

Course Assessment - Part A: Your Plan

COMPLETE

#568

Please select your course and name from the drop-down menu. If your course or name are incorrect or missing, contact the Curriculum and Assessment Administrative Assistant, 541-506-6037 or swade@cgcc.edu.

ESR 172- Environmental Science: Chemical Perspectives- Jules Burton- Winter 2022

* **Part A: Your Plan DIRECTIONS 1.** Choose three of your course outcomes to assess and report on this term (these will also be used in your Student Course Evaluation survey): **Outcome #1**

Express graphically, orally or in writing form, basic elements of chemistry in the environment.

* **Outcome #2**

Utilize field and laboratory methods/technologies to measure and describe environmental factors.

* **Outcome #3**

Understand environmental chemistry and human effects upon it.

Have you completed an assessment for this course prior to this term?

Yes

If yes, are you assessing different outcomes?

Yes

Comments:

(No response)

2. To which degree(s) or certificate(s) does your course map? Degree, Certificate, & Program Outcomes

Not Sure

* **Method of Assessment 3. What methods will be used to assess individual student understanding of each of these outcomes? (Please be specific.) Outcome #1: Method to assess student understanding**

We learn the organization of the Periodic Table and how elements combine by writing balanced chemical reactions, and we discuss the names orally

* **Outcome #2: Method to assess student understanding**

We collect samples of lichen as biological indicator species during term, identify them using dichotomous keys and observe them and their chemistry in the environment

* **Outcome #3: Method to assess student understanding**

We study and discuss water pollution, air pollution and the human impact that affects them. Students make bead models of the chemicals and learn to write them as symbols and apply scientific laws to predict the outcomes of reactions.

*** 4. How will you know if you were successful in your efforts to teach this outcome? Outcome #1:**

If students can successfully balance reactions and use the law of Conservation of Matter to predict the outcomes at least 80% of the time.

*** Outcome #2: How will you know if you were successful in your efforts to teach this outcome?**

Students will understand the inherent biodiversity of lichen, have time to use observation, use dichotomous keys and to identify samples they have gathered and are correct 70% of the time.

*** Outcome #3: How will you know if you were successful in your efforts to teach this outcome?**

Students will understand the consequences of air pollution in the atmosphere and successfully write balanced chemical reactions and predict outcomes 70% of the time

5. Instructor Questions: Create two course specific questions to be included on the Student Course Evaluation. Question #1

How does a balanced chemical reaction support the Law of Conservation of Matter

Question #2

How is lichen an example of biodiversity and an indicator species

Do you require the names of students who complete the course evaluation survey? (Please note: names will be sent to instructors the Thursday before term ends)

NO

Reminder, when completing Part B, instructors will be asked the following questions: Describe anything you did to assist the institutional effort to support students in improving achievement of the specified criteria for the following Institutional Learning Outcomes (ILO): 1. ILO#1 - Communication - "Content Development" and/or "Control of Syntax and Mechanics" 2. ILO#2 - Critical Thinking/Problem Solving - "Student Position" and/or "Evaluate Potential Solutions" 3. ILO#4 - Cultural Awareness - "Curiosity" (Encouraging our students to "Ask deeper questions about other cultures and seek out answers to these questions") 4. ILO#5 - Community and Environmental Responsibility - "Understanding Global Systems" and/or "Applying Knowledge to Contemporary Global Contexts" 5. ILO#3 - Quantitative Literacy - "Application/Analysis" and/or "Assumptions"

(No response)