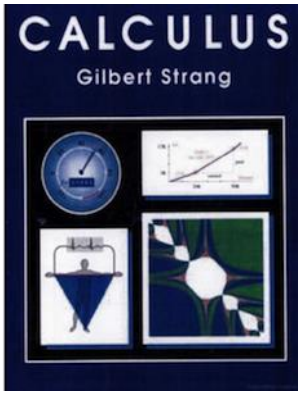
Faculty Review of Open eTextbooks

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:

Calculus



Find it: eTextbook Website

Textbook Authors:

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Reviewed by:

Jeff Silverman

Institution:

California State University, Sonoma

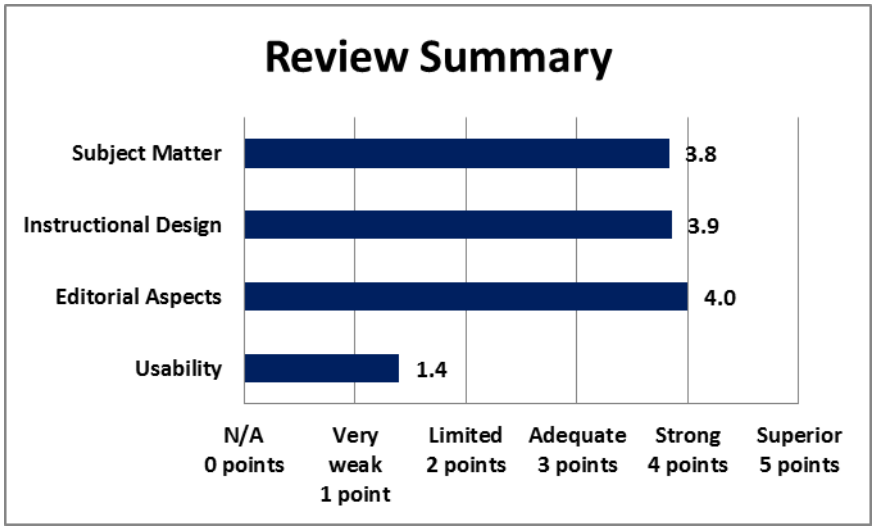
Title/Position:

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: 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)
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 author presents calculus with many applications to physics (which I think is very appropriate). Many Calculus texts concentrate more on skills than applications.
- Also, the text uses graphs extensively to demonstrate the different concepts presented in calculus.
- Test banks are not provided.
- Chapter review questions at the end of the chapter are not included. However, at the end of each chapter there are some fill in the blank questions that are thought provoking.

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: 27 out of 35

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

- The text introduces the calculus with a discussion of the relationship between velocity and distance and uses that relationship throughout the chapters on differential and integral calculus.
- The textbook contains some very unusual problems - not just the "typical" calculus problems.
- There are no group activities, however, there are some very challenging problems that could be used as group activities.
- The textbook does not have any searchable capabilities.

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: 20 out of 25

Please provide comments on any editorial aspect of this textbook:

- The textbook is rather stark in its appearance. This is acceptable for a certain type of student (perhaps engineering or physics), however, I don't think it is very engaging for a student that is taking a calculus

course to fulfill a prerequisite for biology.

- The author writes some of textbook in the first person (which is very unusual) - but I like it.

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: 7 out of 25

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

- It appears that the textbook can only be accessed in pdf format. There is no way (that I found) to navigate the textbook other than by scrolling.

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?

- I would recommend this textbook to instructors that have students that are planning on studying engineering or physics and have a very strong mathematical background (they perhaps may have taken a high school calculus course).
- Most of the sections have some sort of application included in both the exercises and the reading.
- At times it seems as if the author is speaking directly to the reader. I think it makes the reading more engaging.

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

- Unfortunately, this textbook requires a higher level of mathematical maturity than the students in my courses possess. However, I would incorporate many of the author's examples in my lectures.

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