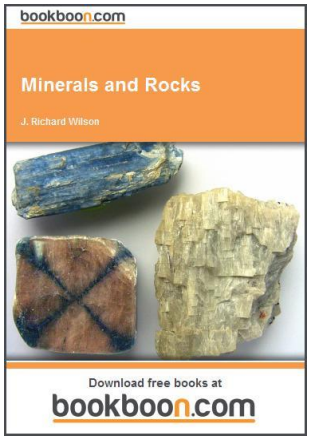
Faculty Review of Open eTextbooks

The California Open Educational Resources Council 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). 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:

Minerals and Rocks



Find it: eTextbook Website

Textbook Authors:
J. Richard Wilson

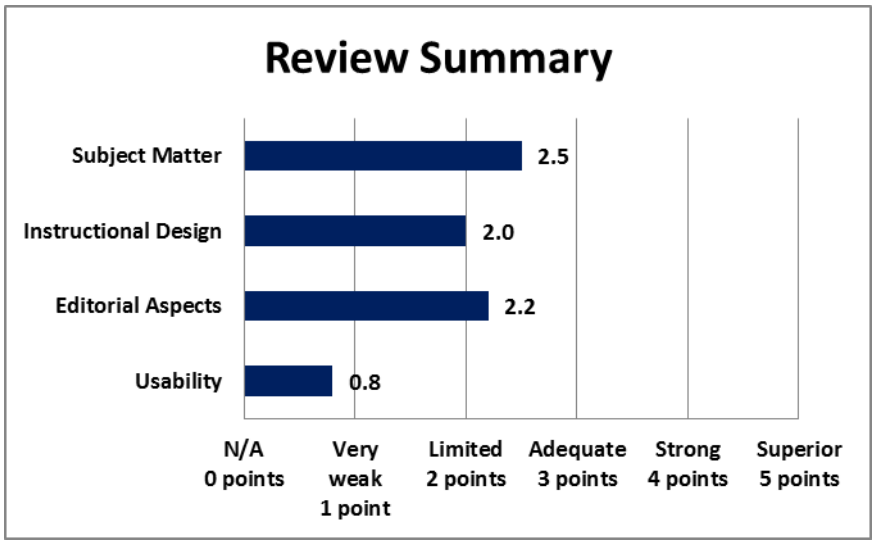
Reviewed by:
Elise Knittle

Institution:
University of California, Santa Cruz

Title/Position:
Professor

Format Reviewed:
Online

A small fee may be associated with various formats.



Date Reviewed:
December 2015

California OER Council eTextbook Evaluation Rubric

CA Course ID: GEOL 100

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

Total Points: 15 out of 30

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

- I note that this textbook is fine as a textbook on Minerals and Rocks. However, I was asked to review this book as a possible text for a survey course in Physical Geology. For that end, this book may not that useful and so here are some comments on its suitability as a textbook for Physical Geology.

- I note that a typical university Physical Geology course will cover a broad range of introductory material including: plate tectonics; geologic time; minerals/earth materials; igneous, sedimentary and metamorphic rocks; mountain building and deformation of the Earth's surface; basic geophysics (earthquakes, earth structure); landforms/geomorphology; weathering/erosion; surface water (liquid and frozen); the ocean and the atmosphere; and Earth resources (economic minerals/petroleum etc.). The breadth of material covered in Physical Geology necessitates that only 1-2 lectures are spent on any given topic and these lectures are the broadest type of overview.

- This "Mineral and Rocks" textbook is a very complete introduction to the traditional teaching of practical mineralogy and igneous, metamorphic and sedimentary petrology. It would, for example, be a suitable textbook for a 3-quarter upper division course sequence in those topics (which is a typical second year course-load for a geology or earth sciences major). However, for an introductory survey course, this book would only cover about 4-6 lectures worth of material and goes far beyond the typical content of a survey course.

- The parts of this on-line textbook I could imagine assigning for intro physical geology students to read are the first two chapters (Introduction and Minerals -- an Introduction) which are about 20 pages long, and the first few pages of Chapters 5 (Igneous Rocks), 6 (Sedimentary Rocks) and 7 (Metamorphic Rocks). The majority of the content of these Chapters is too advanced for beginning students.

- This book could serve as an excellent reference for students interested in a more detailed treatment of these topics but it does not cover enough material to serve as a stand-alone text for a survey course in Physical Geology. For example, there is no treatment of plate tectonics or geologic time in this textbook – those topics are absolutely key subjects for any introductory survey course.

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: 14 out of 35

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

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 latid0out 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: 11 out of 25

Please provide comments on any editorial aspect of this textbook:

- I was completely distracted by the many ads at the front of the book.

Usability (25 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: 4 out of 25

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

- I wasn't able to assess some of these thing (i.e. can the textbook 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: 5 out of 10

Overall Comments

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

- It's a useful standard text for teaching mineralogy and basic igneous, metamorphic and sedimentary petrology.

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

- If I was teaching an on-line mineralogy course this book would be fine. But for an on-line survey course in Physical Geology this book was have very limited use.

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.)

CALIFORNIA OER COUNCIL
CSU + CCC + UC

For questions or more information, contact the CA Open Educational Resources Council.