



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:

Biology



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Find it: [eTextbook Website](#)

Textbook Authors:

OpenStax College (numerous contributors)

Reviewed by:

Nathan Lanning

Institution:

California State University, Los Angeles

Title/Position:

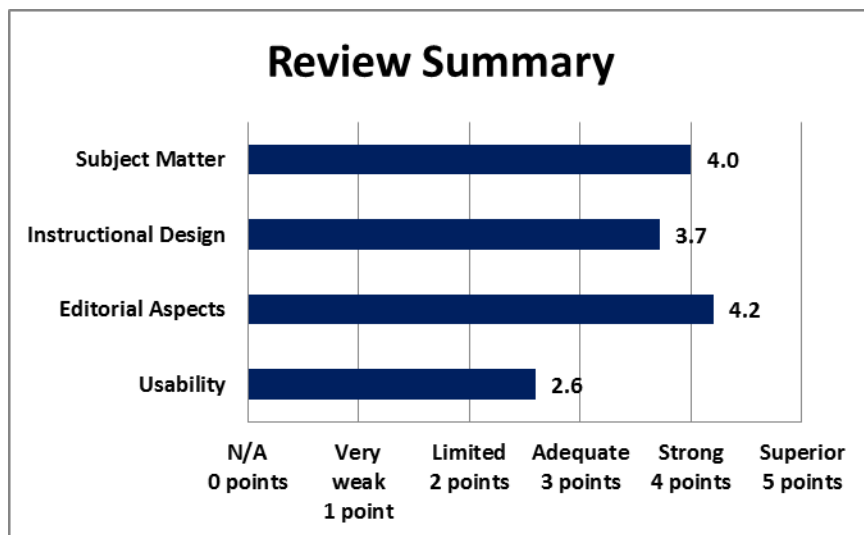
Professor

Format

Reviewed:

[Online](#)

A small fee may be associated with various formats.



Date Reviewed:

August 2015

California OER Council eTextbook Evaluation Rubric

CA Course ID: [BIOL 130S](#)

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: 24 out of 30

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

- The subject matter was virtually identical to the standards hard copy textbooks in the field. I compared this text head-to-head with Campbell Biology (9th Edition), Raven Biology (10th Edition) and Brooker Biology (3rd Edition). The subject matter in OpenStax Biology was almost identical to these texts with respect to organization (only a few minor changes in order of content presentation in some chapters) and breadth and depth of content. I did not find any obvious deficiencies in the OpenStax text. This is significant, as most comparable OER sources (e.g., Boundless) or reduced cost texts (e.g., Nature Principles of Biology) have significantly less depth of content compared to standard texts. The only content absent in OpenStax Biology compared to the standard texts is a chapter on genomes and their evolution.
- The OpenStax Biology text is currently up-to-date with its information. However, one potential concern is whether new editions will be released in the future. It is not clear whether information will be updated (current edition was published 2013).

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: 26 out of 35

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

- Learning objectives are clearly stated and fully met in the text content. One strength of the OpenStax text is its variety of learning styles (e.g., plenty of linked animations and interactive questions).
- There is ample associated online content providing additional learning approaches. Also great chapter-by-chapter summaries of key points and key terms.

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: 21 out of 25

Please provide comments on any editorial aspect of this textbook.

- The figures in OpenStax are not as high quality as standard texts, but they are fully adequate for interpretation and are adequate for understanding key concepts in the text.

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: 13 out of 25

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

- It's a PDF

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?

- All of the above.
- My department has decided to adopt this text for our Biology Majors Introductory Biology series. It definitely exceeds the lower cost and OER sources that we have used in the past.
- Additionally, each chapter contains several "Career Connections" which do a great job of introducing students to relevant occupations related to the content being covered in the text. These Career Connections are superior to comparable aspects of standard texts.

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

- Our department has adopted it for the 2015-2016 AY.

We invite you to add your feedback on the textbook or the review to [the textbook site in MERLOT](#) (Please [register](#) in MERLOT to post your feedback.)



For questions or more information, contact the [CA Open Educational Resources Council](#).



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