

Student Learning Target

Grade: 10 th -12 th	Subject: AP Physics I	Interval of Instruction: Full Year
1. WHAT SHOULD STUDENTS KNOW AND BE ABLE TO DO? HOW WILL I MEASURE SUCCESS? <ul style="list-style-type: none">• What content will I prioritize?<ul style="list-style-type: none">○ What standards are most tied to success?○ What prior knowledge will they need to be successful?• What assessment will provide the best evidence of my students' mastery of the priority content at the end of the year?<ul style="list-style-type: none">○ Will this assessment method enable me to determine how students are progressing throughout the year?		
Priority Content: <p>The AP Physics I: Algebra-Based course focuses on the big ideas typically included in the first and second semester of an algebra-based, introductory college-level physics sequence and provide students with enduring understandings to support future advanced course work in the sciences. Through inquiry-based learning, students will develop critical thinking and reasoning skills, as defined by the AP Science Practices. The course requires that 25% of the instructional time will be spent in laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to demonstrate foundational physics principles and apply all seven science practices defined in the curriculum framework.</p>		
End-of-Year Assessment Method and Name: <p>All students enrolled in this course will take the AP Physics I Exam that includes 50 multiple-choice questions (single-select and multi-select) that represent the knowledge and science practices outlined in the AP Physics I learning objectives in the curriculum framework. Students will also have to respond to a set of free-response questions including three item types: experimental design, qualitative/quantitative translation, and short-answer.</p>		

2. WHAT DO STUDENTS KNOW AND WHAT ARE THEY ABLE TO DO NOW? <ul style="list-style-type: none">• What knowledge/skills are related to success with this year's priority content?• What data sources and background information are available?• What diagnostic assessment resources are available?• What can I conclude about students' mastery of prior knowledge and skills?• Based on the data, what can I conclude about students' readiness?
<p>To determine where my students' knowledge of science and because of the mathematical treatment of the basic principles of physics that is a prevalent part of this course, I analyzed historical data related to student achievement in science and mathematics.</p> <p>This course includes a significant focus on learning in a laboratory setting. Students have some experience in a laboratory setting. However, I measured their current level of knowledge and skills through a lab based assessment at the beginning of the course. This diagnostic assessment was scored with a 5 point Lab Report Rubric with 7 components (abstract, procedure, data, calculations, graphs, error analysis, and conclusion). I paired students based on similar achievement levels and they collaborated to complete the assessment.</p> <p>The following chart presents the data for each student.</p>

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2. WHAT DO STUDENTS KNOW AND WHAT ARE THEY ABLE TO DO NOW?

- What [knowledge/skills are related to success](#) with this year's [priority content](#)?
- What [data sources](#) and [background information](#) are available?
- What diagnostic assessment resources are available?
- What can I conclude about students' mastery of prior knowledge and skills?
- Based on the data, what can I conclude about students' readiness?

Student	ACT Math	Geometry Grade	Algebra II Grade	ACT Science	Chemistry	Lab Report Diagnostic Score (Average Score; components w/ score below 3)
1	20	B	Currently enrolled	25	A	2.43; 4 of 7
2	26	A	B	32	A	3.57; 0 of 7
3	27	A	A	23	B	2.86; 3 of 7
4	31	A	A	22	B	2.86; 3 of 7
5	24	A	B	21	B	2.43; 4 of 7
6	22	B	Currently enrolled	30	A	3.0; 3 of 7
7	23	B	A	22	B	2.43; 4 of 7
8	29	A	A	20	C	2.43; 4 of 7
9	21	C	Currently enrolled	26	A	2.43; 4 of 7
10	25	A	A	32	A	3.57; 0 of 7
11	26	A	B	28	B	3.0; 3 of 7
12	30	B	A	22	A	2.86; 3 of 7
13	25	A	Currently enrolled	21	A	2.43; 4 of 7
14	32	A	A	24	B	2.86; 3 of 7

This is the first year for AP Physics 1 and 2 to be taught as these courses will replace AP Physics B. Over the past 4 years, 25% of my students have scored a 3 or higher on the AP Physics B Exam. This is approximately 13% over the average for students in Louisiana for the 2013 school year.

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3. IS THERE A GROUP OF STUDENTS ON WHICH I SHOULD FOCUS THIS LEARNING TARGET?

- Have I set learning targets for all of my students?
- Which subgroups in my school population need additional support to achieve success?
- Which students will need additional support to achieve success?

Total Population: All 14 students will be the focus of this learning target.

Identified Subgroup: There are 6 students who scored below a 3 on 4 of the 7 components of the laboratory diagnostic assessment. These students will need additional help with this area of the course. If 3 of these students score a 3 or higher on the College Board administered AP Exam, I will consider this as exceptional attainment on my SLT.

My second SLT will focus on student success on an EOY Laboratory assessment.

STUDENT LEARNING TARGET:

- What level of performance on the end-of-year assessment from Step 1 do I expect the identified student population to achieve?

6 out 14 of my AP Physics I students will score a 3 or higher on the College Board Exam for this course.

SCORING PLAN:

- How will you measure your students' success?
- Based on students' baseline data, what is the minimum level of performance I expect from the identified students?
- Based on students' baseline data, how many students can reasonably be expected to meet or exceed the expected level of performance?

Insufficient Attainment of Target (1 point): The teacher has demonstrated an insufficient impact on student learning by falling far short of the target.	Partial Attainment of Target (2 points): The teacher has demonstrated some impact on student learning, but did not meet the target.	Full Attainment of Target (3 points): The teacher has demonstrated a considerable impact on student learning by meeting the target.	Exceptional Attainment of Target (4 points): The teacher has demonstrated an outstanding impact on student learning by surpassing the target by a meaningful margin.
Achievement range: 0-3 students score a 3 or higher.	Achievement range: 4-5 students score a 3 or higher.	Achievement range: 6-8 students score a 3 or higher.	Achievement range: 9-14 students score a 3 or higher.

4. HOW WILL I MONITOR PROGRESS?

- When will I monitor students' developing mastery of the priority content?
- What [curricular resources](#) and [assessment methods](#) will I use to determine students' mastery of the priority content on an on-going basis?
 - Are these assessment methods aligned with the end-of-year assessment identified in Step 1?

Ongoing: Student understanding will be assessed daily through opportunities to engage in conversations and investigations about the topics being studied. Throughout the year, I will ensure the laboratory experiences further develop understanding and I will monitor their learning through the use of the Laboratory Report Rubric.

I will administer Interim Assessments three times throughout the year. These assessments will included items covered up until that point and will be selected from the practices tests available through [College Board](#). I will review results with students as a class and individually.

Checkpoint 1 Practice AP Assessment - October	Checkpoint 2 Practice AP Assessment - January	Checkpoint 3 Practice AP Assessment - April
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