

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: Analytical Chemistry

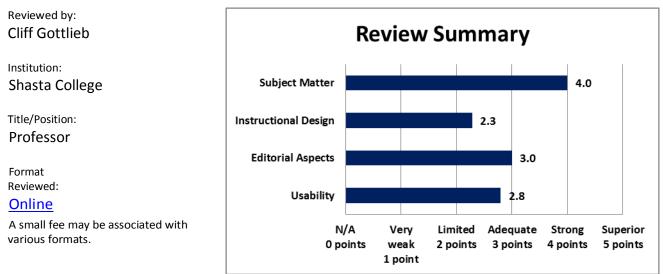




Analytical Chemistry 2.0 by ChemWiki is licensed under <u>Creative Commons</u> <u>Attribution-NonCommercial-ShareAlike</u>

Find it: eTextbook Website

Textbook Authors: ChemWiki



Date Reviewed:

May 2016

California OER Council eTextbook Evaluation Rubric

CA Course ID: No C-ID

Subject Matter (30 possible points)	N/A	Very Weak	Limited	Adequate	Strong	Superior
Subject Matter (Supossible points)	(0 pts)	(1pt)	(2 pts)	(3pts)	(4 pts)	(5 pts)
b the content accurate, error-free, and unbiased?						Х
Does the text adequately cover the designated course					х	
with a sufficient degree of depth and scope?					^	
Does the textbook use sufficient and relevant examples					х	
to present its subject matter?					^	
Does the textbook use a clear, consistent terminology to					v	
present its subject matter?					X	

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: 24 out of 30

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

- The main part of this wiki is fundamentally identical to the text Analytical Chemistry 2.0 by David Harvey. In addition to that link there are links to specific areas. Some of these are just copied directly from the Harvey text. Others have updated the text such as the link to Instrumental Analysis which gives more detail on area severely lacking in Harvey's text such as Mass Spectrometry
- There are no actual experimental procedures for analysis in the text, although there are references to many. The text must assume some lab techniques will be demonstrated by the lab instructor.
- The original text by Harvey has a 2000 copyright and the text shows its age. Mass spec is barely mentioned and other examples and references are equally dated. Since this wiki based on a 2000 copyright text, it may not meet the recent requirement by CID for texts.

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				

• There are no test bank, videos, nor animations.

Total Points: 16 out of 35

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

- The presentation is standard text with adequate pictures and graphs.
- No learning outcomes are stated. There are the end of chapter summaries and key terms for each chapter.
- As a wiki it is not searchable and does not have ancillaries.

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 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)				х		

How effective are multimedia elements of the textbook?		v	
(e.g. graphics, animations, audio)		^	

Please provide comments on any editorial aspect of this textbook:

- I found a few errors. I am sure there are more. Very surprising for a wiki based on a previously commercially published text.
- Chapter 2.2.5 the symbol for micro is missing in examples. This could throw a student.
- Chapter 12.5 Wrong Heading for Liquid Chromatography.

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?			x			

Total Points: 14 out of 25

Total Points: 15 out of 25

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

• Only available as a wiki

Overall Ratings						
	Not at	Very Weak	Limited	Adequate	Strong	Superior
	all (0	(1 pt)	(2 pts)	(3 pts)	(4 pts)	(5 pts)
	pts)					
What is your overall impression of the textbook?				х		
	Not at	Strong	Limited			Enthusiastically
	all (0	reservations	willingness	Willing	Strongly	willing
	pts)	(1 pt)	(2 pts)	(3 pts)	willing (4 pts)	(5 pts)
How willing would you be to adopt this book?			x			

Total Points: 4 out of 10

Overall Comments

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

- It is rigorous statistically and theoretically. The updated wikis on Instrumental Analysis are a plus.
- It is a reasonable text for Analytical Chemistry although one would need to supplement it with actual procedures for lab activities.

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

• Provide actual procedures for lab activities.

We invite you to add 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.)





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