

**Institution:** Louisiana Board of Regents

**Course Code:** CPHY 1023Louisia082923

**Course Number:** CPHY 1023

**Course Name:** Physical Science I

**Course Representative:** Emily Frank

**Review Start Date:** 2023-09-11

**Review End Date:** 2023-10-04

**Custom Rubric:** QM Rubric, LOUIS DE OER

## **General Standard 1: Course Overview and Introduction: The overall design of the course is made clear to the learner at the beginning of the course.**

**Overview Statement:** The course overview and introduction set the tone for the course, let learners know what to expect, and provide other guidance to help learners succeed from the outset.

### **STANDARD 1.1 - (3 Points) Essential**

**1.1 Instructions make clear how to get started and where to find various course components. Points Possible: 3 Points**

**Awarded: 3 Result: MET** (Yes: 3, No: 0)

#### **Reviewer Recommendations**

The Welcome message at the top of the class provides a course and brief overview.  
STANDARD 1.1

#### **Evidence**

In this same module, there is a Navigating the course section which informs students how to use the LMS to move through the course modules.

The Getting Started module provides a clear step-by-step list of what students should do to get started in the course. The link to the course syllabus is provided in this module as well.

#### **Suggestions For Improvement**

Under the Navigating the Course heading appears instructions for adopting instructors to edit at their discretion. The only indication is the bold print, which may be accidentally overlooked by the adopting instructor.

Consider making this text (that is obviously intended to be edited before the class is taught) stand out in some way other than just bold font to make it more obvious.

STANDARD 1.1

#### **Reviewer Recommendations Evidence**

The introductory information is clear and is easy to follow. Navigation is streamlined and direct. Getting Started is easily identifiable. Description of course and CLOs are posted in the Introduction section. Verbiage indicates how to navigate the course.

#### **Suggestions For Improvement**

No suggestions, just a comment--this is well designed and easy to follow. Well done.

STANDARD 1.1

#### **Reviewer Recommendations Evidence**

The course starts with a Welcome Label, description of the course, course objectives, a template for an instructor introduction, and a template for office hour information. There is a "Navigating the Course" section here, but it is more of an instruction to the instructor.

After some learner support materials, there is a Getting Started section with a list of items that a learner needs to complete – that includes a syllabus and an introduction forum.

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### Suggestions For Improvement

Not sure if this is even possible given that this is a template course but, if possible, consider moving the Getting Started to closer to the top of the page and having the welcome information in that. The Getting Started section is far enough down on the screen to require scrolling and searching which might be difficult to a learner that is new to the course and the layout. Consider also, adding a schedule of activities or a video guide of how to navigate the course as mentioned in the annotation and navigating the course section. Also, as noted in the annotation, having a “Read First” or “Start Here” label to make where the learner needs to start stand out more.

### STANDARD 1.2 - (3 Points) Essential

#### 1.2 Learners are introduced to the purpose and structure of the course.

Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)

STANDARD 1.2

### Reviewer Recommendations Evidence

The syllabus and Welcome module both contain a clear course description. The syllabus goes further to introduce Course Goals (which do not include Course Learning objectives).

The syllabus contains a Course Calendar providing the structure of the course, and the delivery method is clearly stated as being fully online. The syllabus goes further to provide specific information about the structure of the course and how students should proceed through each module to be successful.

I noticed that in the Course Calendar, Module 10 on Magnetism is on the schedule, however that module is empty in the course itself.

### Suggestions For Improvement

As the Module 10 area is completely empty, consider removing this module from the course as well as the course calendar.

STANDARD 1.2

### Reviewer Recommendations Evidence

The information provided in the Introduction section shows the purpose/outcomes of the course, and the structure of the course is easily identifiable through the navigation verbiage and structure of the Getting Started section. There is a faculty member introduction page and welcome template for adopters of the course.

### Suggestions For Improvement

Might create a standalone schedule of readings/ assignments and place that near the syllabus link. Maybe create a stand-alone document which maps the CLOs to the assignments and dates.

STANDARD 1.2

### Reviewer Recommendations Evidence

The description of the course is given at the top of the LMS page. There is a schedule outlined in the syllabus. There is a template placeholder for how information will be delivered and structure of the course. All learning activities and assessments are outlined in the syllabus along with a grading rubric and scale.

### Suggestions For Improvement

Please again consider adding – “Read First” on the syllabus as this information is covered here and is important.

### STANDARD 1.3 - (2 Points)

#### 1.3 Communication expectations for online discussions, email, and other forms of interaction are clearly stated. Points Possible: 2 Points Awarded: 2

Result: MET (Yes: 3, No: 0)

STANDARD 1.3

### Reviewer Recommendations Evidence

The Learner Support Module contains an area for the instructors of the course to upload their institution's student handbook or code of conduct as well as generalized netiquette expectations.

## Suggestions For Improvement

### Reviewer Recommendations Evidence

STANDARD 1.3

A Netiquette and Communication Expectations link is placed in the Introduction section. This page provides a template but also sets forth some basic expectations.

In the syllabus, Communication, Announcements, and the E-mail Policy spell out expectations for students and also let students know when to expect a response to emails, etc. A Netiquette/Classroom Etiquette section is also present.

Guidance for Discussion Boards/Forums is present in the Syllabus.

There is also a reference in the QA Forum to expectations for faculty interaction, but that seems a bit awkwardly placed and might be better as a standalone communication item.

## Suggestions For Improvement

Well done with this information in the syllabus. Some of that might be blended into the Netiquette link. The Communication information could be taken from the syllabus and added to a separate page under Introduction.

STANDARD 1.3

### Reviewer Recommendations Evidence

Netiquette is explicitly discussed in the syllabus and in the Netiquette and Communication section of Learner Support section on the LMS page.

## Suggestions For Improvement

### STANDARD 1.4 - (2 Points)

**1.4 Course and institutional policies with which the learner is expected to comply are clearly stated within the course, or a link to current policies is provided.**

**Points Possible: 2 Points Awarded: 2 Result: MET (Yes: 3, No: 0)**

STANDARD 1.4

### Reviewer Recommendations Evidence

The syllabus contains policies on late submissions, classroom etiquette, plagiarism and cheating, student withdrawal, the Americans with Disabilities Act, and Title IX policy, with prompts for the adopting instructor to add or adjust the included policies to match the adopting institution.

## Suggestions For Improvement

STANDARD 1.4

### Reviewer Recommendations Evidence

The syllabus includes an array of important policies which may vary depending upon who adopts the course. Links to policies related to privacy and accessibility are posted in the LMS as a template for adopters.

## Suggestions For Improvement

The syllabus includes Academic Honesty/Title IX/ ADA/Student Withdrawal from Course and some other policies. These could be pulled out and placed on pages in the LMS under Introduction material.

### Reviewer Recommendations Evidence

Student Withdrawal for Course is on page 12 of the syllabus. It is noted throughout the syllabus that late work is not accepted. There are also policies in the syllabus on accommodations and integrity (listed as plagiarism and cheating), and classroom etiquette.

### Suggestions For Improvement

It might be a good idea to include university policies on grievance and incompletes.

### STANDARD 1.5 - (2 Points)

**1.5 Minimum technology requirements for the course are clearly stated, and information on how to obtain the technologies is provided.**

**Points Possible: 2 Points Awarded: 2 Result: MET (Yes: 3, No: 0)**

STANDARD 1.5

### Reviewer Recommendations Evidence

The syllabus contains clear statements for the computer and video conferencing hardware requirements as well as web browser requirements. Students are made aware that these requirements can be purchased locally.

### Suggestions For Improvement

STANDARD 1.5

### Reviewer Recommendations Evidence

The syllabus contains detailed and well constructed information about the technology requirements for the class. This material is clear and easy to understand for learners.

### Suggestions For Improvement

Might place this material in a separate page under Introduction section.

STANDARD 1.5

### Reviewer Recommendations Evidence

Technology Requirements are covered in the syllabus for this course starting on page 5 and continue to page 6 – the learner will need a computer with internet access, Zoom, microphone, speakers, and camera. Detailed steps of how to use Zoom are provided.

### Suggestions For Improvement

### STANDARD 1.6 - (1 Point)

**1.6 Computer skills and digital information literacy skills expected of the learner are clearly stated.**

**Points Possible: 1 Points Awarded: 1 Result: MET (Yes: 3, No: 0)**

### Reviewer Recommendations

The syllabus contains a list of the following technical skills:

- using a web browser- see browser recommendations above
- using email for communication

### Evidence

- sending an email attachment
- navigating the Internet
- using LMS
- saving a document to create a Word, pdf or g-doc file
- uploading saved documents to the LMS
- using conferencing software (i.e. Zoom)- see information on Zoom above :

### Suggestions For Improvement

### Reviewer Recommendations Evidence

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STANDARD 1.6

STANDARD 1.6

The syllabus contains this information. It is well constructed and clearly shares expectations of technical skills. You should be comfortable with the following:

- using a web browser- see browser recommendations above
- using email for communication
- sending an email attachment
- navigating the Internet
- using LMS
- saving a document to create a Word, pdf or g-doc file
- uploading saved documents to the LMS
- using conferencing software (*i.e. Zoom*)- see information on Zoom above

### Suggestions For Improvement

Might place this in a page under Introductory material.

### Reviewer Recommendations

### STANDARD 1.7 - (1 Point)

#### Evidence

STANDARD 1.6

Technical Skills start on page 6 of the syllabus and are listed out.

### Suggestions For Improvement

**1.7 Expectations for prerequisite knowledge in the discipline and/or any required competencies are clearly stated. Points Possible: 1 Points Awarded: 1**

**Result: MET (Yes: 3, No: 0)**

STANDARD 1.7

### Reviewer Recommendations Evidence

The syllabus contains a heading for the prerequisites for this course. However, the actual prerequisites will need to be filled in by the adopting instructor.

### Suggestions For Improvement

STANDARD 1.7

### Reviewer Recommendations Evidence

There is a line in the syllabus which indicates that this is "School Specific," so I believe this meets the requirement of posting pre-requisite information.

### Suggestions For Improvement

No recommendations.

### Reviewer Recommendations

#### Evidence

There is a placeholder for a prerequisite for this course. It states that it is school specific.

### Suggestions For Improvement

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STANDARD 1.7

There is a placeholder template for any instructor to include their own personal information in the "Welcome!" Module of the course. **Suggestions For**

### Improvement

### Reviewer Recommendations Evidence

A template in the course shell asks faculty to post information about themselves. It also gives guidance about length and what should be included.

### Suggestions For Improvement

No suggestions for this standard.

### Reviewer Recommendations

#### Evidence

There is a placeholder for this course with examples given within the course and in the annotation of this standard.

### Suggestions For Improvement

### STANDARD 1.9 - (1 Point)

**1.9 Learners are asked to introduce themselves to the class.**

**Points Possible: 1 Points Awarded: 1 Result: MET (Yes: 3, No: 0) Reviewer**

### Recommendations

#### Evidence

The Getting Started Module contains an "Introduce Yourself!" forum activity to help students meet one another.

### Suggestions For Improvement

### Reviewer Recommendations

#### Evidence

The Introduce Yourself Forum is a good one to ensure that students interact and meet one

### STANDARD 1.8 - (1 Point)

**1.8 The self-introduction by the instructor is professional and is available online. Points Possible: 1 Points Awarded: 1 Result: MET (Yes: 3, No: 0)**

### Reviewer Recommendations

#### Evidence

STANDARD 1.8

STANDARD 1.8

STANDARD 1.8

STANDARD 1.9 STANDARD 1.9

another. **Suggestions For Improvement**

I'm always a bit wary of asking students to post a picture as some students do not want their images online. You might add something like "a picture of yourself or something you really like/enjoy doing/think is beautiful."

STANDARD 1.9

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STANDARD 1.9

### Reviewer Recommendations

#### Evidence

There is an introduction forum provided for learners. **Suggestions For Improvement**

Consider adding points to this to encourage participation. Also consider having a word count (ex:200 words minimum) and requiring learners to respond to other posts (ex: respond at least 50 words each to two other posts) to encourage interaction.

## General Standard 2: Learning Objectives (Competencies): Learning objectives or competencies describe what learners will be able to do upon completion of the course.

**Overview Statement: The learning objectives or competencies establish a foundation upon which the rest of the course is based.**

### STANDARD 2.1 - (3 Points) **Essential**

**2.1 The course learning objectives, or course/program competencies, describe outcomes that are measurable. Points Possible: 3 Points Awarded:**

**3 Result: MET (Yes: 3, No: 0)**

#### Reviewer Recommendations

#### Evidence

The Course Learning Objectives (CLOs) are almost all measurable, using verbs such as:

Explain  
Use

Recognize  
Analyze  
Solve  
Apply

There is one unmeasurable CLO, which is "(CLO6) Demonstrate a fundamental knowledge of chemistry concepts in the areas of  
STANDARD 2.1

measurement, chemical and physical properties of matter, atomic and molecular structure, chemical equations and stoichiometry, reactions, energy relationships, periodicity, bonding, gas laws, and solutions."

### Suggestions For Improvement

To make this CLO6 measurable, consider changing the "demonstrate a fundamental knowledge" portion to indicate HOW students will be asked to demonstrate this knowledge.

**Reviewer Recommendations Evidence**

Outcomes are measurable. All the CLOs call for learners to perform some task which is clear cut/streamlined/measurable. CLO verbs incorporate active learning such as explain and apply, analyze and solve, demonstrate.

**Suggestions For Improvement**

No recommendations.

STANDARD 2.1

**Reviewer Recommendations Evidence**

The course learning objectives (CLOs) are listed near the top of the course page and in the syllabus on page. Almost all the CLOs are in the mid-higher range skill level – use, demonstrate, solve, and apply. While others are in the lower range – recognize and others are in the higher range - analyze.

**Suggestions For Improvement****STANDARD 2.2 - (3 Points) Essential**

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**STANDARD 2.2 - (3 Points) Essential**

**2.2 The module/unit-level learning objectives or competencies describe outcomes that are measurable and consistent with the course-level objectives or competencies.**

**Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)**

**Reviewer Recommendations****Evidence**

The Module level objectives (MLOs) are all measurable, including verbs such as:

List  
Use  
Estimate

Solve  
Recognize  
Convert  
Discuss  
Define  
Analyze  
Determine  
STANDARD 2.2

The relationship between the MLOs and CLOs are indicated by the presence of the aligning CLO code in parenthesis at the end of every MLO. **Suggestions For Improvement**

**Reviewer Recommendations Evidence**

STANDARD 2.2

MLOs and CLOs are very well aligned here. In each module, the MLOs are mapped onto the CLOs. The elements are measurable and consistent with the course level.

**Suggestions For Improvement**



Kudos to you for doing such a fine job of mapping these elements.

STANDARD 2.2

### Reviewer Recommendations Evidence

The MLOs are measurable and consistent with the CLOs with this course. The MLOs are labeled with the CLOs that match up. These MLOs are further written on the learning activities that they are aligned with. The MLOs are clearly written and easy to understand.

### Suggestions For Improvement

Module 9 has so many MLOs – consider combining some or reducing or splitting this module up. There was nothing set up for Module 10 (Magnetism) so it was not evaluated. Also, consider having a course map so items are all in one place.

### STANDARD 2.3 - (3 Points) Essential

**2.3 Learning objectives or competencies are stated clearly, are written from the learner's perspective, and are prominently located in the course.**

**Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)**

STANDARD 2.3

### Reviewer Recommendations Evidence

The learning objectives are all written avoiding jargon and easily understandable by the lay-person. The CLOs are available in the course syllabus, and the MLOs are available in the Module Introduction area, making them prominently located in the course.

### Suggestions For Improvement

STANDARD 2.3

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### Reviewer Recommendations

The MLOs and CLOs are written in straightforward language which is easily accessible to learners. For instance:

### Evidence

STANDARD 2.3

(CLO1) Explain and apply the basic laws and principles governing the nature of matter, motion, work and energy forms, waves, electricity, magnetism, and special topics in astronomy.

(CLO2) Use a basic scientific vocabulary that relates to course content.

(CLO3) Recognize and explain many physical phenomena observed in the physical environment.

(CLO4) Use the scientific method in concert with the basic laws of physics to model, analyze, and interpret physical scenarios in the course materials to everyday life.

(CLO5) Use simple mathematical skills to solve problems that pertain to the physical environment.

### Suggestions For Improvement

Might vary the verb use and incorporate apply or employ.

STANDARD 2.3

### Reviewer Recommendations Evidence

The CLOs are listed on the syllabus and the top of the course. The MLOs are listed at the top of each module. They are clearly written and from the learner's perspective.

### Suggestions For Improvement

**STANDARD 2.4 - (3 Points) Essential**

**2.4 The relationship between learning objectives or competencies and learning activities is clearly stated. Points Possible: 3 Points Awarded:**

**3 Result: MET (Yes: 3, No: 0)**

**Reviewer Recommendations**

**Evidence**

STANDARD 2.4 STANDARD 2.4

**Evidence**

Each activity begins with a list of the corresponding MLOs complete with the aligning CLOs.

**Suggestions For Improvement**

**Reviewer Recommendations**

Excellent done here. The assignments show the MLO/CLO map at the beginning of the assignment. For instance, in Module 5: Chapter 5, the assignment is well constructed with this information. Similarly, Module 9's assignment contains it as well.

**Suggestions For Improvement**

**Reviewer Recommendations**

**Evidence**

The MLOs are written on each of the learning activities that they are aligned with.

**Suggestions For Improvement**

**STANDARD 2.5 - (3 Points) Essential**

**2.5 The learning objectives or competencies are suited to the level of the course. Points Possible: 3 Points Awarded: 3**

**Result: MET (Yes: 3, No: 0)**

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STANDARD 2.4 STANDARD 2.5

**Reviewer Recommendations Evidence**

STANDARD 2.5

As this is a 1000-level course, the level of the objectives at mostly the Understand to Apply levels of Bloom's taxonomy feels appropriate. **Suggestions For**

## Improvement

### Reviewer Recommendations Evidence

STANDARD 2.5

While I am not a scientist, my sense in reviewing these CLOs and MLOs is that these objectives would be appropriate to the course. Critical thinking, problem solving, writing, reading are all elements addressed in the course and unit objectives.

### Suggestions For Improvement

None. These look great.

STANDARD 2.5

### Reviewer Recommendations Evidence

This is a lower-level science course with potentially no prerequisites (depending on the institution). Some of the objectives for this course are lower level (ex: recognize) and some are higher level (ex: analyze), but most are in the middle range and are suited for a beginner's science course and, as noted in the syllabus – “intended for a non-science curriculum”.

### Suggestions For Improvement

## General Standard 3: Assessment and Measurement: Assessments are integral to the learning process and are designed to evaluate learner progress in achieving the stated learning objectives or mastering the competencies.

**Overview Statement: Assessment is implemented in a manner that corresponds to the course learning objectives or competencies and not only allows the instructor a broad perspective on the learners' mastery of content, but also allows learners to track their learning progress throughout the course.**

### STANDARD 3.1 - (3 Points) **Essential**

**3.1 The assessments measure the achievement of the stated learning objectives or competencies. Points Possible: 3 Points**

**Awarded: 0 Result: NOT MET** (Yes: 1, No: 2)

STANDARD 3.1

### Reviewer Recommendations Evidence

For the purposes of this review, the assessments are the Report assignment, the Midterm, and the final exam. All other graded assignments are considered to be learning activities.

The Report Assignments asked students to perform an activity related to the concepts in the module and then write a formal report about the conclusions drawn from the experiment. The top of each Report Assignment (and the corresponding Activity Assignment) listed the MLOs intended to align with the activity and report. I was unable to locate any discrepancies with the alignment provided by this notation.

Additionally, the syllabus indicated that the Report Assignments must include the Video Watch summary, but the VWS has been made into it's own unique assignment.

The midterm and final exams did not contain any questions but rather linked to OpenStax. Therefore, it is impossible to determine if there would be alignment between the questions chosen by the adopting instructor and the stated MLOs or CLOs.

### Suggestions For Improvement

Consider providing an actual exam using questions from the OpenStax question database to help show the intention of the Midterm and Final Exams.

STANDARD 3.1

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STANDARD 3.1

### Reviewer Recommendations Evidence

Written assignments and exams are mapped onto the MLOs and CLOs, so it is clear and easy for learners and reviewers to see what is being measured and how. Well done with this structure in the assessments.

### Suggestions For Improvement

No recommendations for this standard.

STANDARD 3.1

### Reviewer Recommendations Evidence

The assessments (mid-term and final) were not set up, so this reviewer was unable to evaluate this standard. There are placeholder type instructions for instructors to set this up though.

### Suggestions For Improvement

Consider adding sample assessments, even if they are word documents or PDFs of the questions that would be on the assessments.

### STANDARD 3.2 - (3 Points) **Essential**

**3.2 The course grading policy is stated clearly at the beginning of the course.**

**Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)**

STANDARD 3.2

### Reviewer Recommendations Evidence

The syllabus contains a list of all graded activities, their individual point values, the total point value for that category, and the total points possible.

There is also a breakdown of both the points and percentages required to earn each individual letter grade. **Suggestions For**

### Improvement

### Reviewer Recommendations

Here is an example: Discussions will be graded as follows:

### Evidence

STANDARD 3.2

There is a point value explanation for each assignment. This can be found in the syllabus.

**10-8 Points:** Posting and replies include evidence that the student understands and is able to transfer or relate course concepts to a personal or professional experience. The student addresses the main topic once and responds to a minimum of two other students. **7-5 Points:** Posting and replies indicate an understanding of course concepts. The student addresses the main topic once and responds to a minimum of one other student.

**4-1 Points:** Posting and replies are not succinct or do not seem to capture the essence of course concepts. The student does not respond to any other students

There is also a summary of how many points are needed to obtain an A-F.

**90% (540 points) starts A, 80% (480 points) starts B, 70% (420 points) starts C, 60% (360 points) starts D, below 60% (360 points) is F, no rounding on points or percentages.**

### Suggestions For Improvement

Perhaps place this information in a chart so that it is easier for learners to follow and understand.

STANDARD 3.2

### Reviewer Recommendations Evidence

There is a grading scale and a list of course assignments and exams with the total points possible listed on page 10 of the syllabus. The items are listed and clearly stated.

### Suggestions For Improvement

#### STANDARD 3.3 - (3 Points) **Essential**

**3.3 Specific and descriptive criteria are provided for the evaluation of learners' work, and their connection to the course grading policy is clearly explained.**

**Points Possible: 3 Points Awarded: 3 Result: MET** (Yes: 2, No: 1)

activity in the course. **Suggestions For Improvement**

### Reviewer Recommendations

#### Evidence

The syllabus contains grading guides and expectations for every different type of graded STANDARD 3.3

The grading information is only available in the course syllabus, which is a lengthy document. Perhaps you might consider including the grading guides for each individual activity as a link within the activity's description within the course itself. This would help students locate the information more efficiently.

STANDARD 3.3

### Reviewer Recommendations Evidence

In the syllabus, there are sections of assignment descriptions with informal rubrics posted under them. Ideally, these rubrics would be standalone pages/files for reviewers to see.

### Suggestions For Improvement

Consider creating pages in the LMS which contain the rubric and place these next to the assignment sheet file.

Grading rubrics for the assignments in this course are descriptive and explained within the syllabus on pages 7-10.

STANDARD 3.3

### Reviewer Recommendations

#### Evidence

Overall, there are detailed instructions given for the learning activities. However, there seems to be an incompleteness to most of the assignments that makes it difficult to determine what is actually being graded and how much of a response is needed.

### Suggestions For Improvement

Consider having a link or adding these rubrics to each assignment so it is easy and convenient for learners to locate when needed.

Consider making the video the first assignment listed as there were times where the chapter learning activity listed above would have been difficult without seeing the video first (EX: Chapter 6 and Chapter 7). Also, consider having more detailed instructions as some are missing question numbers (Ex: Module 1 Activity Assignment), and how much each question is worth (Ex: #1 is worth 2 points) and how long discussion posts should be (Ex: Minimum of 300 words).

### **STANDARD 3.4 - (2 Points)**

**3.4 The assessments used are sequenced, varied, and suited to the level of the course. Points Possible: 2 Points Awarded: 0**

**Result: NOT MET** (Yes: 1, No: 2)

STANDARD 3.4

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#### **Reviewer Recommendations**

The Report Assignments helped students to gather evidence to prepare themselves for some summative assessments.

#### **Evidence**

STANDARD 3.4

There is no way to collect evidence as to how the assessments would work together sequentially, as there are currently no questions in the Midterm or Final exams. All other graded items are being considered as learning activities.

#### **Suggestions For Improvement**

Consider providing an actual exam using questions from the OpenStax question database to help show the intention of the Midterm and Final Exams.

STANDARD 3.4

#### **Reviewer Recommendations Evidence**

There are forums in the course; exams, the VWS assignments and other assignments which call for students to write responses which analyze materials. The assessments appear to be varied and interesting.

#### **Suggestions For Improvement**

No suggestions. These look great.

STANDARD 3.4

#### **Reviewer Recommendations Evidence**

The assessments (mid-term and final) were not set up, so this reviewer was unable to evaluate this standard. There are placeholder type instructions for instructors to set this up though.

#### **Suggestions For Improvement**

Consider adding sample assessments, even if they are word documents or PDFs of the questions that would be on the assessments.

### **STANDARD 3.5 - (2 Points)**

**3.5 The course provides learners with multiple opportunities to track their learning progress with timely feedback.**

**Points Possible: 2 Points Awarded: 2 Result: MET** (Yes: 2, No: 1)

STANDARD 3.5

#### **Reviewer Recommendations Evidence**

Using the graded learning activities to track learning progress, a student would receive ample feedback on the numerous assignments. **Suggestions For Improvement**

### Reviewer Recommendations Evidence

STANDARD 3.5

In the textbook chapters there are self-checked questions that allow students to inventory what they have learned. Forums/ASW summaries/reports need to be manually graded, and there is no sense of time scale of grading. Additionally, I don't see an option for rough drafts; however, this could be easily remedied by adding some verbiage about time expectations for grading and the importance of feedback to students.

### Suggestions For Improvement

See last sentence above.

STANDARD 3.5

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### Reviewer Recommendations Evidence

STANDARD 3.5

Each module has an assignment, a video summary, a simulation assignment, and a discussion. It appears that all of these items are 10 points each. Each graded item states that it will be NLT one week after the due date.

### Suggestions For Improvement

Consider spelling out explaining what NLT stands for. This reviewer did a find and search and was unable to find it within the syllabus. After an Google search - "No LaterThan" one week after the due date. Consider leaving this out and the due date and time be the due date and time. Also, to meet this standard, consider having feedback time given to the learners. Such as, "All assignments and exams will be graded within 7 days of the due date".

## General Standard 4: Instructional Materials: Instructional materials enable learners to achieve stated learning objectives or competencies.

**Overview Statement: The focus of this Standard is on supporting the course objectives and competencies, rather than on qualitative judgments about the instructional materials.**

### STANDARD 4.1 - (3 Points) **Essential**

**4.1 The instructional materials contribute to the achievement of the stated learning objectives or competencies. Points Possible: 3 Points Awarded: 3**

**Result:** MET (Yes: 3, No: 0)

STANDARD 4.1

### Reviewer Recommendations Evidence

The links to the textbook and to the videos were directly related to the MLOs provided. I was not able to find any evidence of misalignment.

The link to the Module 1 Pressbook Chapter 1: The Nature of Science is pointing towards Chapter 7: Linear Motion instead of the accurate chapter.

### Suggestions For Improvement

Consider correcting the link to the Chapter 1 Pressbook link so that students will find the correct material.

STANDARD 4.1

### Reviewer Recommendations Evidence

The open source Pressbook text appears to be quite good, and the objectives align with the material in the book. I noted several places where the objectives are very well synched with the text. For example: Module 7 objectives are reflected in the text on the first page of the unit reading.

### Suggestions For Improvement

In Module 8, there is a video supplied in the text which does not play correctly. It's an external link about a skateboarder. I reloaded it twice and could not get it to play, so you may want to ck that one.

STANDARD 4.1

### Reviewer Recommendations Evidence

The instructional materials include the Pressbook Chapters provided, videos with provided links and/or embedded, and some additional videos from YouTube and Khan Academy that are provided or have links to get to the provided material.

### Suggestions For Improvement

The materials contribute clearly and directly to the assignments and discussion posts. The material like to assessments (mid-term and final) was not evaluated since there currently is no assessments provided.

### STANDARD 4.2 - (3 Points) Essential

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### STANDARD 4.2 - (3 Points) Essential

**4.2 The relationship between the use of instructional materials in the course and completing learning activities is clearly explained.**

**Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)**

STANDARD 4.2

### Reviewer Recommendations Evidence

The Module introduction pages provide a list of the MLOs, followed by the statement "To achieve these objectives:", which itself is followed by an enumerated list of activities the students are intended to complete in order. This directs them to engage with the textbook reading first before interacting with the learning activities or assessments. The VWS Assignments are activities where the instructional video is included within the assignment description, providing a direct link.

I was a little confused for the Module 1 VWS assignment. Students are given a link to Khan Academy and told to watch all videos. However some of the videos go beyond the learning objective, so it appears they would not be assigned.

### Suggestions For Improvement

For the Module 1 VWS, consider linking to the exact videos that you want students to watch instead of saying "Watch All Videos" to avoid confusion.

STANDARD 4.2

### Reviewer Recommendations Evidence

Instructional materials are well connected to the course and learning activities. Verbiage in each section shows the link between the CLO/MLOs and the activities which are derived from the textbook and the additional materials.

### Suggestions For Improvement

Each module has the readings, assessments, and other materials, such as videos, listed as

### Reviewer Recommendations

### Evidence



Consider adding a study guide to each module for learners to use in taking notes while they read. It is one way to help students make effective use of the textbook in preparation for the assessments.

**STANDARD 4.3 - (2 Points)**

**4.3 The course models the academic integrity expected of learners by providing both source references and permissions for use of instructional materials.**

**Points Possible: 2 Points Awarded: 2 Result: MET (Yes: 3, No: 0)**

STANDARD 4.3

**Reviewer Recommendations Evidence**

The textbook resources all contain a Creative Commons license. The video content is sourced from YouTube or from Khan Academy, which provides attribution. The interactive activities are sourced from pHET.

**Suggestions For Improvement**

STANDARD 4.3

**Reviewer Recommendations Evidence**

All items in the text are sourced appropriately. The assignment files which contain outside sources are cited correctly. For instance, in Module 10, the Activity about Faraday's Law of Magnetism contains a video and that is cited appropriately.

**Suggestions For Improvement**

No recommendations.

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No recommendations.

STANDARD 4.3

**Reviewer Recommendations Evidence**

The license for the OER Pressbook can be found in the lower left-hand corner of the screen of the Pressbook website and additional information at the end of each chapter. The figures from the Pressbook are referenced at the end of the chapter.

All materials in this course are referenced or have links that provide the reference on materials presented.

**Suggestions For Improvement****STANDARD 4.4 - (2 Points)**

**4.4 The instructional materials represent up-to-date theory and practice in the discipline. Points Possible: 2 Points Awarded:**

**2 Result: MET (Yes: 3, No: 0)**

The material appears to be modern and represents up-to-date theory.

**Reviewer Recommendations****Evidence**

## Suggestions For Improvement

### Reviewer Recommendations

#### Evidence

STANDARD 4.4 STANDARD 4.4

The textbook appears to be current. The examples and discussions draw upon modern-day examples. For instance, several of the videos contain animations of things like skate parks and 3-D modeling.

## Suggestions For Improvement

No suggestions.

STANDARD 4.4

### Reviewer Recommendations Evidence

This course uses a Physical Science Open Textbook, there are links and short readings within the course, and videos. This is a physical science course and standard materials that, although dated, are appropriate within the context of this course and subject matter.

## Suggestions For Improvement

Some of the resources are links marked with a grade-level that might be considered less desirable. For example, in Module 1: {<https://www.khanacademy.org/math/cc-fifth-grade-math/imp-measurement-and-data-3>} is one of the videos. Consider finding other resources that do not have links that have grade levels within the URL.

### STANDARD 4.5 - (2 Points)

**4.5 A variety of instructional materials is used in the course.**

**Points Possible: 2 Points Awarded: 2 Result: MET (Yes: 3, No: 0)**

STANDARD 4.5

### Reviewer Recommendations Evidence

The major source of information is the textbook. A secondary source are the videos that are only linked from the VWS Assignments. For students who struggle to learn by reading alone, the number of instructional materials may be helpful, but the positioning of the instructional materials in the course may not be helpful.

## Suggestions For Improvement

Consider reorganizing the items within each module to provide the instructional materials first, and then all of the learning activities next. © 2023 Quality Matters All rights reserved.

This could mean moving the VWS Assignments to the second spot in the module to help those struggling find the video resources more quickly.

An alternate method would be to include just a link to all the videos on one page and make that page the second spot in the module. Then the third spot could be the VWS assignment based on the content students have just read and watched.

STANDARD 4.5

### Reviewer Recommendations Evidence

The textbook and video segments used for the Video summaries are good materials which will help students to learn content. Ideally, a few more extra sources could be brought in

(published articles or other scholarly materials), but these two sources plus the additional assignment materials provided by the instructor should be useful for learners.

### Suggestions For Improvement

Consider adding material to deepen learner engagement and round out the existing resources.

STANDARD 4.5

### Reviewer Recommendations Evidence

There is a variety of instructional materials including a Pressbook online textbook, YouTube videos, Khan Academy, and phet.colorado.edu. **Suggestions For Improvement**

## General Standard 5: Learning Activities and Learner Interaction: Learning activities facilitate and support learner interaction and engagement.

**Overview Statement: Course components that promote active learning contribute to the learning process and to learner persistence.**

**STANDARD 5.1 - (3 Points) Essential**

**5.1 The learning activities promote the achievement of the stated learning objectives or competencies. Points Possible: 3 Points**

**Awarded: 3 Result: MET (Yes: 3, No: 0)**

STANDARD 5.1

### Reviewer Recommendations Evidence

For the purposes of review, the learning activities are the Activity Assignments, VWS Assignments, and Forum Discussions. Using the indicated MLOs visible at the top of each activity, the alignment between the activities and objectives is obvious. I was unable to find any discrepancies between the indicated alignment and reality.

### Suggestions For Improvement

STANDARD 5.1

### Reviewer Recommendations Evidence

Activities promote the achievement of the goals. These assignments show consideration of the objectives and also build the connection to the competencies by framing them in the assignment sheet. This is very well done.

### Suggestions For Improvement

No suggestions

STANDARD 5.1

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STANDARD 5.1

### Reviewer Recommendations Evidence

The learning activities in each module of this course include reading the textbook chapter, and a short assignment related directly to the chapter material, watching a video (or sometimes more) and writing a summary, doing a simulation activity, and participating in discussions. The learning activities are aligned with the objectives and all are required for grades.

## Suggestions For Improvement

Consider cutting back on some of the assignments or combining some of them as it is quite a bit of work to do (and grade) per week. What works best for that week's materials? Is the simulation really worth it or is the activity better? Do they need to discuss this week AND do an activity? These items could probably be combined or mixed and matched depending on what the topic is that week. Could also make some of them optional or for bonus points.

### **STANDARD 5.2 - (3 Points) Essential**

**5.2 Learning activities provide opportunities for interaction that support active learning. Points Possible: 3 Points Awarded:**

**3 Result:** MET (Yes: 3, No: 0)

STANDARD 5.2

#### Reviewer Recommendations Evidence

Learner-content interaction is heavily supported by the Chapter Assignments, VWS Assignments, Forum Discussion activities, and interactions with the textbook.

Learner-learner interaction is promoted by the Forum Discussion activities.

Learner-instructor interaction is supported in the Forum Discussions, where the syllabus states "I will provide scoring feedback and post solutions for each discussion." The same indication is given for the Midterm, and Report Assignments,

## Suggestions For Improvement

STANDARD 5.2

#### Reviewer Recommendations Evidence

Activities promote active learning and the achievement of the goals. For instance, there are video sessions where students must watch and then summarize what they have learned. Forums help students to engage learner to learner and content; the videos embedded from PHET are interesting in that they contain manipulatives like the skateboarder animation and the 3D modeling of different types of bonds between chemicals.

## Suggestions For Improvement

### Reviewer Recommendations

#### Evidence

learner-instructor: Weekly feedback on assignments.FAQ forum.

learner-learner: Weekly discussion boards.

learner-context: Pressbook, videos, and simulations.

### Suggestions For Improvement

### **STANDARD 5.3 - (3 Points) Essential**

**5.3 The instructor's plan for interacting with learners during the course is clearly stated. Points Possible: 3 Points**

**Awarded: 3 Result:** MET (Yes: 2, No: 1)

**Reviewer Recommendations Evidence**

STANDARD 5.3

The syllabus contains an email policy and an announcement policy. It is also strongly indicated by the syllabus that students will receive feedback on learning activities and assessments from the instructor.

**Suggestions For Improvement**

STANDARD 5.3

**Reviewer Recommendations Evidence**

In the syllabus, the instructor references Zoom meetings, email interactions. The instructor likely is engaging with the Forum activities.

**Suggestions For Improvement**

Perhaps consider adding a bit more about the role of interaction with learners and how much learners can expect in their course. Some students may be coming from situations where instructors are required to comment daily on Forums; whereas, that may not be required at other institutions.

STANDARD 5.3

**Reviewer Recommendations Evidence**

In the syllabus, it states that all email will be answered within 24 hours. This reviewer was unable to find a statement regarding when feedback on assignments should be expected by.

**Suggestions For Improvement**

It would be helpful if the syllabus and/or Moodle would provide a statement to let learners know when they will receive feedback on course work, such as "within one week of the due date".

**STANDARD 5.4 - (2 Points)**

**5.4 The requirements for learner interaction are clearly stated.**

**Points Possible: 2 Points Awarded: 2 Result: MET (Yes: 3, No: 0)**

STANDARD 5.4

**Reviewer Recommendations Evidence**

As given by the example in the annotations, all Forum Discussion activities contain explicit instructions on how to properly participate in the Forum.

I couldn't find any information in the syllabus that outlines students' expected frequency of logging into the class per week or the recommended weekly coursework hours.

## Suggestions For Improvement

Consider adding a recommendation for the frequency and time dedication expected for students enrolled in this course into the syllabus.

In the syllabus, expectations about learner interaction via Forums is presented in a detailed manner: Discussions:

## Reviewer Recommendations

### Evidence

STANDARD 5.4

**Please adhere to the following:** Discussions are intended to complement the readings and assignments and determine your ability to apply what you have learned. Discussions are to be completed after the Assignments. There will be 10 Discussions. Each discussion will be worth 10 points. The scoring rubric is provided below. I will provide scoring feedback and post solutions for each discussions *NLT one week* after the discussion session is closed.

You are expected to participate in Discussions according to the posted deadlines on LMS. I would like for our discussions to be a free give and take of ideas. For that to happen, people must participate. To ensure participation in our discussions, you are required to post on LMS at least 3 times for each discussion topic. Your initial posting is due on Monday by 11:59 pm CST. Your responses to 2 of your classmates are due on Saturday by 11:59 pm CST. Your initial posting should address the discussion topic requirements, while your other two postings

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should be replies to your classmates. Be sure to comment on at least two of your classmates' postings. Your response should be at least 5 sentences long. This includes responses to classmates' posts. Your replies must be more than a simple phrase like "I agree" or "I like your answers". Replies should reflect why you agree or like what has been posted. Your replies must reflect a genuine effort to engage your fellow classmates regarding the comments provided. Please think about the questions and your peers' responses and reply thoughtfully and courteously, according to netiquette rules. Use good English grammar, correct punctuation, and complete sentences. While the posts will mostly be judged by their thoughtfulness and completeness, I reserve the right to take off points for grammatical errors, especially if they interfere with the clarity of your post. **Unless specified in the directions, all Discussion postings and replies should be made in the discussion forum. Do not email me any Discussion postings unless the directions specifically direct you to do so.**

## Suggestions For Improvement

Consider adopting Flip Forums. This platform allows for video submissions, and it is free. It does not, however, automatically feed into the gradebook in Moodle, so that is a downside of the platform.

STANDARD 5.4

## Reviewer Recommendations Evidence

Communication expectations for this course can be found on the syllabus on pages 2-3 and include how to get in touch and that it needs to be in a professional manner and how often the learner should check email and the response time expected from the instructor (within 24 hours).

## Suggestions For Improvement

## General Standard 6: Course Technology: Course technologies support learners' achievement of course objectives or competencies.

**Overview Statement: The technologies enabling the various tools used in the course facilitate rather than impede the learning process.**

### STANDARD 6.1 - (3 Points) Essential

**6.1 The tools used in the course support the learning objectives or competencies.**

**Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)**

STANDARD 6.1

## Reviewer Recommendations Evidence

Moodle is compatible with H5P which can help to engage learners, and it also contains pre-programmed items such as Forums, quizzes, assignments. The textbook and Khan Academy resources also contain links to tools that will engage learners. The downside of the PHET videos/animations is that they are a bit difficult to learn to manipulate, but after a few minutes of trial and error, I was able to see the skateboarder at work.

### Suggestions For Improvement

A bit more direction for elements like the PHET tools might be useful. I reloaded that video twice before it would become interactive and allow me to move the skater.

STANDARD 6.1

### Reviewer Recommendations Evidence

The LMS tools used include the page, the File, the URL, and the activity. The quiz is indicated for use in the Midterm and Final, but there is no evidence of the quiz's actual use.

Additionally, the video repositories on YouTube and Khan Academy are used for instructional materials.

Interactive technologies included pHET resources.

These will all help students achieve the stated learning objectives.

### Suggestions For Improvement

STANDARD 6.1

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STANDARD 6.1

### Reviewer Recommendations Evidence

As designed, this course uses discussion boards, a grade book, announcements, videos (mostly YouTube and Khan Academy) and a simulation site. These tools are directly related to the learning objectives in this course.

### Suggestions For Improvement

#### STANDARD 6.2 - (3 Points) **Essential**

**6.2 Course tools promote learner engagement and active learning.**

**Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)**

STANDARD 6.2

### Reviewer Recommendations Evidence

This course has some simulator activities that in particular promote learner engagement and active learning. However, there are also discussion boards used also.

### Suggestions For Improvement

Consider adding automated self-check exercises to replace some of the graded work (as suggested in a previous standard as there is quite a bit of grading in this course).

STANDARD 6.2

### Reviewer Recommendations Evidence

The tools are well designed and do promote active learning. The PHET series is particularly useful for engagement and showing concrete representations of theoretical constructs.

### Suggestions For Improvement

Consider adding some H5P elements. Students like them and they are fun to use. Additionally, students can provide their summaries in Flip Forums which allow learners to see one another's videos. Students seem to enjoy posting these.

**Reviewer Recommendations**

**Evidence**

The interactives, Discussion Forums, and other assignment activities promote student interaction with the course.

**Suggestions For Improvement**

**STANDARD 6.3 - (1 Point)**

**6.3 A variety of technology is used in the course.**

**Points Possible: 1 Points Awarded: 1 Result: MET (Yes: 3, No: 0) Reviewer**

**Recommendations**

This course uses a variety of technology throughout the entire course that includes videos, discussion boards, and a simulator site.

**Suggestions For Improvement**

STANDARD 6.3

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STANDARD 6.3

**Reviewer Recommendations Evidence**

A variety of technology is present in the links provided in the textbook--3D modeling, animations of concepts, and other elements allow learners to better see and understand the abstract concepts in the course. The Khan Academy videos also incorporate an array of animations/explanations/mini-lectures.

**Suggestions For Improvement**

Perhaps consider examining new and emerging technologies which can be used in teaching science.

STANDARD 6.3

**Reviewer Recommendations Evidence**

A variety of tools, such as the LMS tools such as the page, the File, the URL, and the activity, as well as the non-LMS tools like the video repositories on YouTube and Khan Academy and interactive technologies like PHET resources.

**Suggestions For Improvement**

**STANDARD 6.4 - (1 Point)**

**6.4 The course provides learners with information on protecting their data and privacy. Points Possible: 1 Points Awarded: 0**

**Result: NOT MET (Yes: 1, No: 2)**

STANDARD 6.4

**Reviewer Recommendations Evidence**

This reviewer was unable to locate privacy policies or a placeholder for privacy policies in this course other than for the LMS page.



### Suggestions For Improvement

It would be helpful to include a statement on the syllabus and/or Moodle providing learning with information on protecting their data and privacy.

STANDARD 6.4

### Reviewer Recommendations Evidence

A template for adopters is provided so that privacy and data information policies can be listed for learners. The current sample does not contain the Moodle policy or Pressbooks policy on data privacy.

### Suggestions For Improvement

Consider adding the Moodle and Pressbooks policies as examples.

STANDARD 6.4

### Reviewer Recommendations Evidence

There is a document under learner support that provides privacy data for tools that both are and are not used in this course. This might lead to confusion.

### Suggestions For Improvement

Consider amending the "Example Data and Privacy" document to only include the technologies used in this course. For example, the Open Office, Adobe, Microsoft, and Java privacy information has no bearing on this course and might be removed to avoid confusion.

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## General Standard 7: Learner Support: The course facilitates learner access to institutional support services essential to learner success.

**Overview Statement: It is important to ensure online learners know they have access to and are encouraged to use the services that support learners at the institution. In the Learner Support Standard, four different kinds of support services are addressed: technical support, accessibility support, academic services support, and student services support.**

### STANDARD 7.1 - (3 Points) **Essential**

**7.1 The course instructions articulate or link to a clear description of the technical support offered and how to obtain it.**

**Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)**

STANDARD 7.1

### Reviewer Recommendations Evidence

*Learner Support was marked Met by all reviewers, but it was not reviewed given that this content should be localized to the adopting institution and course. The associated Moodle template includes placeholders for the elements found in Learner Support, which should be completed by adopting instructors to articulate the elements contained within this standard.*

### Suggestions For Improvement

STANDARD 7.1

### Reviewer Recommendations Evidence

*Learner Support was marked Met by all reviewers, but it was not reviewed given that this content should be localized to the adopting institution and course. The associated Moodle template includes placeholders for the elements found in Learner Support, which should be completed by adopting instructors to articulate the elements contained*

within this standard.

### Suggestions For Improvement

### Reviewer Recommendations

### Evidence

STANDARD 7.1 STANDARD 7.2

### Evidence

Met according to the parameters of this review.

### Suggestions For Improvement

### STANDARD 7.2 - (3 Points) **Essential**

**7.2 Course instructions articulate or link to the institution's accessibility policies and services. Points Possible: 3 Points Awarded: 3 Result: MET**

(Yes: 3, No: 0)

### Reviewer Recommendations

*Learner Support was marked Met by all reviewers, but it was not reviewed given that this content should be localized to the adopting institution and course. The associated Moodle template includes placeholders for the elements found in Learner Support, which should be completed by adopting instructors to articulate the elements contained within this standard.*

### Suggestions For Improvement

STANDARD 7.2

### Reviewer Recommendations Evidence

*Learner Support was marked Met by all reviewers, but it was not reviewed given that this content should be localized to the adopting institution and course. The associated Moodle template includes placeholders for the elements found in Learner Support, which should be completed by adopting instructors to articulate the elements contained within this standard.*

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### Suggestions For Improvement

### Reviewer Recommendations

STANDARD 7.2

### Evidence

Met according to the parameters of this review.

### Suggestions For Improvement STANDARD 7.3 - (3 Points) **Essential**

**7.3 Course instructions articulate or link to the institution's academic support services and resources that can help learners succeed in the course.**

**Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)**

STANDARD 7.3

### Reviewer Recommendations Evidence

*Learner Support was marked Met by all reviewers, but it was not reviewed given that this content should be localized to the adopting institution and course. The associated Moodle template includes placeholders for the elements found in Learner Support, which should be completed by adopting instructors to articulate the elements contained within this standard.*

### **Suggestions For Improvement**

STANDARD 7.3

### **Reviewer Recommendations Evidence**

*Learner Support was marked Met by all reviewers, but it was not reviewed given that this content should be localized to the adopting institution and course. The associated Moodle template includes placeholders for the elements found in Learner Support, which should be completed by adopting instructors to articulate the elements contained within this standard.*

### **Suggestions For Improvement**

STANDARD 7.3

### **Reviewer Recommendations**

#### **Evidence**

Met according to the parameters of this review.

### **Suggestions For Improvement STANDARD 7.4 - (1 Point)**

### **7.4 Course instructions articulate or link to the institution's student services and resources that can help learners succeed.**

**Points Possible: 1 Points Awarded: 1 Result: MET (Yes: 3, No: 0)**

STANDARD 7.4

### **Reviewer Recommendations Evidence**

*Learner Support was marked Met by all reviewers, but it was not reviewed given that this content should be localized to the adopting institution and course. The associated Moodle template includes placeholders for the elements found in Learner Support, which should be completed by adopting instructors to articulate the elements contained within this standard.*

### **Suggestions For Improvement**

STANDARD 7.4

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STANDARD 7.4

### **Reviewer Recommendations Evidence**

*Learner Support was marked Met by all reviewers, but it was not reviewed given that this content should be localized to the adopting institution and course. The associated Moodle template includes placeholders for the elements found in Learner Support, which should be completed by adopting instructors to articulate the elements contained within this standard.*

## Suggestions For Improvement

### Reviewer Recommendations

#### Evidence

Met according to the parameters of this review.

**General Standard 8: Accessibility and Usability: The course design reflects a commitment to accessibility and usability for all learners.**

STANDARD 7.4

## Suggestions For Improvement

**Overview Statement: The course design utilizes the principles of Universal Design for Learning (UDL) and reflects a commitment to accessibility, ensuring all learners can access all course content and activities, and to usability, ensuring all learners can easily navigate and interact with course components.**

**Disclaimer: Meeting QM Specific Review Standards regarding accessibility does not guarantee or imply that the specific accessibility regulations of any country are met.**

### STANDARD 8.1 - (3 Points) **Essential**

#### 8.1 Course navigation facilitates ease of use.

**Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 2, No: 1)**

STANDARD 8.1

### Reviewer Recommendations Evidence

Course navigation facilitates ease of use. The layout and design of this course are consistent with content, instructional materials, and objectives. The course design enables learners to easily locate where they are within the course and easily return to the home page from any location.

## Suggestions For Improvement

STANDARD 8.1

### Reviewer Recommendations Evidence

The course template is well designed and easily navigable. Blocks/modules flow easily one to another. The pages are easy to read. There is not an overwhelming array of font or color which can be distracting. The navigation pane on the left is very useful.

## Suggestions For Improvement

No suggestions.

STANDARD 8.1

### Reviewer Recommendations Evidence

Nearly every URL in this class opens in the same window as the LMS page. This means that whenever a student clicks on any external URL, including the video links, activity links, etc., the student will effectively "lose their place" in the course and need to navigate back to where they originally clicked on the link. This does not meet the expectations of this standard.

The links to the textbook website did open in a new window.

The video links and embedded videos all have the video title (or video embed) followed by the complete "naked" URL for the video. This would not be accessible, as students using screen readers would need to listen to the entire URL without being able to access the video. The same is true for the textbook links; they are included as "naked" URLs rather than hyperlinked text if accessed from the left-panel navigation bar.

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### Suggestions For Improvement

To help students stay on track with their course participation, consider editing all external URL links in the course to open in a new window. This would help this course to meet the expectations of this standard.

Consider removing all "naked" URLs from the course to make it more accessible. This includes replacing the textbook links with hyperlinked text as well as removing the extra video URLs after a hyperlinked or embedded video.

### STANDARD 8.2 - (3 Points) Essential

#### 8.2 The course design facilitates readability.

Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)

STANDARD 8.2

#### Reviewer Recommendations Evidence

This course has little to no spelling and grammar errors that distract from learning. There are pictures within some course materials. However, these are referred to and enhance the materials and are not viewed as distractions.

### Suggestions For Improvement

STANDARD 8.2

#### Reviewer Recommendations Evidence

Course makes good use of white space. There are not overwhelming sets of images; fonts are easy to read. Colors are harmonious and not overwhelming. There is a consistency in presentation of information which makes navigation flow easily.

### Suggestions For Improvement

module. The text does not feel crowded or confusing, there is enough white or blank space to prevent reader fatigue.

#### Reviewer Recommendations

STANDARD 8.2

#### Evidence

Heading styles are mostly used to consistently separate the different components of each

Naming conventions such as Chapter Assignments, Chapter Discussions, VWS assignments, etc. are used consistently to help avoid confusion. The text is legible and the student can adjust the size with their browser settings.

Color is not used to convey meaning, only for emphasis if at all.

If used, color is not distracting and does not prevent the student from being able to read the material.

The course contains no underlined text which might be confused for a hyperlink.

### Suggestions For Improvement

### STANDARD 8.3 - (3 Points) Essential

#### 8.3 The course provides accessible text and images in files, documents, LMS pages, and web pages to meet the needs of diverse learners.

Points Possible: 3 Points Awarded: 3 Result: MET (Yes: 3, No: 0)

**Reviewer Recommendations Evidence**

Not including Pressbook - The course provides accessible text and images in files, documents, LMS pages, and web pages to meet the needs of diverse learners. Text colors alone are not relied on to convey meaning. Underlined text is avoided unless used for navigation. When using the accessibility inspection tool in Pressbook, alt text was provided.

**Suggestions For Improvement**

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Consider making the alt-text content more easily accessible by adding it to the LMS page, such as a list of images and the descriptions on each Module.

STANDARD 8.3

**Reviewer Recommendations Evidence**

Images in the textbook and in the modules are captioned so that a screen reader should be able to read them. The syllabus design needs to be reconsidered to integrate headings rather than bold which can often interfere with screen readers for visual impaired students. Images are appropriate to each module and learning section.

**Suggestions For Improvement**

Consider reformatting the syllabus to be more compliant with Universal Design.

STANDARD 8.3

**Reviewer Recommendations Evidence**

The text-based content in the course is all searchable and selectable, making it all accessible. All images placed in the course contain Alt Text or Figure captions.

**Suggestions For Improvement****STANDARD 8.4 - (2 Points)**

**8.4 The course provides alternative means of access to multimedia content in formats that meet the needs of diverse learners.**

**Points Possible: 2 Points Awarded: 0 Result: NOT MET** (Yes: 0, No: 3)

STANDARD 8.4

**Reviewer Recommendations Evidence**

YouTube's and Khan Academy videos have closed captioning available. However, the Pressbook chapters are not searchable files and do not provide for the audio reading of the content. This reviewer was also unable to use a reader for the Pressbook chapters. In addition, after several attempts, this reviewer was unable to find a way to complete the simulator activities from a perspective of needing more accessibility - such as audio or visual applications.

**Suggestions For Improvement**

Consider providing or having the ability of an outside resource to provide an audio reader version or an add-on to the Pressbook chapters provided and the course webpage. Consider contacting or having other options for the simulation activities for those that would need additional accessibility to do these learning activities.

STANDARD 8.4

**Reviewer Recommendations Evidence**

Videos in Khan academy are generally captioned. I didn't see any videos linked inside the textbook. For the Video Summary assignment, some of the videos are not captioned. For example, the units of measure video in Unit 1 is not captioned, and I did not see a transcript of that one. Same with the Physics Motion Graphs in Module 2.

### Suggestions For Improvement

Please check all videos for captioning.

STANDARD 8.4

### Reviewer Recommendations Evidence

There are some issues with the embedded videos and closed captioning. Every video that has been embedded does not include closed captions.

However, if a student would follow the link, they would be linked to a version of the video that did have closed captions.

### Suggestions For Improvement

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Consider removing the embedded videos from the course and only include the linked versions. This would allow all students to access the accessible version of this recording only.

### STANDARD 8.5 - (2 Points)

**8.5 Course multimedia facilitate ease of use.**

**Points Possible: 2 Points Awarded: 2 Result: MET (Yes: 3, No: 0)**

STANDARD 8.5

### Reviewer Recommendations Evidence

The videos and links to other readings within the Pressbook chapters are easy to use with clear images and clear audio. The videos are shorter than 15 minutes and this reviewer did not experience difficulty with connections to the websites (Pressbook, Khan Academy, YouTube, or the simulation activities).

### Suggestions For Improvement

STANDARD 8.5

### Reviewer Recommendations Evidence

The multimedia relies upon sources outside the LMS and course, but they are appropriate for the course, and in general, they are easy to access. I did find that some of the PHET videos needed a bit more direction in order to interact with them, but eventually, I figured out how to make those interactive elements work. The Khan academy videos are well done and express the abstract concepts in a relatively simple way.

### Suggestions For Improvement

STANDARD 8.5

### Reviewer Recommendations Evidence

Course videos allow for repeated use, changing the playback speed, changing the size of the video window, etc. without relying on high-speed internet access.

### Suggestions For Improvement

### STANDARD 8.6 - (2 Points)

**8.6 Vendor accessibility statements are provided for all technologies required in the course. Points Possible: 2 Points**

**Awarded: 2 Result: MET (Yes: 2, No: 1)**

STANDARD 8.6

### Reviewer Recommendations Evidence

Accessibility statements are provided for Pressbook and Moodle on the LMS page. Accessibility statements can be found on the links for YouTube and Khan Academy with searches on their sites. This reviewer was unable to find an accessibility statement for the simulator activities site.

### **Suggestions For Improvement**

Consider adding accessibility statements to this course on the LMS page or in the syllabus for Khan Academy and YouTube. Consider also, to locate and add an accessibility statement for the simulator activities or note the absence of one.

STANDARD 8.6

### **Reviewer Recommendations Evidence**

The Learner Support module contains a page named Accessibility Policies and Services which defines the accessibility policies for Pressbooks and Moodle but does not mention Khan Academy, YouTube, or PHET.

### **Suggestions For Improvement**

Consider adding accessibility statements for ALL technologies currently at use in the class, including Khan Academy, YouTube, and pHET. © 2023 Quality Matters All rights reserved.

Consider adding accessibility statements for ALL technologies currently at use in the class, including Khan Academy, YouTube, and pHET.

### **Reviewer Recommendations**

#### **Evidence**

A template for this is provided, and Pressbooks/Moodle's statements are present.

### **Additional Review Comments:**

#### **Reviewer**

STANDARD 8.6

### **Suggestions For Improvement**

The syllabus indicated that the Report Assignments must include the Video Watch Summary, but the VWS has been made into unique assignments outside of the Report Assignment. You might consider revising the syllabus to remove this discrepancy.

Some of the VWS activities require users to possess items they were not warned they'd need. For example, the Module 1 Activity Assignment, students are informed they need to be able to measure the mass of a can of beans in grams. If students do not possess a gram-based scale, they would not be able to participate in this activity. It might be a good idea to review all activities to confirm that students are warned about needing specific equipment. Alternatively, the activities could be altered to reflect items students would already possess.

The Discussion Forum prompts instruct students to provide definitions that are available from the primary instructional materials or from internet searches. You might consider narrowing the focus of these forums to address slightly different prompts, which could inspire students to critically think about the concepts rather than repeating already well-established definitions.

Module 10 Magnetism contains no content. It might be a good idea to remove it from the course completely.

**TOTAL POINTS AWARDED: 92**

**FINAL RESULT: DID NOT MEET STANDARDS**



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