

## 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 no/low cost and open etextboks 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:

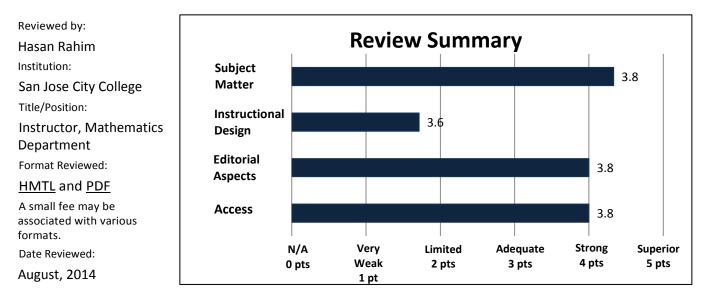
## Online Statistics Education: An Interactive Multimedia Course of Study



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## California OER Council eTextbook Evaluation Rubric

CA Course ID: MATH 110

Subject Matter (30 possible points)		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?					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,					х	

Subject Matter (30 possible points)	N/A	Very Weak	Limited	Adequate	Strong	Superior
	(0 pts)	(1pt)	(2 pts)	(3pts)	(4 pts)	(5 pts)
ethnicities, and backgrounds?)						

Total Points: 23 out of 30

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

This textbook has the look and feel of a research work. That is at once its strength and its weakness. It is geared more toward students majoring in math, science, medicine, technology or engineering. There is far more emphasis, for instance, on transformations (not just linear but logarithmic and exponential) than is found in traditional texts. As such, the text is more suitable as a supplemental resource for the average student. On the other hand, for advanced students, it is an excellent resource. Chapter 8, comprising "Advanced Graphics" and chapter 20, comprising 32 "Case Studies" are valuable references but for a one-semester course may be overkill. Each section of each chapter is written by one or more authors (hence the feel of a research paper), which is good but which also stands in the way of offering a sense of coherence. A nice touch is the inclusion of "Statistical Literacy" at the end of each chapter. However, the exercises at the end of each chapter are not sufficient to gauge the day-to-day progress of students. Problems and exercises should be distributed more uniformly throughout the chapters. It is clear that the subject matter presentation will appeal more to students with strong mathematical backgrounds than otherwise. All in all, an excellent supplementary resource.

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.)				x		
Is the textbook searchable?					X	

Total Points: 28 out of 35 points

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

The instructional design of the book is linear. Each section is by one or more authors and exercises follow at the end of the chapter. While the content is eclectic in some sense (Chapter 6 – Research Design, Chapter 13 – Power, Chapter 32 - Case Studies), the design is traditional and somewhat muted. However, content trumps form and design and so the book is a valuable resource for learning statistics. Certainly its research flavor is one of its distinguishing features.

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				х		
clear and visually engaging and effective? Are colors,				^		
font, and typography consistent and unified?)						
Does the textbook include conventional editorial						
features? (e.g. a table of contents, glossary, citations					Х	
and further references)						
How effective are multimedia elements of the					Х	

Editorial Aspects (25 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
textbook? (e.g. graphics, animations, audio)						

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

Total Points: 19 out of 25

Because each section of each chapter is written by one or more authors, some inconsistency regarding indentation, for instance, has crept in. The first line in some paragraphs is indented while in others, it is not. A few spelling errors also mar the overall professional look and feel of the book ("Affect" used in place of "Effect" in the title of chapter 29.) These are trivial layout errors that can be easily fixed. Overall, the editorial aspect of the textbook is commendable.

Access (30 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?					х	
Is the textbook accessible in a variety of different electronic formats? (e.gtxt, .pdf, .epub, etc.)					х	
Can the textbook be printed easily? Does the user interface implicitly inform the reader how to interact with and navigate the textbook?					x x	
How easily can the textbook be annotated by students and instructors?				х		

Total Points: 19 out of 30

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

The availability of the textbook in several formats, including pdf, e-pub and e-book, gives students the flexibility they need to gain a comprehensive understanding and mastery of statistics. The Virtual Lab implementing simulation is also a wonderful resource, although a few beginning students may struggle to master the basic idea behind simulation in statistics.

Overall Ratings (10 possible points)	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?					х	
	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?				Х		

## **Overall Comments**

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

- More advanced content than typical textbook
- Appeal more to students with strong math backgrounds
- Has a research flavor
- Interesting case studies
- Good virtual simulation lab

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

- Provide more exercises throughout the chapters to gauge student progress.
- Condense some of the chapters to fit within a traditional semester.
- Identify clearly who the textbook is meant for, that is, students majoring in which fields, and so on.
- Also identify the prerequisites for using this rather advanced textbook.

We invite 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 CA Open Educational Resources Council



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