

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:

Precalculus



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Find it: eTextbook Website

Textbook Authors: Carl Stitz and Jeff Zeager

Reviewed by: Kristin Webster

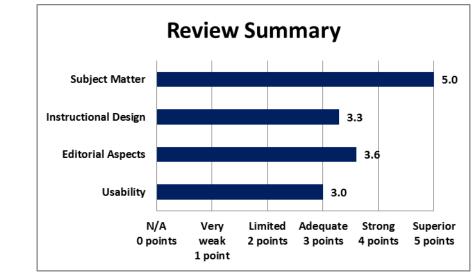
Institution: California State University, Los Angeles

Title/Position: Professor

Format Reviewed:

<u>Online</u>

A small fee may be associated with various formats.



Date Reviewed:

May 2016

California OER Council eTextbook Evaluation Rubric

CA Course ID: MATH 155

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?						x

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: 30 out of 30

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

- The content of this book is amazing. The authors present the ideas of Precalculus in a clear and conceptual manner.
- I believe that both students and many novice instructors could use this book to understand some of the deeper connections between precalculus and calculus.
- Precalculus should certainly be more than an algebra review, it should help students shift from relying on a procedural knowledge in math.
- This book provides an excellent resource for this instructional objective.
- There are sufficient images to illustrate the concepts presented.
- There is no test bank that I am aware of.

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?)				х		
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: 23 out of 35

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

- The exercise sets are excellent but there are no ancillary materials. On the website, there are some additional teaching resources such as PowerPoint slides and sample quizzes. In addition, WebAssign has encoded most of the 3rd edition homework questions.
- The reading level does seem more sophisticated than a standard Precalculus text.
- There are no specific objectives listed. However, most sections begin with a narrative that hints at the objectives for the section.
- The book does seem to require some calculator use. This may be of concern to those not using a calculator in their course. My personal opinion is that questions pointing at "Graphing Utilities" are a bit dated. The use of static graphing devices is being replaced by more interactive tools (such as Desmos). Especially in light of the fact that this is a review for an Open Source Text, those teaching should also be considering the inclusion of other types of freely available math tools.

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: 18 out of 25

Please provide comments on any editorial aspect of this textbook:

- The strength of this text is that it presents the ideas in a very accessible and conceptual matter. If an instructor could get their students to actually sit and read the text, it would be an excellent resource.
- It is organized and sections are clearly labeled. The hyperlinks provide a way for students to navigate easily within the pdf version.
- The layout does seem a bit crowded. One of the things that students struggle with in reading a math text is slowing down to pause and think about each idea. This book has large paragraph explanations to many exercises which are insightful and clearly written but there are not any layout enforced pauses for students to be able to stop and consider the ideas presented.

Usability (25 possible points)		Very Weak	Limited	Adequate	Strong	Superior
Is the textbook compatible with standard and commonly available hardware/software in college/university campus student computer labs?	(0 pts)	(1pt)	(2 pts)	(3pts)	(4 pts)	(5 pts) X
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			
		•	•	T	otal Points:	15 out of 25

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

• A pdf math text is accessible on virtually any computer and most smart phones. However, annotating a pdf is often difficult as students usually only have a pdf reader and not more robust software. In general, I think many students would choose to print this book so that they could annotate it.

Overall Ratings						
	Not at	Very Weak	Limited	Adequate	Strong	Superior
	all (0 pts)	(1 pt)	(2 pts)	(3 pts)	(4 pts)	(5 pts)
What is your overall impression of the textbook?						х
	Not at	Strong	Limited			Enthusiastically
	all (0	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?						x

Total Points: 10 out of 10

Overall Comments

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

• Mainly the excellent exercise sets and strong conceptual presentation.

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

• None. The weaknesses highlighted in this review are ones that exist for most math textbooks and are not usually a concern for those choosing math texts.

We invite you to add your feedback on the textbook or the review to <u>the 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.



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