

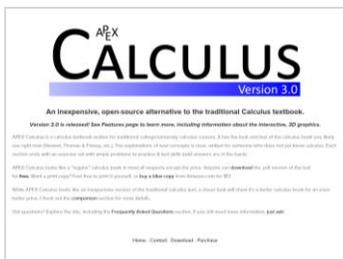


Faculty Review of Open eTextbooks

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 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:

Apex Calculus 3.0



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Find it: [eTextbook Website](#)

Textbook Authors:

Gregory Hartman, et al.

Reviewed by:

Shirley Yap

Institution:

California State University, East Bay

Title/Position:

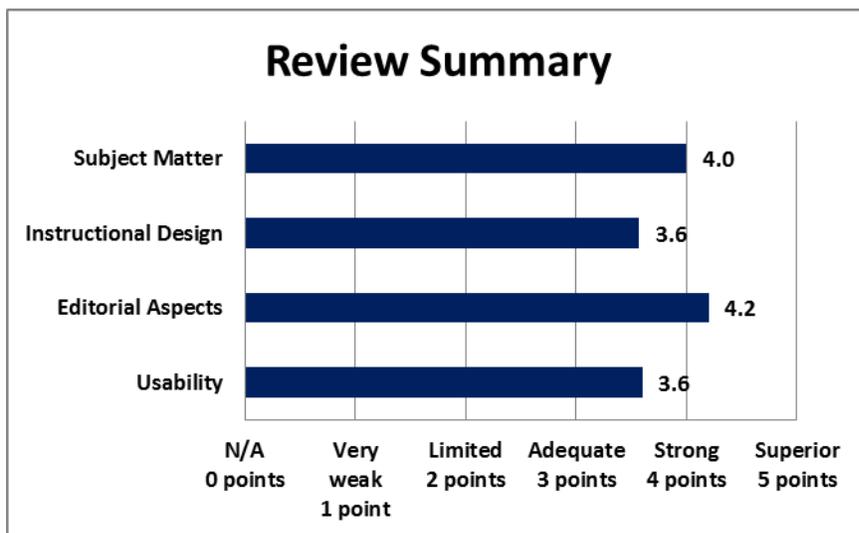
Professor

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 220](#)

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				X		

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?)						
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Total Points: 24 out of 30

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

- The strong points of the book include a lot of motivating examples, a streamlined, clean exposition, and conversational style that makes it student-friendly.
- Another strong component of the content is interactive graphics, which helps students understand functions of two variables and other three-dimensional calculus concepts.
- Some things it has sacrificed for its uncluttered exposition are proofs and the corresponding graphics that help students understand proofs.
- Often, textbooks come with text banks, student solutions manuals, and instructor solutions manuals. This book doesn't have those ancillary materials, but that should not deter faculty from adopting it, as these are not required.

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: 25 out of 35

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

- Some Calculus textbooks have many more graphics, which aid the visual learner, but this text certainly has the most important graphics. The exposition of the integral is very computational and it would better serve visual learners to have an understanding of integrals as area.

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: 21 out of 25

Please provide comments on any editorial aspect of this textbook:

- The text is well-written and well-edited.

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: 18 out of 25

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

- If the book is printed out, annotation is easy. If read in Adobe Reader, annotation is possible, but only text (not mathematical symbols, which can be important).

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: 7 out of 10

Overall Comments

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

- Streamlined and conversational style that is geared towards making the student comfortable and not overwhelmed. However, the price paid for this comfort is the lack of many proofs (which some would say are the heart of mathematics) in the text.
- In some ways, this text is geared more towards the engineer who wants the tools without necessarily understanding how the tools work rather than the physics or math student who wants to understand things more deeply.

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

- The authors deliberately wanted to eliminate many of the proofs because it often confuses students and proofs can of course be found elsewhere (online or in other books). While I agree with the additional stress proofs put on students, I do think that students need to know of their importance in math. I would also like to see more graphics.

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