

SEMINARS ON SCIENCE

Assessment

ASSESSMENT COMPONENT: ASSIGNMENTS

Course Assignments introduce processes, tools and technologies that scientists use to ask questions. Using course activities -- the essays, streaming video files, and online interaction through discussion -- students read, explore, post and respond. Based on these activities, our associated assignments work to engage learners in specific scientific practices.

Overall Objective: To build content knowledge through weekly Assignments.

Objective	Exceeds course expectations	Meets course expectations	Approaches course expectations	Does not meet course expectations
To strengthen conceptual knowledge	Submitted assignments always work to identify and incorporate the Science concept(s) and processes covered.	Submitted assignments frequently work to identify and incorporate the Science concept(s) covered.	Submitted assignments occasionally identify or use the Science concept(s) covered.	Submitted assignments do not work to identify or incorporate the Science concept(s) covered.
To foster incorporation of scientific inquiry	Assignments always identify and use the scientific processes introduced in the activities: to make observations, examine evidence, interpret and analyze data to draw conclusions and generate new questions.	Assignments frequently identify or use the scientific processes introduced in the activities: to make observations, examine evidence, interpret and analyze data to draw conclusions and generate new questions.	Assignments occasionally identify or use the scientific processes introduced in the activities: to make observations, examine evidence, interpret and analyze data to draw conclusions and generate new questions	Assignments do not identify or use the scientific processes introduced in the activities: to make observations, examine evidence, interpret and analyze data, to draw conclusions and generate new questions.
To identify tools and techniques	Assignments always identify or use the scientific tools presented, or work to describe processes that scientists might use to collect and analyze data.	Assignments often identify or use the scientific tools presented, or work to describe processes that scientists might use to collect and analyze data.	Assignments sometimes identify or use the scientific tools presented, or work to describe processes that scientists might use to collect and analyze data.	Assignments do not identify or use the scientific tools presented, or work to describe processes that scientists might use to collect and analyze data.
To broaden scientific language usage	Assignments always display and convey scientific information through the use of shared scientific language.	Assignments often display or convey scientific information through the use of shared scientific language.	Assignments sometimes display or convey scientific information through the use of shared scientific language.	Assignments do not display or convey scientific information through the use of shared scientific language
To organize time schedules	Completed all assignments in a timely manner	Completed all assignments	Completed some of the assignments	Did not complete any of the assignments

OVERALL ASSESSMENT: ASSIGNMENTS (COURSE WEIGHT: 30%)

ASSESSMENT COMPONENT: DISCUSSIONS

A large part of crucial course learning occurs through our Discussion — text-based, 'asynchronous' (not at the same time) message exchanges. Using the online Discussion areas, you will be in frequent contact with your course's Instructional team and your peers during this seminar.

Discussion in an online learning environment may appear to be different from communication in a face-to-face environment. Yet, as in exemplary live classroom conversations — initiations, questions, responses and follow-ups occur in great online classroom communication. Learning in an online "virtual" community is actually revealed partially through our building collection of threaded text messages in our course Discussion areas.

Overall Objective: To construct content knowledge and community through weekly Discussions.

Objective	Exceeds course expectations	Meets course expectations	Approaches course expectations	Does not meet course expectations
To support reflections on content	Always reflects on content through posts that reference course materials and assignments while bringing in additional resources and asking additional questions.	Often reflects and relates posted messages to course content, materials, resources and activities.	Occasionally reflects and relates posted messages to course content, materials, and activities.	Rarely posts, or posts without reflecting on course content, materials and activities.
To articulate growing understanding	All of the Discussion assignments completed.	Almost all of the Discussion assignments completed.	More than half of the Discussion assignments completed.	Few Discussion assignments completed.
To engage in the online learning community and extend the online conversation	Many substantive and timely responses to posted messages and responses from other learners and course faculty.	Often responds in a substantive and timely manner to posted messages and responses from other learners and course faculty.	Occasionally responds substantively to other posted messages.	Few substantive responses to other posted messages.

OVERALL ASSESSMENT: DISCUSSIONS (COURSE WEIGHT: 40%)

ASSESSMENT COMPONENT: FINAL PROJECT

You have two options for the Final Project. The first option is to create an 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? The second option is to create an Application in the Field related to a course topic you find particularly interesting. What question would you study further if you could? How would you plan to answer that question?

Overall Objective: To build understanding through the enactment of a final project.

Objective	Exceeds course expectations	Meets course expectations	Approaches course expectations	Does not meet course expectations
To demonstrate content knowledge	Project clearly applies, identifies, and uses appropriate course related scientific concepts.	Project applies, identifies, and uses appropriate course related scientific concepts.	Project sometimes applies, identifies or uses appropriate course related scientific concepts.	Project does not apply, identify or use appropriate course related scientific concepts.
To support scientific inquiry	Project clearly supports scientific inquiry either by raising and investigating important questions in a manner that is 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 gather, organize, analyze, and evaluate information related to these questions.	Project supports scientific inquiry either by raising and investigating questions or through the design of classroom materials that may provide students with opportunities to ask important questions and gather, organize, analyze, and evaluate information related to these questions.	Project seeks to support scientific inquiry either by raising important questions or through the design of classroom materials that might allow student research projects or practice to emerge.	Project does not support scientific inquiry by raising and investigating important questions in a manner that is 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 gather, organize, analyze, and evaluate information related to these questions.
To integrate and organize content	Incorporated all of the required elements as well as a clearly articulated introduction and conclusion.	Incorporated all of the required elements.	Incorporated most of the required elements in the project.	Did not incorporate the required elements in the project.
To organize time schedules	Completed all of the milestones and the project by all of the dates due.	Completed the milestones and the final course project.	Completed most of the milestones yet submitted the final project after the date due.	Did not complete the project milestones or submit the final project by the dates due.
To use resources	Critically analyzed all included resources. Went beyond the course-based resources to incorporate personal ideas, additional information and described or developed additional media to enhance the project.	Incorporated personal ideas, additional information and web resources or course based materials to enhance the project.	Used some course related resources in the project.	Did not use resources effectively in the project.

WEEK 3 FINAL PROJECT SUBMISSION (COMPLETE OR INCOMPLETE)

WEEK 5 FINAL PROJECT SUBMISSION (COMPLETE OR INCOMPLETE)

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