

Assessment Plan Year	Program level Learning Outcomes	Course	Assessment Tool	Desired Performance Benchmark	Timeline	Individual(s) Responsible	Use of Results/ Action Items and Dissemination
2018/19	PLO 1 Demonstrate knowledge of factual material essential to their discipline in science.	PHY130, CLO A: Apply the laws of classical mechanics in areas of linear kinematics and dynamics, force and work/energy concepts, conservation of linear and angular momentum, rotational kinematics and dynamics.	Force Concept Inventory (FCI): pre-instruction and and post-instruction survey.	Scores equal or above national average; gain and effect size at medium or high levels.	All PHY130 sections will be assessed during Fall 2018 and Spring 2019. The assessment with FCI will probably continue until Fall 2019.	Glenda Denicolo	Results will be disseminated to faculty and discussed in follow-up college-wide meeting. Action plans will then be determined based on the results of the assessments
2019/20	PLO#2: Apply the scientific process, including designing and conducting experiments and testing hypotheses; PLO#4: Prepare written reports in a standard scientific format; PLO#5: Analyze and interpret quantitative scientific data;	PHY132, CLO B: Use various laboratory instruments including computer-based data acquisition. PHY132, CLO C: Interpret and manipulate graphical data including fits to linear and polynomial functions. PHY132, CLO D: Apply critical thinking skills in analyzing practical problems; take necessary data and formulate solutions. PHY132, CLO E: Present the results of experiments as coherent reports including error analysis.	Laboratory report with standardized rubric.	2/3 of our students will achieve a 70% or better on the rubric.	All PHY132 sections will be assessed by Spring 2020.	Anindita Ghosh	Results will be disseminated to faculty and discussed in follow-up college-wide meeting. Action plans will then be determined based on the results of the assessments
2020/21	PLO#6: Perform laboratory skills specific to their discipline in science;	PHY132, CLO D: Apply critical thinking skills in analyzing practical problems; take necessary data and formulate solutions. PHY132, CLO B: Use various laboratory instruments including computer-based data acquisition.	A practical final laboratory exam, or laboratory reports.	2/3 of our students will achieve a 70% or better on the rubric.	PHY132 will be assessed Fall 2020 and Spring 2021.	Anindita Ghosh	Results will be disseminated to faculty and discussed in follow-up college-wide meeting. Action plans will then be determined based on the results of the assessments
2021/22	PLO#7: Evaluate and discuss contemporary science-related social and ethical issues, both locally and globally, using scientific knowledge and reasoning.	No CLO fits this PLO at the moment. A series of e-mail has been exchanged between us and Dean Tacke-Cushing regarding PLOs 7 and 3 for the discipline of physics. It was decided that it is more imperative to assess and improve all that is currently offered, rather than superficially extending coverage to satisfy a list of requirements -which we should have created ourselves in the first place. The list of PLOs cited here is ideal and noble in its goals, but unrealistic right now. Dean Tacke-Cushing understands that the self-assessment process leads to reevaluation of the PLOs per discipline. As assessment is always evolving, please keep us involved in any further discussions.	We propose to continue using the Force Concept Inventory (FCI) with PHY130 and extend it to PHY101. We also propose to add another nationally recognized assessment tool for electromagnetism (CSEM, BEMA or EMCA).				
2022/23	PLO#3: Read, understand, and critically review scientific papers;		We propose to continue using the Force Concept Inventory (FCI) with PHY130 and extend it to PHY101. We also propose to add another nationally recognized assessment tool for electromagnetism (CSEM, BEMA or EMCA).				