.	Cited reference sources in an organized manner with minor errors.	Some reference sources omitted or poorly organized.	Did not cite reference sources.

**In the Field with Spiders - Week 5
Collecting and Identifying Spiders, Part 2**

Objective	Exceeds course expectations	Meets course expectations	Approaches course expectations	Does not meet course expectations
To identify spider specimens to the lowest possible taxonomic level	Correctly identified three spider specimens to the Family level or lower.	Correctly identified two spider specimens to the Family level or lower.	Attempted to identify spider specimens.	Did not identify spider specimens.
To examine the thinking process in the identification of spider specimens	Examined the thinking process behind the identification of specimens in detail.	Examined the thinking process behind the identification of specimens.	Examined the thinking process but examination lacked detail or was incomplete.	Did not examine thinking process.
To reflect on challenges and questions that arose in the identification process	Reflected on challenges and questions in the identification process and posed possible solutions for these challenges.	Reflected on challenges and questions in the identification process.	Reflected on challenges and questions but reflections lacked detail or were incomplete.	Did not reflect on challenges and questions.
To communicate scientific ideas	Description communicated ideas effectively using appropriate course-related language.	Description generally communicated ideas using appropriate course-related language.	Description generally communicated ideas but did not use course-related language. OR Description contained significant errors.	Did not communicate scientific ideas.
To cite reference sources	Cited all reference sources in an organized manner.	Cited reference sources in an organized manner, with minor errors.	Some reference sources omitted or poorly organized.	Did not cite reference sources.

OVERALL ASSESSMENT: ASSIGNMENTS (COURSE WEIGHT: 30%)

ASSESSMENT COMPONENT: DISCUSSIONS

A large part of learning in our online courses occurs through discussion (text-based, asynchronous message exchanges). You are expected to be in frequent contact with your instructional team and other learners in the course's Discussion areas.

While this can be different from face-to-face communication, the same characteristics make classroom and online discussions meaningful. Both consist of two-way exchanges between teachers and learners: a back-and-forth that engages and deepens the understanding of all participants.

Each Discussion is graded two weeks after it begins. Weekly grades are based on how well learners reflect on content, engage in discussion with faculty and other students, and extend the online conversation (see the first two rows in the rubric). These grades will appear in the gradebook and will be combined with grades for the completion of Discussion assignments (see the third row in the rubric) to determine an Overall Assessment for Discussions.

Overall Objective: To construct content knowledge and community.

Objective	Exceeds course expectations	Meets course expectations	Approaches course expectations	Does not meet course expectations
To support reflections on content (Discussion Grade Weight: 45%)	Reflected on the Discussion question using course materials while drawing on other resources and asking additional questions.	Reflected on the Discussion question using course materials.	Did not adequately reflect on the discussion question or did not relate post to course materials.	Did not post, or posted without addressing the Discussion question.
To engage in the online learning community and extend the online conversation (Discussion Grade Weight: 35%)	Posted many substantive and timely responses to other learners and course faculty.	Often responded in a substantive and timely manner to other learners and course faculty.	Occasionally responded substantively to other learners and course faculty, or failed to post in a timely manner.	Posted few or no substantive responses.
To complete the Discussions (Discussion Grade Weight: 20%)	Completed all of the Discussions.	Completed almost all of the Discussions.	Completed more than half of the Discussions.	Completed few or no Discussions.

OVERALL ASSESSMENT: DISCUSSIONS (COURSE WEIGHT: 40%)

ASSESSMENT COMPONENT: FINAL PROJECT

You have two options for the *Final Project*.

- *Application in the Classroom*: an instructional unit based on a course topic that you might be interested in using in your own classroom or environment. How could you use questions related to this course to support research and inquiry exploration in an educational setting?
- *Application in the Field*: a research proposal that relates to a course topic you find particularly interesting. What question would you pursue if you could? How would you plan to answer that question?

Overall Objective: To build and demonstrate understanding of course content.

Objective	Exceeds course expectations	Meets course expectations	Approaches course expectations	Does not meet course expectations
To demonstrate content knowledge	Project demonstrated mastery of course content by applying appropriate scientific concepts.	Project demonstrated understanding of course content by applying appropriate scientific concepts.	Project demonstrated a limited understanding of course content by applying appropriate scientific concepts.	Project failed to demonstrate an understanding of course content.
To support scientific inquiry	Project clearly supported scientific inquiry, either by raising and investigating important questions in a manner consistent with the way scientists study the natural world, or through the clear design of classroom materials that provide students with opportunities to ask important questions and to gather, organize, analyze, and evaluate relevant information.	Project supported scientific inquiry, either by raising and investigating questions or by designing classroom materials that may provide students with opportunities to ask important questions and to gather, organize, analyze, and evaluate relevant information.	Project sought to support scientific inquiry, either by raising important questions or by designing classroom materials that might enable student research projects or practice to emerge.	Project did not support scientific inquiry.
To integrate and organize content	Incorporated all of the required elements, as well as a clearly articulated introduction and conclusion in an organized sequence that demonstrates the goals of the project.	Incorporated all of the required elements, as well as a clearly articulated introduction and conclusion in an organized sequence that demonstrated the goals of the project. Some elements lacked depth and/or clarity.	Incorporated most but not all of the required elements, or lacked an organized sequence that demonstrated the goals of the project.	Did not incorporate the required elements.
To use resources (essays, books, videos, websites, etc.)	Critically analyzed all resources. Incorporated personal ideas, course based materials, and additional resources.	Incorporated personal ideas, course based materials, and additional resources.	Drew upon some course-related resources.	Did not use resources effectively in the project.
To organize time schedules	Completed all of the milestones and the final project by the date each was due.	Completed one milestone by the due date; submitted one after the due date. Completed the final course project by the due date.	Both milestones completed, but one or both submitted after the due date. Completed the final project after the due date. OR Did not complete the milestones. Completed the final project by the due date.	Did not complete the project milestones. Completed the final project after the due date.

WEEK 3 FINAL PROJECT SUBMISSION (COMPLETE OR INCOMPLETE)

WEEK 5 FINAL PROJECT SUBMISSION (COMPLETE OR INCOMPLETE)

OVERALL ASSESSMENT: FINAL PROJECT (COURSE WEIGHT: 30%)