



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:

Organic Chemistry



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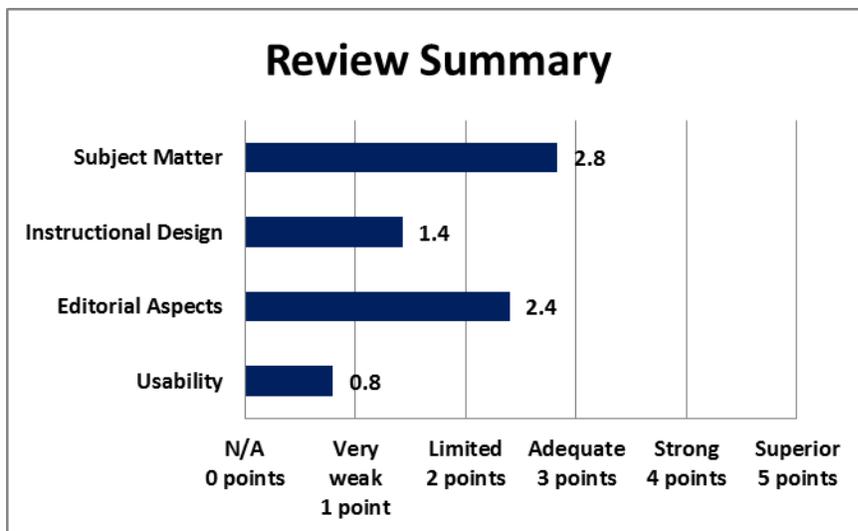
Professor

Format

Reviewed:

[Online](#)

A small fee may be associated with various formats.



Date Reviewed:

November 2015

California OER Council eTextbook Evaluation Rubric

CA Course ID: [CHEM 160S](#)

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: 17 out of 30

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

- This online handbook for organic chemistry seeks to cover all major topics that would be presented in a yearlong organic I and II sequence.
- Despite the fact that all these topics have listed sections, many are too narrow in focus (e.g., substitution vs. elimination reaction and structure determination).
- The lack of mechanisms for many sections is particularly notable.
- Overall, students would be better served by better organization and streamlining of the material presented.
- If this were to serve as the primary textbook for a course, then the following would need to be updated: (1) subject matter better focused to standard organic chemistry courses, (2) mechanisms listed for all key transformations, (3) figures should be drawn in standard format, (4) practice problems should be listed for every functional group and (5) a concise list of key reactions.

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: 10 out of 35

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

- The online text is organized alphabetically rather than in a logical conceptual progression. Although an instructor could just tell students which section to refer to, this is inadequate for large lecture courses and would ultimately be very confusing for students.

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: 12 out of 25

Please provide comments on any editorial aspect of this textbook.

- The figures for many sections are inadequate with either inconsistent structures or structures that do not

have normal bond geometries. For certain sections, arrow-pushing mechanisms are poorly demonstrated, which would greatly limit students that are attempting to understand this concept.

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: 6 out of 25

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

- This is an online resource that would be difficult to use offline (e.g., printed hardcopies).

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			
How willing would you be to adopt this book?	X	Strong reservations (1 pt)	Limited willingness (2 pts)	Willing (3 pts)	Strongly willing (4 pts)	Enthusiastically willing (5 pts)

Total Points: 2 out of 10

Overall Comments

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

- The online resource has certain sections which are very good (ones that I already link to during my organic course).

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

- By and large, the textbook is poorly organized and does not provide the depth necessary for a stand-alone resource. The figures, mechanism, organization and topics would all have to be updated prior to it having a chance for adoption in a standard organic chemistry course.

We invite you to add your feedback on the textbook or the review to [the textbook site in MERLOT](#)
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For questions or more information, contact the [CA Open Educational Resources Council](#).



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