

Q130.

Program Outcomes

Program: Physics

Q5. On which outcomes will you be reporting? (select all that apply) Please enter separate measures of the same outcome occurring in the same academic year as two separate submissions.

- Outcome 1: Graduates will be able to demonstrate an understanding of the essence of physics laws and concepts without mathematics.
- Outcome 2: Graduates will be able to apply broad concepts in physics to specific problems in order to come to numerical, analytical, and approximate solutions.
- Outcome 3: Graduates will be able to write a report, discuss the content, and describe the conclusions to a variety of audiences.
- Outcome 4: Graduates will be able to identify and implement appropriate computational tools (software, coding, programming, and/or scripting) to solve a variety of problems both in the context of the classroom and in research projects.
- Outcome 5: Graduates will know how to identify relevant existing works in literature that inform or support their own scholarly work and provide accurate citations and recognition where appropriate when presenting their own work.
- Outcome 6: Graduates will be able to conduct effective research which will include computer use, problem solving, hypothesis testing, and analysis of uncertainties.
- Outcome 7:
- Outcome 8:
- Outcome 9:
- Outcome 10:
- Outcome 11:
- Outcome 12:

Q6. Outcome 1: Graduates will be able to demonstrate an understanding of the essence of physics laws and concepts without mathematics.

Q7. End of academic year:

2022 ▼

Q8. Please upload any related files (pdf, doc, xls, csv, zip). Multiple files can be condensed and uploaded in a zip file [📁](#)

[PHYS-361-02 F21-Analytical Mechanics Assessment-grades.zip](#)

115.4KB
application/zip

Q9. Outcome 1:

Assessment tool <input type="text"/>	Force Concept Inventory in Analytical Mechanics (Phys362) and Conceptual Survey of Electricity and Magnetism in Electricity and Magnetism (Phys342)
Measure <input type="text"/>	Percentage correct
Target <input type="text"/>	75% on FCI and 60% on CSEM
Results <input type="text"/>	92.5% on FCI and 69.8% on CSEM

Q10. Was the target met?

Yes No

Q147. Improvements and changes made since the last assessment:

This is the first assessment.

Q11. Results Narrative

F21 Analytical FCI 92.5% Here we are meeting the goal S22 E&M CSEM 69.8% Here we are meeting the goal but can we do better here? FYI In the intro physics labs the scores were: F21 FCI was 56.9%, F21 CSEM was 44.1%, S22 was 36.4%.

Q12. Review of Results

The E&M result is above the goal for this metric and shows improvement relative to those in the introductory course but there is certainly room for improvement. Departmental discussion about this identified that the tests and homework sets in this class are very directed at problem solving rather than on simple articulation of conceptual Electricity & Magnetism.

Q13. Improvements Planned

When this course is next taught the coverage will remain the same but problems that ask student to focus on the essence rather than detailed problem solving will be included in the class as part of homework.



Q130.

Program Outcomes

Program: Sociology

Q5. On which outcomes will you be reporting? (select all that apply) Please enter separate measures of the same outcome occurring in the same academic year as two separate submissions.

- Outcome 1: Students will explain and compare sociological theories and use theory to explain human behavior.
- Outcome 2: Students will describe and interpret the social and cultural processes that inform social interaction.
- Outcome 3: Students will understand and apply data collection and analysis techniques used by sociologists and critically evaluate sociological research.
- Outcome 4: Students will describe and interpret the forms and sources of social stratification, inequality, and difference that exists in societies.
- Outcome 5: Students will integrate their sociological imagination with their post-graduation plans.
- Outcome 6:
- Outcome 7:
- Outcome 8:
- Outcome 9:
- Outcome 10:
- Outcome 11:
- Outcome 12:

Q22. Outcome 3: Students will understand and apply data collection and analysis techniques used by sociologists and critically evaluate sociological research.

Q23. Year:

2021 ▼

Q24. Please upload any related files. Multiple files can be condensed and uploaded in a zip file

Q25. Outcome 3:

Assessment tool

Either the GRE-Subject test or re-administer shared final from SOC-101 Intro in the 495-Capstone course.

Measure

Students will understand and apply data collection and analysis techniques used by sociologists and critically evaluate sociological research

Target

80% of graduating students will have an average of 75% or more on those 10 questions or be in the 60th percentile or higher on the Majors Field exam

Results

The mean percent correct in the Capstone class for Methods and Stats was 44%.

Q26. Was the target met?

Yes No

Q149. Improvements and changes made by the department since the last assessment of this outcome:

Our Research Methods class has been revised to include a more rigorous paper and poster presentation assignment. However, due to Covid, Methods was taught online and the research poster assignment had to be scaled down.

Q27. Results Narrative

We will try the improved research paper and poster presentation in Spring 2022 and hope to be in person in hopes of higher scores on the ETS major field exam.

Q28. Review of Results

As a department, we discussed the results. We were conducted a pre- and post-test with our methods students and found that, while their scores did not increase, their confidence in their ability to do research did. (ASA grant)

Q29. Improvements Planned

Some plans: 1. Teach Research Methods in a traditional face-to-face modality 2. Encourage students to present their research posters at conferences including the Hope College Celebration of Undergraduate Research 3. Encourage faculty to include students in their own research so that students get practice applying Methods concepts.

Q30. Outcome 4: Students will describe and interpret the forms and sources of social stratification, inequality, and difference that exists in societies.

Q31. Year:

2021

Q32. Please upload any related files. Multiple files can be condensed and uploaded in a zip file

Q33. Outcome 4:

Assessment tool

GRE-Major Field test

Measure

Students will describe and interpret the forms and sources of social stratification, inequality, and difference that exists in societies.

Target

80% of graduating students will have an average of 75% or more on those 10 questions or be in the 60th percentile or higher on the Majors Field exam

Results

The mean percent correct for the class was 63% for Race and Ethnicity and 66% for Gender.

Q34. Was the target met?

Yes No



Q150. Improvements and changes made by the department since the last assessment of this outcome:

There have only minimal changes since the department has been in transition with new faculty hires. However we have hired faculty with expertise in race and gender.

Q35. Results Narrative

There were 15 students in the Capstone class that took the GRE Major Field exam. The area with the highest mean percent correct was Social Psychology. This topic is taught in almost every class -- and it has been the highest for the last 4 years. Stratification, both race and gender, are the second highest area and are always over 50% correct.

Q36. Review of Results

We reviewed these results at our August department retreat.

Q37. Improvements Planned

1. To include more components on race in other Sociology courses. 2. To offer informal discussions with CDI for student conversation around race. 3. To offer a book club/reading group with a book on the topic of race. We expect to see an improvement in the next GRE major field test.