



Faculty Review of Open eTextbooks

The [California Open Educational Resources Council](http://www.cool4ed.org) 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:

Linear Algebra Done Wrong



License:



Linear Algebra Done Wrong by Sergei Treil is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/)

Find it: [eTextbook Website](#)

Textbook Authors:

Sergei Treil

Reviewed by:

Kristin Webster

Institution:

California State University,
Los Angeles

Title/Position:

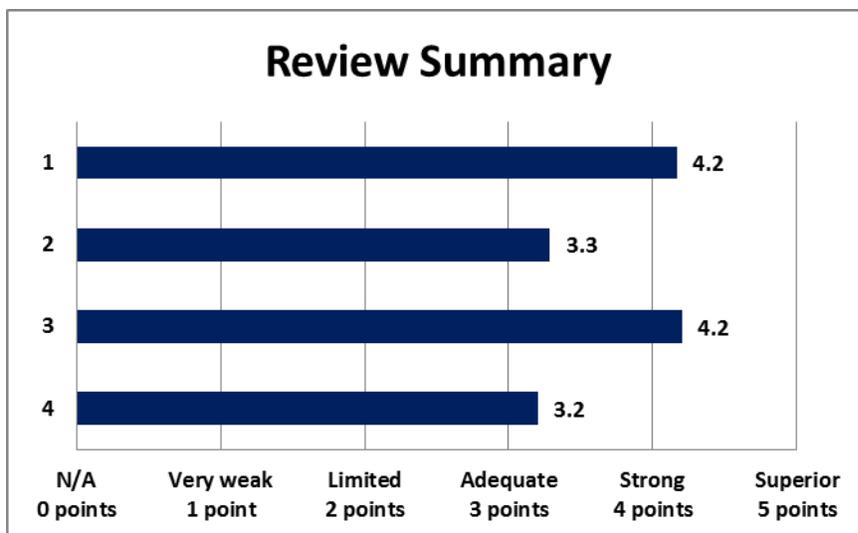
Professor

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 250](#)

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: 25 out of 30

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

- I believe the ordering of the topics in this book is conceptually appropriate. It would be my choice for a text if I were teaching the class to math majors who needed a good introduction to proof. However, if the Linear Algebra course being taught is more focused on compilation and application, this book would not be sufficient. I think most instructors would want more examples and more exercises. Check out the section on eigenvalues for a specific deficit in the latter category.
- The last few chapters of the text are not topics required by the Linear Algebra syllabus.
- There is no student solutions manual.

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: 23 out of 35

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

- Again, the audience for this book must be carefully considered. If you are using this course as an introduction to proof, it is a wonderful source. There are limited exercises, and even further limited computational exercises. I would think that many instructors would need another source to pull additional exercises from. On the other hand, for the correct audience, this book is beautifully written with a nice conceptual flow. See Chapter 4 on Spectral Theory for a good sample of the type of coverage this book has. It is rich with concept and motivation, but there is not much computational practice.

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:

- I think the visual layout of this book is appealing. The author uses textboxes to indicate important ideas or

concepts. He has margin notes to remind students of important ideas or to provide prompts at different lines of thinking.

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: 16 out of 25

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

- I could use the standard tools for notes and highlighting provided by Adobe Acrobat when using the pdf, but students may be using pdf readers without these capabilities (i.e. on their smartphones). When printed, there is adequate space in the margin to add notes.
- This book seems to assume most calculations would be done by hand. As such, there were no specific references to use of technology and many courses use calculators or online software for computation.

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?

- This would be the best text if utilizing Linear Algebra to transition students to proof and upper level mathematical thinking. It is very readable.

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

- It is just not appropriate for the audience of students in our Intro Linear Algebra course. The students are a variety of STEM majors and I would not use a textbook of this type for our current course.

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.)



For questions or more information, contact the [CA Open Educational Resources Council](#).



This [review](#) is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).