

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



License:

Precalculus by Jay Abramson, et al. is licensed under a <u>Creative Commons</u> <u>Attribution 3.0</u>

Find it: eTextbook Website

Textbook Authors: Jay Abramson, et al.

Reviewed by: Larry Green

Institution: Lake Tahoe Community College

Title/Position: Professor

Format Reviewed:

<u>Online</u>

A small fee may be associated with various formats.



Date Reviewed:

August 2015

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?				х		

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?			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?)			x	

Total Points: 23 out of 30

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

- This textbook covers all of the standard topics taught in any traditional precalculus course except for mathematical induction.
- The examples and exercises are standard, but do not go above and beyond classical examples.
- I would like to see more modern applications to the fields of computer science, biology, chemistry and geology that are similar to what students will see in these courses.

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?)					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: 29 out of 35

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

- This textbook is well organized with each section beginning with learning outcomes, followed by a relevant application, then content and examples, then key equations and concepts and finishes with a large collection of exercises.
- The videos that accompany each section are produced well and are of the appropriate length to retain students' interest.
- Students with visual or auditory learning styles will be appreciate the clear text, graphs and videos.
- Students with tactile learning styles will have to do their own search since this textbook does not contain or reference interactive apps. The examples in the OpenStax version have solutions that are revealed upon clicking a button. This allows the students to work on it before they see the solution. The odd exercises are formatted in a similar way.

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						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	

Please provide comments on any editorial aspect of this textbook.

- The layout of this book is excellent.
- Every example contains clear explanations with easy to read annotations.
- The graphs contain helpful comments and are multi-colored in a way that assists the students visually without being distracting.
- The videos include colored displays, well-paced speech, examples that are of the appropriate level of difficulty to explain the concepts being discussed.

N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
					x
				х	
					Х
					х
		х			
			(0 pts) (1pt) (2 pts)	(0 pts) (1pt) (2 pts) (3pts)	(0 pts) (1 pt) (2 pts) (3 pts) (4 pts)

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

- Having a pdf version makes it simple for students or the bookstore to create a printed version of the text.
- The OpenStax version is more interactive and easier to navigate and would be recommended for students who are accessing the textbook online. Students will have no issues accessing the textbook in either format.
- The videos are all closed captioned making them accessible to the hearing impaired.

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

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?

- The textbook is easy to read and has helpful videos to accompany each section.
- The graphs are well annotated and the difficulty level is appropriate for students in a precalculus course.

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

- The topic of mathematical induction needs to be added.
- The exercises are bland. Authentic exercises that reflect what students will see in their science courses must be included in each section.
- The introductory example for each section is interesting, but needs to be revisited in full detail either as an example or exercise.

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



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