

Course Assessment– Part B: Your Results & Analysis

#292

Your Email *

Please select your course and name from the drop-down menu. If your course or name are incorrect or missing, please contact Instructional Services.

GS 109 – Physical Science (Meteorology) – 1092316 – Gretchen Gebhardt
– Winter 2018

Part B: Your Results

Directions

1. Report the outcome achievement data gathered via the assignments, tests, etc. you identified for each outcome (question 3) of your Part A. (Only include data for students who completed the course. Do not include students who withdrew or earned an incomplete) *

Outcome #1: Final Essay

90% 2
80% 8
70% 2
60% 6
less than 60% 1
Not attempted 1

Outcome #2: Weekly Weather Journal Evaluation in lab 9

90% 2
80% 6
70% 8
less than 70% 0
not attempted 4

Outcome #3: Final Project– Presentation

90% 9
80% 8
70% 3
less than 70% 0
not attempted 0

Outcome #1 *

Use an understanding of atmospheric processes to explain the practice of weather prediction.

% of students who successfully achieved the outcome (C or above) * 60%

Outcome #2 *

Make field and laboratory based observations and measurements of the atmosphere, weather, and climate, use scientific reasoning to interpret these observations and measurements, and compare the results with current models of meteorological processes identifying areas of congruence and discrepancy

% of students who successfully achieved the outcome (C or above) * 80%

Outcome #3 *

Use scientifically valid modes of inquiry, individually and collaboratively, to critically evaluate the hazards and risks posed by meteorological processes both to themselves and society as a whole, evaluate the efficacy of possible ethically robust responses to these risks, and effectively communicate the results of this analysis to their peers.

% of students who successfully achieved the outcome (C or above) * 100%

ANALYSIS

3. What contributed to student success and/or lack of success? *

Outcome # 1: Many students confused the exam question with a question on a lab – which, although similar was not asking for the same information. A statement was included in the final exam essay question specifying that this question was different, but many students did not fully read the question and left out the information the question was asking for. Points were lost due to this confusion.

Outcome #2: The summary of their weekly weather journal was in the last lab of the term, which can be rushed through by those students anxious to be finished (especially when the sun is shining!). Many students did not elaborate or explain in detail how they have improved over time (as the question asked). When looking back to the weekly journals students were required to keep, I had 3–5 students not complete entries each week and as the term progressed they were asked to build on each entry adding weather information we learned about the previous week. Many did not make these adjustments each week and lost points.

Outcome #3: This was a group presentation, so it was difficult to separate out for each student. In some groups each person discussed the hazards and in some groups one student was in charge of this content and the others discussed how storms formed and examples of storms.

4. Helping students to realistically self-assess and reflect on their understanding and progress encourages students to take responsibility for their own learning. Please compare your students' perception of their end-of-term understanding/mastery of the three outcomes (found in student evaluations) to your assessment (above) of student achievement of the three outcomes. *

Outcome #1:

Before the term almost the entire class rated their understanding at 'Poor' or 'Fair'.

After this switched to mostly 'Good' to 'Very Good'

Outcome #2:

Before the term almost the entire class rated their understanding at 'Poor' or 'Fair'.

After this switched to 'Good' to 'Excellent'

Outcome #3:

Before the term almost the entire class rated their understanding at 'Poor' or 'Fair'.

After this switched to mostly 'Good' to 'Very Good'

Answer to Q5:

Outcome #1: Students were much lower than I expected. I think this is due to many confusing the question with one asked on a previous lab and not fully addressing what was asked. This seems like a common problem I see in my classes. Students don't read instructions fully or questions fully.

Outcome #2: This one did not match my expectation. I think the results I got were lower than what the students reported because they did not elaborate in the question I used to evaluate this outcome.

Outcome #3: I am surprised at this outcome – we both match, however I was not able to assess them individually. I think this is an outcome I need to have a specific lab for and not a group project as the assignment.

5. Did student achievement of outcomes meet your expectations for successfully teaching to each outcome (question 4 from Part A) *

See previous answer – this box is too small

6. Based on your analysis in the questions above, what course adjustments are warranted (curricular, pedagogical, student instruction, etc.)? *

I have since re-written the weekly weather journal description to (hopefully) make the new content requirements obvious to students.

I would like to add a lab in which they are required to evaluate hurricanes (prediction, warnings, impact, recovery, etc.) and compare with other students. This would require some time to both develop the lab as well as re-arrange weekly content in the course.

I also need to update my quiz questions to reflect the change to an OER – many questions are from the book and therefore use different terminology.

Some student comments that I found very helpful and would like to address in future classes:

“...This class overall was very difficult for me because I am not as interested in subject as other classes. I am actually surprised that I learned as much as I did. Thank you...”

“...I had to learn to trust myself and follow a process of critical thinking instead of assuming I didn't know the answer...”

“...I understood this the most because I like seeing the correlation of facts and figures to the real world observations...”

“...I essentially did not understand anything about global warming before and now I really understand the videos I am watching online and in sociology class. I feel empowered to understand the situation we are in globally, so much so that I can talk about with friends, family and peers...”

“...The weekly weather observations were helpful because they put what we were learning into real life, and helped me to understand that I can see and use what I have learned throughout my normal days...”

“...At first, I did not understand this activity. However, after awhile I began to see it as something that gave me appreciation for the forecasting that is done for us and is readily available online. It didn't help as much because it was hard to get a turn to look at the weather station information so that I could fully learn or understand from mistakes...”

Answer to Q7

Time! I would also like to purchase some hand held barometers as well as a rain gauge students can check on their own. I am not sure the weather station is accurately recording precip or wind. We also conduct an experiment modeling global circulation patterns – an electronic turntable able to rotate at slow speeds would make this experiment work much, much better (we currently use stools and students rotate by hand). Unfortunately these are not readily available and would need to be built.

In response to one of my student comments, it sounds like it would help the class if the weather station data could be put online so students could access the information from any computer, instead of just one.

7. What resources would be required to implement your recommended course adjustments (materials, training, equipment, etc.)? What Budget implications result?

Time and a full time position :) See previous question for details – this box is too small.

8. Reflect on any adjustments you made from the last assessment of this course (if applicable) and their effectiveness in student achievement of outcomes. *

- I think adding the weekly weather journal and the use of the campus weather station to check their data was helpful.
- My students have been able to use and OER this term, although many still purchased the textbook.
- The college was also able to provide transportation for my students to get to the NWS office in Portland. My entire class this term was able to attend!
- I did not have a chance to re-organize the course to include in each week: “weather hazard/human impact/mitigation information.” (from last 109 assessment)

9. Describe how you have shared information about course outcomes with

Information is provided in the course syllabus

your students.

10. Please describe any changes/additions to instruction, curriculum or assessment that you made to support students in better achieving the CGCC Core Learning

Outcomes:

CLO #1: Communication. The areas that faculty are focusing on are: "Source and Evidence" and "Organization and Presentation" and

CLO #2: Critical Thinking/Problem Solving. The areas that faculty are focusing on are: "Student's Position" (Critical Thinking) and "Evaluate Potential Solutions" (Problem Solving).

CLO#1 - my students were required to give presentations in class, however I have found many students need help with researching information.

CLO#2 - I have not had the chance to add my hurricane idea mentioned above, but I hope to add this in next time!

Created 5 May 2018 11:58:50 AM	
PUBLIC	