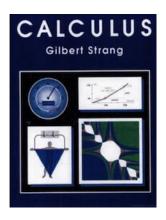


Faculty Review of Open eTextbooks

The <u>California Open Educational Resources Council</u> 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:

Calculus



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Textbook Authors: Gilbert Strang

Reviewed by:
Mark Eastman

Institution:

University of California, Santa Cruz

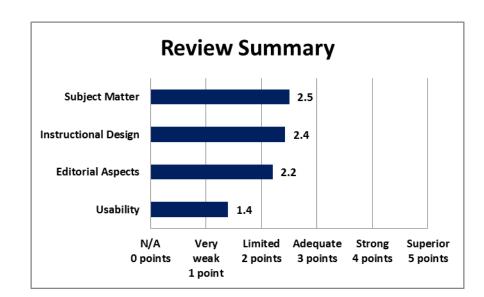
Title/Position:

Professor

Format Reviewed:

Online

A small fee may be associated with various formats.



Find it: eTextbook Website

Date Reviewed:

December 2015

California OER Council eTextbook Evaluation Rubric

CA Course ID: MATH 210

Subject Matter (30 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
b the content accurate, error-free, and unbiased?			Х			
Does the text adequately cover the designated course with a sufficient degree of depth and scope?				х		
Does the textbook use sufficient and relevant examples to present its subject matter?				х		

Does the textbook use a clear, consistent terminology to present its subject matter?				х	
Does the textbook reflect current knowledge of the subject matter?			х		
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?)	х				

Total Points: 15 out of 30

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

- The theme of the text is ideas first, rigor later. This format may be hard for some instructors to use.
- Concepts are presented in a more conversational manner than most other calculus texts; students may appreciate this presentation.

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				Х		
appropriate reading levels for undergrad use?				^		
Does the textbook reflect a consideration of different		Х				
learning styles? (e.g. visual, textual?)		^				
Does the textbook present explicit learning outcomes				х		
aligned with the course and curriculum?				^		
Is a coherent organization of the textbook evident to the					х	
reader/student?					^	
Does the textbook reflect best practices in the instruction			х			
of the designated course?			^			
Does the textbook contain sufficient effective ancillary						
materials? (e.g. test banks, individual and/or group				Х		
activities or exercises, pedagogical apparatus, etc.)						
Is the textbook searchable?		X				

Total Points: 17 out of 35

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

- The PDF format I read was not searchable or interactive at all. It was very hard to read on both a computer and on my tablet.
- There are few illustrations in the text; more illustrations would help.
- The exercise sets are extensive, with a sufficient number of problems from which to choose.

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?			х			
Is the textbook written in a clear, engaging style?					Х	
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?)			Х			
Does the textbook include conventional editorial features? (e.g. a table of contents, glossary, citations and further references)			х			
How effective are multimedia elements of the textbook? (e.g. graphics, animations, audio)		Х				

Total Points: 11 out of 25

Please provide comments on any editorial aspect of this textbook:

- This text needs a new format. The content and presentation of this text is one of the best on the list I have reviewed, but the format in which I viewed it was very poor (like a poorly copied text).
- It would be nice to have the ability to easily move to various sections and pages within the text; that is not possible in the current format.

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?		х				
Is the textbook accessible in a variety of different electronic formats? (e.gtxt, .pdf, .epub, etc.)		х				
Can the textbook be printed easily?				Х		
Does the user interface implicitly inform the reader how to interact with and navigate the textbook?			х			
How easily can the textbook be annotated by students and instructors?	х					

Total Points: 7 out of 25

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

• The lack of ability to search and navigate is a serious drawback of this text. Even the printed pages were hard to read; it looked as if the manuscript pages were just poorly scanned into PDF format.

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?				х		
	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?			х			

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?

- The conversational style of presentation is a bit hard at first, but eventually is appealing to the reader.
- The exercise sets are extensive; there is a very good selection of problems to choose from.
- Some ideas presented without rigor yield some very interesting facts I have not seen before.

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

- The text needs a better format rather than a hard to read PDF format.
- Some key concepts are presented by working examples; there is little explanation as to what the key idea is. This learn by doing approach is usually successful, but is sometimes lacking in clarity.

We invite you to add your feedback on the textbook or the review to the <u>textbook site in MERLOT</u> (Please <u>register</u> in MERLOT to post your feedback.)



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

