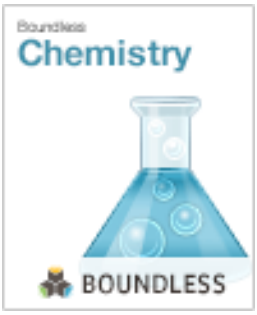
Faculty Review of Open eTextbooks

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 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:

Chemistry



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Title/Position:
Professor

Format Reviewed:
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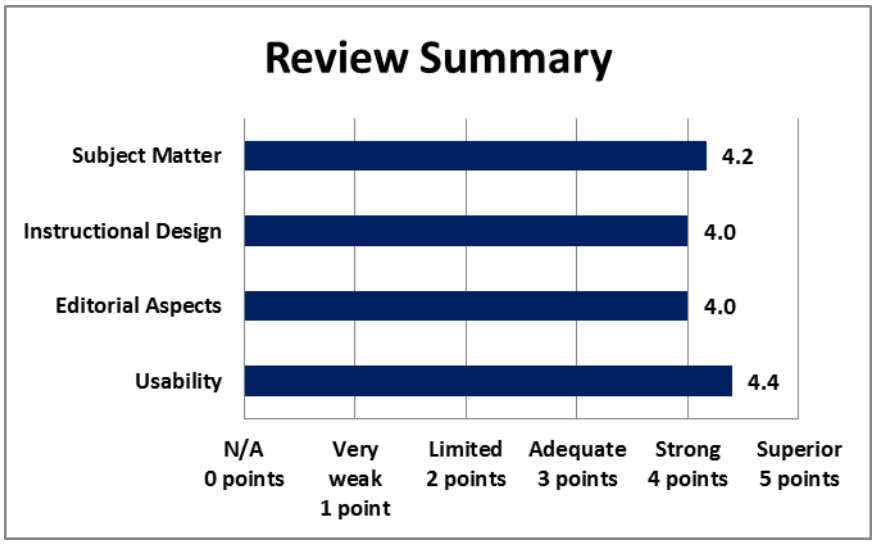

Date Reviewed:
December 2015

California OER Council eTextbook Evaluation Rubric

CA Course ID: CHEM 120S

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						X

present its subject matter?						
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:

- The text book is clearly written. At the beginning of each chapter section it begins by providing a couple of sentences pertaining to "Learning Objectives", "Key Point", and "Terms" followed by its related "Full Text".
- All aspects of the text one can "Edit".
- The text portions are very well defined however, they are very brief, not more a paragraph or two per section.
- Many of the text sections have You Tube clips embedded in them at about 10 minutes in length. The text sections contain frequent pop up ads on the right hand side of the screen, and many of the You Tube clips first have a few seconds of ads at the beginning.
- Some of the more complicated topics such as 1. Chemical Equilibrium, 2. The common ion effect with regard to Buffers, 3. Development of the Second Law of Thermodynamics, 4. Free Energy Changes for Nonstandard States, 5. Chemical Equilibrium type calculations requires more in-depth explanations and worked out examples.
- The early chapters not relating to the topics of Thermodynamics and Nuclear Chemistry the level of the material is nice and clear.
- The text book has a nice Table of Contents, however, does not provide a back of the book Index.
- At the end of each topic about 5 multiple choice questions are presented for assignment purposes. The traditional back of the chapter homework problems are not provided.
- One can edit all quizzes.
- The instructor can assign student reading assignments from the text and monitor student progress.

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: 28 out of 35

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

- Each chapter presented is as its own download.
- The text book contains good diagrams and appropriate You Tube clips are provided.
- A section for instructors to access all the power-points is provided.

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

Total Points: 20 out of 25

Please provide comments on any editorial aspect of this textbook.

- Do not like the aspect of pops appearing within the text sections. In general the layout of the text book is nice. It needs to provide more homework back of the chapter problems.

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: 22 out of 25

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

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?

- Subject matter very clearly presented.
- Good diagrams.
- All topics for a general chemistry curriculum are presented.
- Good you tubes.
- Easily edited by the instructor.

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

- The more involved topics relating to the Thermodynamic sections need more examples of worked out problems. i.e. 1. Chemical Equilibrium, 2. The common ion effect with regard to Buffers, 3. Development of the Second Law of Thermodynamics, 4. Free Energy Changes for Nonstandard States, 5. Chemical Equilibrium type calculations requires more in-depth explanations and worked out examples.
- Need end of the chapter homework problems not in a multiple choice format.
- No pop up ads should occur within the text.

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For questions or more information, contact the CA Open Educational Resources Council.