

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 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:

Organic Chemistry With a Biological Emphasis Volumes I & II





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Format Reviewed:

<u>Online</u>

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)
b the content accurate, error-free, and unbiased?						Х
Does the text adequately cover the designated course with a sufficient degree of denth and scene?					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, ethnicities, and backgrounds?)				х

Total Points: 28 out of 30

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

- This textbook is well organized and covers all major topics relevant to an organic chemistry course with a biological emphasis.
- Organic chemistry -- by itself -- is difficult to cover in a yearlong course, and naturally, incorporating biochemical subject matter would make it even more challenging to teach all of the important topics. However, this textbook does a very admirable job of striking the appropriate balance.
- Certain sections (e.g., resonance) in volume 1 could be covered in greater detail, whereas the significant number of reactions in volume 2 could be cut down somewhat.

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				х		
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?			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: 26 out of 35

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

- Overall, the organization is excellent, and the figures are very good.
- Each chapter has sufficient practice problems, and the tables at the back of the book are very useful. However, specific learning objectives or concise summaries would be help for students to focus the material.

Editorial Aspects (25 passible points)		Very Weak	Limited	Adequate	Strong	Superior
Editorial Aspects (25 possible points)	(0 pts)	(1pt)	(2 pts)	(3pts)	(4 pts)	(5 pts)
Is the language of the textbook free of grammatical,				×		
spelling, usage, and typographical errors?				^		
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,					^	
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?	×					
(e.g. graphics, animations, audio)		^				

Please provide comments on any editorial aspect of this textbook.

Total Points: 15 out of 25

- The writing style is much more conversational than a standard textbook, which could be a plus or minus depending on the audience.
- Despite the fact the PDF is searchable, a glossary -- which is not included -- should be provided as

textbooks are reference materials.

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?	х					
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					

Total Points: 13 out of 25

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

• Parts of the textbook are online and it is available as a PDF. Since the textbook is organized well, it should be fairly easy to use.

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					v	
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				v		
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?

• Effectively covers all major topics that are necessary for an organic chemistry course with a biological emphasis.

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

- Students tend to struggle with new concepts even with simple molecular structures, so the rapid jump to more complex biomolecules may be challenging for many students.
- In addition, given the length of the text, instructors should carefully decide how they want to select/approach many of the topics during a yearlong course.

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>.

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