Clearly Stated Programmatic Student Learning Outcomes (SLOs)

	Exemplary 3	Acceptable 2	Developing 1	Score or Holistic Evaluation
Clarity and specificity	All SLOs are stated with clarity and specificity including precise verbs and rich descriptions of the knowledge, skills and value domains expected of students upon completing the program.	SLOs generally contain precise verbs, rich description of the knowledge, skills and value domains expected of students.	SLOs are inconsistently defined for the program, descriptions of the knowledge, skill and value domains are present but lack consistent precision.	3
Student-Centered	All SLOs are stated in student-centered terms (i.e. what a student should know, think, or do).	Most SLOs are stated in student-centered terms.	Some SLO's are stated in student-centered terms.	3
Expectation Level	SLO's exceed basic expectations established by the University and other necessary approving organizations required of the submitting unit.	SLO's meet the basic expectations established by the University and other necessary approving organizations required of the submitting unit.	SLOs meet only a portion of the expectations established by the University or other necessary approving organizations required of the submitting unit.	3

Recommendations:

Programmatic Curricular Map

	Exemplary 3	Acceptable 2	Developing 1	Score or Holistic Evaluation
Content Alignment	All SLOs are mapped to common classes or learning activities expected of all students completing the program.	Most SLOs are mapped to common classes or learning activities expected of all students completing the program.	Common classes or learning activities are identified for all students completing the program but most SLO's are not clearly mapped to classes or activities.	3
Student Learning Development of SLOs (Learning Benchmarks)	Curricular Map clearly identifies the progression of student learning relative to all SLOs at specific points in the curriculum	Curricular Map identifies levels of expected learning relative to most SLOs at specific points in the curriculum.	Curricular Map identifies expected levels of learning for some SLOs at specific points in the curriculum.	3
Student Engagement	Classes and/or activities engage students in the work outlined in the SLOs.	Classes and/or activities engage students in the work outlined by most of the SLOs	Classes and/or activities do not consistently engage students in the work outlined by most of the SLOs.	3

Recommendations:

Alignment with IPFW Baccalaureate Framework				
	Exemplary **3**	**Acceptable** **2**	**Developing** **1**	**Score or Holistic Evaluation**
IPFW Baccalaureate Framework Alignment	Specific, clearly defined, student-centered Program-Level SLO's are aligned to all foundation areas of the IPFW Baccalaureate Framework.	Generally defined student-centered Program-Level SLO's are aligned to all foundation areas of the IPFW Baccalaureate Framework.	Program-Level SLO's are aligned to some foundation areas of the IPFW Baccalaureate Framework.	3

Recommendations:

Assessment Plan – Part 1

	Exemplary 3	Acceptable 2	Developing 1	Score or Holistic Evaluation
Relationship between assessments and SLOs	Detail is provided regarding SLO-to-measure match. Specific items included on the assessment are linked to SLOs. The match is affirmed by faculty subject experts.	Description of how SLOs relate to assessment is general but sufficient to show alignment.	Description of how SLOs relate to assessment is incomplete or too general to provide sufficient information for use in determining progress toward SLO.	3
Types of Measures	All SLOs are assessed using at least two measures including at least one direct measure	Most SLOs are assessed using at least one direct measure.	Most SLOs are either assessed using only indirect measures or are not assessed.	3

Recommendations:

3 types of measures were used:
- a standardized test in a pre-post format
- the products of the computational and experimental projects that are part of every 300 level or higher physics course
- use the presentations, both poster and formal, in the senior thesis class and at least one of the upper level laboratories

*Exit interviews were inclued as a measure, but "these did not happen with the Fall 2019/Spring 2020 graduating class" (p.6).

Assessment Plan – Part 2

Established Results	Statements of desired results (data targets) provide useful comparisons and detailed timelines for completion.	Statements of desired results provide a basic data target and a general timeline for completion.	Statements of desired results are missing or unrealistic for completion.	2
Data Collection and Design Integrity	The data collection process is sound, clearly explained, and appropriately specific to be actionable.	Enough information is provided to understand the data collection process with limited methodological concerns.	Limited information is provided about the data collection process or includes sufficient flaws to nullify any conclusions drawn from the data	2
Evidence of Reliability of Measures	Methods used to ensure reliability of findings are clearly explained and consistently support drawing meaningful conclusions.	Methods used to ensure reliability of findings are stated and generally support drawing meaningful conclusions.	Methods to ensure reliability of findings are insufficient for drawing meaningful conclusions.	2

Recommendations:

Information about metrics of each assessment is provided (pp.8-9), but limited methodological concerns remain. For example, the report states that "In PHYS 346 we use observations of how students approach challenges in laboratory: a) how much they look for new solutions, b) how much they rise to challenges, and c) how much assistance they need" (p. 8). However, there is no specific rubric to measure "how much" students produce expected outcomes. We are not sure how student's work was determined as " excellent," "good," "acceptable," and "poor" (p.11). We recommend providing specific rubrics to use stduents' products and performances.

Providing an observation protocol or specific rubrics would be useful. Standardized Pre/Post testing for the introductory classes (PHYS 152 and 251) is used, and this is useful. However, no results from pre/post testing are presented in the report, and there is no interpretations about this measure.

Reporting Results

	Exemplary 3	Acceptable 2	Developing 1	Score or Holistic Evaluation
Presentation of Results	Results are clearly present and directly related to SLOs. Results consistently demonstrate student achievement relative to stated SLOs. Results are derived from generally accepted practices for student learning outcomes assessment.	Results are present and related to SLOs. Results generally demonstrate student achievement relative to stated SLOs. Results are derived from generally accepted practices for student learning outcomes assessment.	Results are provided but do not clearly relate to SLO's. Results inconsistently demonstrate student achievement relative to stated SLO's. Use of generally accepted practices for student learning outcomes assessment is unclear.	1
Historical Results	Past iterations of results are provided for most assessments to provide context for current results.	Past iterations of results are provided for the majority of assessments to provide context for current results.	Limited or no iterations of prior results are provided.	1
Interpretation of Results	Interpretations of results are reasonable given the SLOs, desired levels of student learning and methodology employed. Multiple faculty interpreted the results including an interpretation of how classes/activities might have affected the results.	Interpretations of results are reasonable given the SLO's, desired levels of student learning and methodology employed. Multiple faculty interpreted the results.	Interpretation of results does not adequately refer to stated SLO's or identify expectations for student learning relative to SLO's. The interpretation does not include multiple faculty.	1

Recommendations:

The report presents a summary of each assessment. It is unclear how the results are drawn from the assessments.

The report states that exit interviews "did not happen with the Fall 2019/Spring 2020 graduating class" (p. 6), but it presnts the partical results of exit interviews (pp.11-12). We wonder when the exit interviews were conducted if not in Fall 2019/Spring 2020.

Report Dissemination and Collaboration

	Exemplary 3	Acceptable 2	Developing 1	Score or Holistic Evaluation
Documents and results are shared with faculty	Information is routinely provided to all faculty with multiple opportunities for collaboration to build meaningful future plans.	Information is provided to all faculty through an effective mode and with sufficient detail to be meaningful.	Information is not distributed to all faculty or provides insufficient detail to be meaningful.	2
Documents and results are shared with other stakeholders	Information is routinely provided to stakeholders (beyond faculty) with multiple opportunities for collaboration to build meaningful future plans.	Information is shared with stakeholders (beyond faculty) through an effective mode and with sufficient detail to be meaningful.	Information is not distributed to stakeholders (beyond faculty) or provides insufficient detail to be meaningful.	N/A

Recommendations:

The department is in a state of continual revision. Information is provided (p. 10), but the report does not explain how information is not used "for collaboraiton to build meaningful future plans."

The report provides no information about stakeholdes.

Use of Results for Programmatic Change to Improve Student Learning, Achievement and Success – Part 1				
	Exemplary **3**	**Acceptable** **2**	**Developing** **1**	**Score or Holistic Evaluation**
Programmatic and Curricular Improvement	Evidence reported demonstrates a consistent pattern of an integrated assessment, pedagogy and curricular approach that assesses student performance relative to SLOs, uses assessment data to make curricular and/or pedagogical changes and re-assesses learning to determine how or the extent to which the change positively influenced student learning.	Evidence reported demonstrates assessment of student learning relative to SLO's and describes curricular and/or pedagogical changes planned or made as a result of assessment of student learning. Some evidence of an emergent pattern of assess/curricular or pedagogical change/ re-assess is demonstrated.	Assessment findings are reported but insufficient evidence of curricular or pedagogical changes are present and limited or no evidence of an emergent pattern of assess/curricular or pedagogical change/re-assess is demonstrated.	2

Recommendations:

We acknowldge "changes to address findings" (p.12) and conclusion (p.13). However, evidence is not clearly addressed "to determine how or the extent to which the change positively influenced student learning."

Use of Results for Programmatic Change to Improve Student Learning, Achievement and Success – Part 2				
	Exemplary **3**	**Acceptable** **2**	**Developing** **1**	**Score or Holistic Evaluation**
Improvement of Assessment Process (mechanics)	Past and current assessment process are critically evaluated, including acknowledgement of flaws, present and intended improvements to process are identified (when needed) and specific changes to the assessment process are detailed.	Past and current assessment process are critically evaluated, including acknowledgement of flaws, present and intended improvements to process are identified (when needed) and moderate changes to the assessment process, or general plans for improvement of assessment process are proposed.	Past and current assessment process are sporadically evaluated, including acknowledgement of flaws, but no evidence of improving upon past assessment or making plans to improve assessment in future iterations is proposed.	2

Recommendations:

We acknowldge changes for future assessments (p.13). We sugest that the department clearly state which results related to SLOs lead to necessary changes and how they would be used for future asessment plans.