



## Faculty Review of Open eTextbooks

The [California Open Educational Resources Council](http://www.cool4ed.org) has designed and implemented a faculty review process of the free and open etextbooks showcased within the California Open Online Library for Education ([www.cool4ed.org](http://www.cool4ed.org)). Faculty from the California Community Colleges, the California State University, and the University of California were invited to review the selected free and open etextboks using a rubric. Faculty received a stipend for their efforts and funding was provided by the State of California, the William and Flora Hewlett Foundation, and the Bill and Melinda Gates Foundation.

Textbook Name:

### Light and Matter



License:



*Light and Matter* by Benjamin Crowell is licensed under a [Creative Commons Attribution-ShareAlike 3.0](https://creativecommons.org/licenses/by-sa/3.0/)

Find it: [eTextbook Website](#)

Textbook Authors:

Benjamin Crowell

Reviewed by:

Leah Sharp

Institution:

College of Marin

Title/Position:

Professor

Format

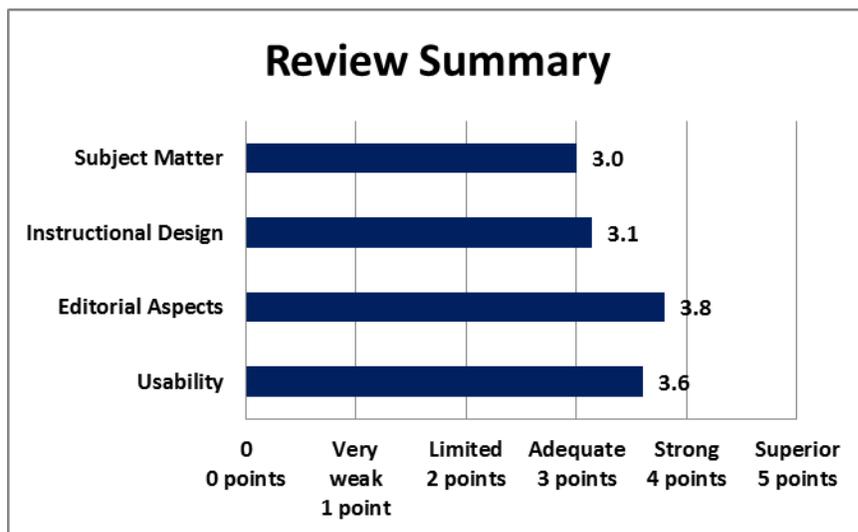
Reviewed:

[Online](#)

A small fee may be associated with various formats.

Date Reviewed:

March 2015



### California OER Council eTextbook Evaluation Rubric

CA Course ID: [PHYS 105](#)

Subject Matter (30 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Is the content accurate, error-free, and unbiased?					X	
Does the text adequately cover the designated course with a sufficient degree of depth and scope?					X	
Does the textbook use sufficient and relevant examples to present its subject matter?			X			
Does the textbook use a clear, consistent terminology to present its subject matter?					X	
Does the textbook reflect current knowledge of the subject matter?					X	
Does the textbook present its subject matter in a culturally sensitive manner? (e.g. Is the textbook free of	X					

offensive and insensitive examples? Does it include examples that are inclusive of a variety of races, ethnicities, and backgrounds?)						
---------------------------------------------------------------------------------------------------------------------------------------	--	--	--	--	--	--

Total Points: 18 out of 30

Please provide comments on any aspect of the subject matter of this textbook:

- The content of this book is appropriate for College Physics Algebra Based A (CID# PHYS 105). However, in my opinion that more examples related to the biological sciences would improve this text greatly.

Instructional Design (35 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Does the textbook present its subject materials at appropriate reading levels for undergrad use?					X	
Does the textbook reflect a consideration of different learning styles? (e.g. visual, textual?)				X		
Does the textbook present explicit learning outcomes aligned with the course and curriculum?		X				
Is a coherent organization of the textbook evident to the reader/student?					X	
Does the textbook reflect best practices in the instruction of the designated course?				X		
Does the textbook contain sufficient effective ancillary materials? (e.g. test banks, individual and/or group activities or exercises, pedagogical apparatus, etc.)				X		
Is the textbook searchable?					X	

Total Points: 22 out of 35

Please provide comments on any aspect of the instructional design of this textbook:

- The textbook jumps right in to center of mass and continues from there; then provides a natural transition to defining position and time (displacement and time intervals). Optional calculus sections are included for the interested and motivated students. A drawback to this textbook is its lack of biologically relevant applications.

Editorial Aspects (25 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Is the language of the textbook free of grammatical, spelling, usage, and typographical errors?					X	
Is the textbook written in a clear, engaging style?					X	
Does the textbook adhere to effective principles of design? (e.g. are pages laid out and organized to be clear and visually engaging and effective? Are colors, font, and typography consistent and unified?)					X	
Does the textbook include conventional editorial features? (e.g. a table of contents, glossary, citations and further references)					X	
How effective are multimedia elements of the textbook? (e.g. graphics, animations, audio)				X		

Total Points: 19 out of 25

Please provide comments on any editorial aspect of this textbook.

Usability (30 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Is the textbook compatible with standard and commonly available hardware/software in college/university campus student computer labs?						X
Is the textbook accessible in a variety of different electronic formats? (e.g. .txt, .pdf, .epub, etc.)					X	
Can the textbook be printed easily?						X
Does the user interface implicitly inform the reader how to interact with and navigate the textbook?			X			
How easily can the textbook be annotated by students and instructors?			X			

Total Points: 18 out of 30

Please provide comments on any aspect of access concerning this textbook.

- As indicated on the website, the web based version has formatting issues; the pdf does not have these problems. The online version does not have annotation options for the user; depending on the software

used by the user, the pdf version could be annotated.

Overall Ratings						
	Not at all (0 pts)	Very Weak (1 pt)	Limited (2 pts)	Adequate (3 pts)	Strong (4 pts)	Superior (5 pts)
What is your overall impression of the textbook?				X		
	Not at all (0 pts)	Strong reservations (1 pt)	Limited willingness (2 pts)	Willing (3 pts)	Strongly willing (4 pts)	Enthusiastically willing (5 pts)
How willing would you be to adopt this book?				X		

Total Points: 6 out of 10

## Overall Comments

If you were to recommend this textbook to colleagues, what merits of the textbook would you highlight?

- The language used in this textbook is clear and concise, great for a student taking physics for the first time. The textbook jumps right in to center of mass and continues from there; then provides a natural transition to defining position and time (displacement and time intervals). Optional calculus sections are included for the interested and motivated students.

What areas of this textbook require improvement in order for it to be used in your courses?

- I would consider adopting this textbook if more examples pertaining to the biological sciences were included. In addition, fluid dynamics seems to be missing.

We invite you to add your feedback on the textbook or the review to [the textbook site in MERLOT](#)  
(Please [register](#) in MERLOT to post your feedback.)



For questions or more information, contact the [CA Open Educational Resources Council](#).



This [review](#) is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).

Light and Matter -- physics for students majoring in the life sciences. Simple Nature -- physics for scientists and engineers, with a nontraditional order of topics. Mechanics -- introductory mechanics for scientists and engineers, with a traditional order of topics. Fields and Circuits. Conceptual Physics. Problems in Introductory Physics. Light & Matter's Conversations with Great Photographers from Around the World. Learn Photography Macro Photography Articles. Thomas Shahan & Macro Photography. See all results. Follow Light & Matter by Email. Get Notified of New Articles and Videos. Please leave this field empty. Email \*. Select list(s): Follow By Email (All New Articles) Light & Matter Weekly Digest. We keep your data private and never sell it. Read our Privacy Policy.