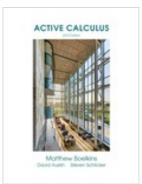


## **Faculty Review of Open eTextbooks**

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 (<u>www.cool4ed.org</u>). Faculty from the California Community Colleges, the California State University, and the University of California were invited to review the selected free and open etextbooks 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: Active Calculus

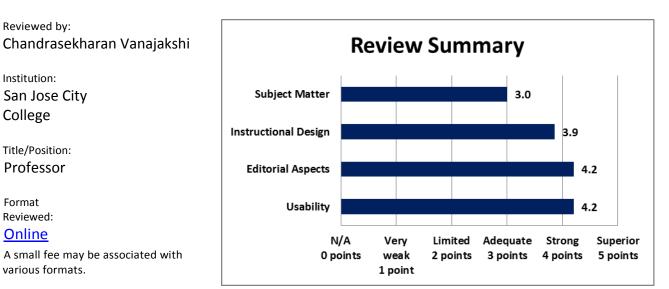


Textbook Authors: Matt Boelkins, David Austin, and Steve Schlicker



Active Calculus by Matt Boelkins, David Austin, and Steve Schlicker is licensed under a <u>Creative Commons Attribution-</u><u>NonCommercial-ShareAlike 4.0</u> International License

Find it: eTextbook Website



Date Reviewed:

August 2015

## **California OER Council eTextbook Evaluation Rubric**

CA Course ID: MATH 210

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

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: 18 out of 30

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

• Gives a good introduction to each sub-topic.

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?					х	
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?		х				
Is a coherent organization of the textbook evident to the reader/student?						х
Does the textbook reflect best practices in the instruction of the designated course?					х	
Does the textbook contain sufficient effective ancillary materials? (e.g. test banks, individual and/or group activities or exercises, pedagogical apparatus, etc.)						х
Is the textbook searchable?						Х

Total Points: 27 out of 35

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

- The 'Motivating Questions' and 'Preview Activities' and 'Activities' in the middle of the section combine the different approaches very nicely. This 'wraps' the material in a variety of ways that will make learning it easier.
- The summary at the end of each section is useful.
- The "flow" is handled very well here. The Preview Activities and the actual activities after the explanations facilitate active learning.
- The overall design is very good.

Editorial Accorts (2E passible points)	N/A	Very Weak	Limited	Adequate	Strong	Superior
Editorial Aspects (25 possible points)		(1pt)	(2 pts)	(3pts)	(4 pts)	(5 pts)
Is the language of the textbook free of grammatical,				х		
spelling, usage, and typographical errors?				^		
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						v
clear and visually engaging and effective? Are colors,						Х
font, and typography consistent and unified?)						
Does the textbook include conventional editorial						
features? (e.g. a table of contents, glossary, citations and					Х	
further references)						
How effective are multimedia elements of the textbook?						v
(e.g. graphics, animations, audio)						Х

Total Points: 21 out of 25

Please provide comments on any editorial aspect of this textbook.

- The book refers to JAVA Applets. I didn't see any in the pdf or electronic version.
- Page lay-out and the colors on graphs are very clear and attractive. The book is certainly written in an

engaging style using everyday situations or at least simple physics examples.

• No citations or further references are given.

Usability (25 possible points)	N/A (0 pts)	Very Weak	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior
	(0 pts)	(1pt)	(2 pts)	(Spis)	(4 pts)	(5 pts)
Is the textbook compatible with standard and commonly						
available hardware/software in college/university campus				Х		
student computer labs?						
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						v
to interact with and navigate the textbook?						Х
How easily can the textbook be annotated by students					v	
and instructors?					Х	

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

Total Points: 21 out of 25

- No information on whether it is tied in with course management systems.
- The links all over the text from Table of Contents to the body of the lesson and also the index at the end of the book makes it extremely easy to navigate it and connect things together. This is very good.

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

Total Points: 8 out of 10

## **Overall Comments**

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

- The instructional design is very good.
- The graphics are very clear with different colors emphasizing what is important in the graphs.
- The Motivating Questions that give a nice introduction to the topic and the activities interspersed throughout the lesson will improve student engagement a lot.
- The links to the equations and other material on the Exercises make it easy for the students to immediately go to the relevant part of the text to see how to solve the problem.

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

• Some real-world scenarios from different areas of human activity such as Physics, Engineering, Financial Modeling, Economics, Business and Social Sciences will make it clear to the students how enormously useful and ubiquitous calculus is. That in turn will make them take more interest in the subject instead of merely taking it for getting a grade. This is the only aspect that is wanting in this book.

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 <u>CA Open Educational Resources Council</u>.



This review is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.