



## 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:

### The Environment and the Earth's Surface



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Find it: [eTextbook Website](#)

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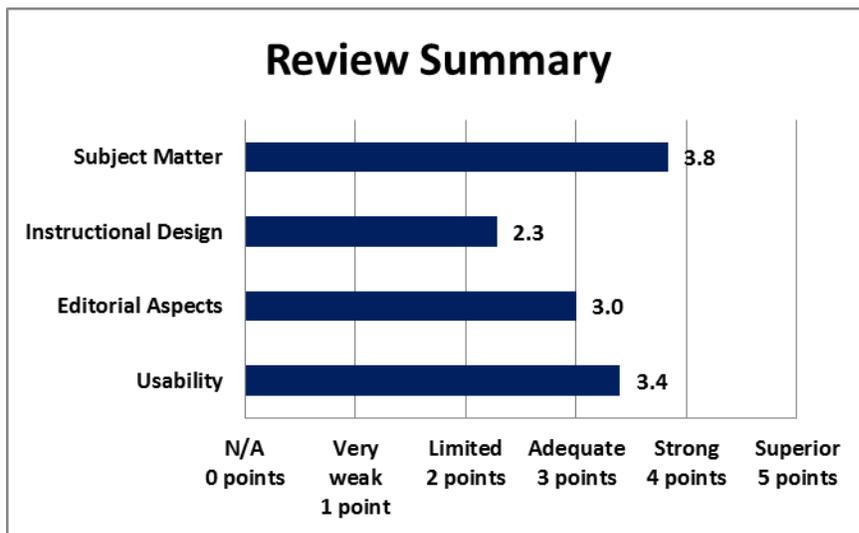
Professor

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: 23 out of 30

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

- The subject material for this text is focused on explaining "earth surface processes". Whereas the text is inappropriate for an introductory geology course (e.g., GEOL 100), it may be suitable with a 200-level geomorphology course for science majors due to the overwhelming emphasis on processes related to aqueous geochemistry and weathering, which are then utilized to explain landforms. Very little (or zero) attention is paid to plate tectonics, structural geology, earthquakes, volcanic eruptions, fossils, geologic time, and the overall geological evolution of our planet, which would be necessary for an introductory geology course like GEOL 100.
- There are no end-of-chapter questions or high quality photographs showing landscapes and landforms. Instead, all images are simple and idealized (although largely not annotated) illustrations made with an electronic drawing software. Neither of these are requirements of geology textbooks, but they are commonly included because geological processes are so challenging to recognize and identify for introductory geology students in the field compared to in a textbook with idealized drawings. Also, because of the topography and map reading chapter, I was surprised to not see any geologic map examples for students to interpret, although this is something I would supplement.

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: 16 out of 35

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

- This is a no-frills textbook with hundreds of pages of text complemented by simple, clean, and informative idealized illustrations. Illustrations are sparsely annotated and there are no videos, geologic maps, real-life photographs of landscapes, or other multimedia components.
- My sense is that this text was written for students with previous academic experiences in science, not necessarily because of terminology or reading ease, but because of the way that the author(s) tend to present the material in a plain and direct way devoid of analogies from everyday life, which are helpful in an introductory geology text.
- Also, because the text is so heavily text based, it also seems like this book was designed for students who identify with linguistic intelligence, rather than those students who identify with spatial and logical intelligence, the latter of which I more typically see in geology classes.

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: 15 out of 25

Please provide comments on any editorial aspect of this textbook:

- The text is straightforward, accurate, and written in a way that seems most accessible for students who already possess an interest in science.
- Illustrations are simple and clean drawings that portray idealized scenes of what the author attempts to explain, which is nice. But, these types of illustrations prevents students with limited experience (in the outdoors and/or in geology) from learning to recognize various geological characteristics in a non-ideal example (real world outcrops are weathered, covered, etc.). It would be better to supplement images of outcrops with these illustrations/drawings to show what "a geologist sees".
- If I were to utilize this book for a class, I would supplement it with videos, geologic maps, animations, and other multimedia files, as there are none in this text.

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: 17 out of 25

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

- The book is a series of PDF chapter files - each ranging in length from about 40-80 pages.
- Students could easily print these if they want and/or annotate in Adobe.
- Instructors could also easily post these chapters on a learning management platform (e.g., Blackboard, Moodle) for easy access for students too.

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: 3 out of 10

## Overall Comments

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

- This book is a well-written and well-organized text that is most appropriate for 200-level courses aimed at introducing geology/earth science/geography majors who have already completed a GEOL 100 type course to geological sub-disciplines like geomorphology and surfaces processes.

- Illustrations are clean, simple, and idealized, and the author(s) utilize modern advances in the science to explain the origin of landforms and landscape evolution.

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

The following changes would need to be made in order for me to use this in my Geology 100 course:

- Addition of sections that offer a more thorough treatment of geologic time, as well as plate tectonics, structural geology, earthquakes, volcanic eruptions, fossils, and the overall geological evolution of our planet. As the book is now, it does not cover the topics that I see as the most important for an introductory geology course.
- Real-life photographs of geological outcrops and landforms coupled with the idealized illustrations currently in the book. Students need to learn how to identify and recognize subtle features of rocks and landforms in order to interpret their origin. Idealized illustrations are helpful, but only if students can see what the landform or outcrop looks like in "real life".

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