

Proposal for ACHE/ACCS Open Educational Resources Grant

For Academic Year 2018-2019

Submitter Name	Dr. Jonathan Koh		
Submitter Title	Director of Grants		
Submitter Email	jkoh@sheltonstate.edu		
Submitter Phone Number	205.391.2471		
Submitter Campus Role <i>(Faculty/Team Lead, Grants Office Representative, Academic Affairs Office Representative, etc.)</i>	Grants Office Representative		
Applicant Name <i>(Faculty/Team Lead; must be an implementing faculty member)</i>	Tina Jones		
Applicant Email Address	tjones@sheltonstate.edu		
Applicant Phone Number	205.391.2943		
Applicant Job Title and Department, Division, School, etc.	Biology Instructor, Division of Natural Sciences, Shelton State Community College		
Applicant Institution Name	Shelton State Community College		
Other Team Members <i>(Name, Title, Department, Institutions if different, and email address for each)</i>	Barbara Davis Biology Instructor Shelton State Community College brdavis@sheltonstate.edu		
Sponsor Names, Title, Department, Institution <i>(for each letter of support)</i>	Ginger Glass Associate Dean of Academic Services Shelton State Community College		
Proposal Title	Open Educational Resources for Introduction to Biology I (BIO 101)		
Award Category <i>(Check only one):</i>	<input checked="" type="checkbox"/> Small-Scale Alteration (\$250 - \$1,000)	<input type="checkbox"/> Medium-Scale Conversion (\$1,000 - \$3,000)	<input type="checkbox"/> Large-Scale Transformation (\$3,000 - \$5,000)
	Amount of Funding Requested:	\$1,000	\$
Projected Impact	Estimated Number of Students Impacted Annually <small>(From GRAND TOTAL "A", Page 2)</small>	Projected Total Annual Student Cost Savings <small>(From GRAND TOTAL "B", Page 2)</small>	Average Projected Cost Savings Per Student <small>(Divide GRAND TOTAL "B" by GRAND TOTAL "A")</small>
	190	\$60,178.70	\$316.73

Information on Courses Targeted for OER Implementation

Course Number and Name <i>(Example: ENG 101 English Composition I)</i> <i>(Insert additional rows as needed to accommodate all courses affected at all participating institutions, including sections offered by different delivery if they use different learning materials)</i>	Institution	Estimated Annual Enrollment	Cost Per Student for All Currently Required Learning Materials	Cost Per Student for All Proposed Required Learning Materials	Savings Per Student After Implementation of Proposed OER	Total Annual Projected Student Savings
Biology 101: Introduction to Biology I	Shelton State Community College	190	\$316.73	\$0.00	\$316.73	190 x \$316.73 = \$60,178.70
A. GRAND TOTAL:		190	B. GRAND TOTAL:			\$60,178.70

Note: Each course targeted for OER implementation under this grant program must be taught during both fall and spring semester of the 2018-2019 academic year. The team lead must teach at least one section of each course during each semester.

NARRATIVE

DESCRIPTION OF PROJECT: (1) *In the space below, discuss the goals of the project. What do you hope to achieve?*

There are three main goals associated with this pilot project: **1) increase and improve student access and success; 2) provide professional development opportunities for faculty; and 3) develop and implement an effective open educational resource curriculum for Biology 101: Introduction to Biology I.**

The first and foremost goal of this project is to **increase and improve student access and success**. This goal refers to the overarching scope and purpose of this project. While the term “increasing access” has a broad definition, for the purposes of this proposed project, it refers to two essential characteristics of present-day higher education: 1) the cost to attend and 2) the ability to access information physically for learning purposes. By increasing access to educational materials for students enrolled in Biology 101, students will experience greater levels of success without the financial burden.

The second goal, **faculty development**, represents an essential component to the implementation of this project. The faculty/team lead will attend an Open Educational Resource Conference to learn from experts in the field, discover new and innovative techniques to course delivery, and network with other professionals who share a passion for these low cost educational delivery methods.

Finally, the third goal of this project is **curriculum development/implementation**. The faculty/team lead will revise the current Biology 101 curriculum and associated course materials to reflect more affordable means of taking the course. The faculty/team lead will then pilot the new course and troubleshoot any technical or educational issues uncovered throughout the first semester. Any issues with software, broken hyperlinks, and/or educational gaps will be resolved prior to beginning the next semester.

Should this project be funded within the stated timeline, these three goals will be accomplished by the start of the second semester (spring 2019) so that this course is offered as a full OER course. SSCC will then be able to begin to measure performance and enrollment rates against prior course metrics. SSCC fully anticipates increased learning outcomes as well as increased attendance rates due to the little-to-no-cost nature of the Open Educational Resources (OER) design.

As a secondary outcome removed from the initial action plan, which will be measured after the completion of this project, SSCC anticipates that additional faculty will realize the potential and positive repercussions of implementing OER courses in all divisions of the College. We hope to be able to submit additional OER proposals like this one next summer, should funding remain available for these projects.

(2) Describe the student learning materials (textbooks, lab manuals, homework/test systems, supplementary reading material, etc.) that are currently required in each course, tell which of those are targeted for replacement with OER, and tell whether you plan to replace these by adopting existing OER, revising existing OER, or creating completely new OER.

Currently, for Biology 101, there are two purchases necessary for students to receive the full breadth of instruction. Shelton State Community College's Division of Natural Sciences utilizes *Campbell Biology: Concepts and Connections 9th Edition* textbook, *MasteringBiology* online tools, and the eText access code by Pearson Publishing. The following information has been gathered from the MyPearson store website to provide an accurate description of the student learning materials that are currently required in each course (<http://www.mypearsonstore.com/bookstore/campbell-biology-concepts-connections-013429601X>).

- *Campbell Biology: Concepts and Connections 9th Edition* provides a “conceptual framework for understanding the world of biology.” This hardcover textbook costs \$220.78 to the student. It is worth noting that this particular book can be purchased as a loose-leaf text to save roughly \$65, yet doing so will not return any monetary value to the student if resold at a later date.
- Also required for this course is the online homework, tutorial, and assessment product called *MasteringBiology*. Students utilize this product to complement the text. It provides “self-paced learning activities that allow them to improve their understanding and quickly master concepts.”
- Additionally, included as a package within the Pearson Biology Concepts bundle is an eText access code. The Pearson eText code “allows educators to easily share their own notes with students so they can see the connection between their reading and what they learn in class.”

Should this project be funded and approved as is, all three of these learning materials will be replaced with OER materials. The replacement OER materials will be amalgamated by adopting existing OER from the OpenStax Community (<https://openstax.org/details/books/concepts-biology>) and the Lumen Learning Boundless Biology e-book and resource community (<https://courses.lumenlearning.com/boundless-biology/>). Ancillary materials will be delivered to students via Canvas, which is the learning management system utilized in all SSCC courses to provide supplemental learning modules and feedback to students among other things. Ancillary materials will be gathered from other locations online but will also include two subscriptions for the instructors within this division to access. The following subscriptions are very cost effective to the institution and are thus free for the students. These supplementary resources will certainly enhance course delivery by providing students with increased access to study materials and various practice assessments to ensure that they are learning.

- Quizlet Plus provides a unique learning mechanism that allows for mastery of content by teachers and students (<https://quizlet.com/teachers>). The cost for quizlet is very minimal. At only \$15 a year, the instructors can access a variety of quizzes, study materials, and other modes of instruction to ensure that students are grasping the concepts. Students do not have to pay for this resource.
- Memrise Pro combines learning with fun activities and a community feel (<https://www.memrise.com/science/>). BIO 101 students will gain access to this software and will then be connected to learning from a global perspective by having 24/7 access to learning communities, pertinent content, and additional study materials.

All of these features combined with each other more than make up for the loss of the traditional Pearson text. As technology continues to evolve faster and takes on larger roles in our lives, it is imperative that our instruction keep up with the pace. The above-mentioned OER materials will not only maintain pace but will result in cost savings for students and increased learning opportunities for more people.

ACTION PLAN: *In the space below, describe the role of each project team member and the work or activities expected from them.*

The action plan for this proposed project includes a three-pronged approach to the objectives previously mentioned. All of the objectives will be conducted and completed by the faculty/team lead, biology instructor Tina Jones. If funded for this project, Ms. Jones will develop, implement, and instruct the Biology 101 OER course in the fall semester of 2018. She will troubleshoot and maintain all content for the course utilizing the aforementioned OER communities, ancillary materials, and her expertise and experience within the Canvas technology. While Ms. Jones is the sole full-time faculty member responsible for the activities of this project, she will have assistance and support from other areas of the College. One area of support identified to assist with the development of this project is the Division of Library Services. The SSCC Electronic Services Librarian, Kelly Ann Griffiths, will provide assistance through resource consultation and procurement. Content analysis and curriculum review will be conducted by an SSCC adjunct instructor in the Division of Natural Sciences, Ms. Barbara Davis. Shelton State also stands ready to provide technological support through the Office of Instructional Technology and eLearning to assist in course materials being delivered through Canvas. Additional staff support provided by the College for this project will be in the form of administrative support. The College's Director of Grants and the Restricted Funds Officer will assist with performance reporting and financial management. Furthermore, support from the Dean of Instruction and Workforce Development and the Office of Academic Services will be available to ensure that the most effective instructional practices are being utilized, and all course designs meet accreditation standards.

INSTITUTIONAL SUPPORT: *(1) In the space below, describe the institutional support that will be made available for the project, including any in-kind financial support, assistance from instructional or graphic designers, help with writing, editing, research, etc.*

Shelton State Community College will provide varying levels of institutional support through the departments listed above in the Action Plan. Additionally, in-kind financial support will be provided through the following deliverables: course-release time (\$5,824); supplementary travel to OER Conference not covered in this proposal and valued at approximately \$2,000.00 (<https://openedconference.org/2018/>) ; and necessary editing and writing conducted through the Publication Action Group in place at SSCC.

(2) Think about the individuals (other than students) and departments, divisions, or schools that have a stake in the success of this project. If the project is successful, what support from these stakeholders can you expect for continued use of the implemented OER? What evidence exists that this expectation is reasonable? Use the space below to answer these two questions.

There will be multiple stakeholders at SSCC who will realize the positive impact that this project accomplishes. Should this project be funded, we anticipate that key faculty within the Division of Natural Sciences will realize OER's effects in alleviating student financial barriers to access and success. The purpose of this project is to demonstrate the positive effects of OER through this pilot course, and it is reasonable to assume that faculty will notice positive effects, such as enrollment increases in courses that have implemented OER. Furthermore, the nature of curriculum design under this model will give each instructor more control over the materials being used. The instructors will be able to modify course delivery and curriculum design to reflect more efficient and effective learning outcomes each semester, thus giving them more control over their courses. While there is not currently a bevy of instructors intent on implementing an OER model, SSCC anticipates that this project will facilitate exponentially more interest from faculty in other divisions as well as the natural sciences. Various departments at SSCC have shown interest in implementing OER, but have not been offered much incentive. We anticipate that positive student feedback and increases in enrollment for OER courses will generate increased interest among faculty at Shelton State. In terms of projecting increased usage from faculty members at SSCC, this is the strongest form of evidence that currently exists.

SUSTAINABILITY PLAN: *What is your plan for offering the course in the future, including maintenance, enhancement, and updating of course materials?*

The instructor responsible for designing Biology 101, Tina Jones, is also responsible for implementing the course under traditional OER guidelines. Ms. Jones will also be responsible for maintaining the course through reoccurring management of the various modules to ensure that current material is being taught. Ms. Jones will also maintain and troubleshoot hyperlinks used throughout the life of this course. As time progresses, Ms. Jones will also be responsible for utilizing the increasing bank of resources found within other OER repositories, such as Open Textbook Library, OER Commons, Merlot, iLumina, and MIT's OpenCourseWare, just to name a few. Both the division chair and the Associate Dean of Academic Services will oversee these duties and responsibilities so that they can maintain current knowledge of any enhancements or changes made to the course. This overseeing will also facilitate a smooth transition in the event that any leave time needs to be taken by Ms. Jones.

BUDGET

In the table below, please list all anticipated expenses to complete the project. Include personnel (salaries, replacement costs for release time, overload pay, etc.) and other project expenses including software, supplies, equipment, travel, etc. Insert additional rows as needed.

EXPENSE CATEGORY	AMOUNT REQUESTED	VALUE OF INSTITUTIONAL IN-KIND CONTRIBUTION	PROJECT TOTAL
	\$	\$	\$
Annual Subscription to Quizlet Plus	\$15.00	N/A	\$15.00
Lifetime Subscription to Memrise Pro	\$129.00	N/A	\$129.00
Course Release Time for Faculty Lead	\$411.00	\$5,413.00	\$5,824.00
Conference Registration	\$345.00	N/A	\$345.00
Out of State Travel	N/A	\$2,000.00	\$2,000.00
Technology	\$100.00	N/A	\$100.00
GRAND TOTALS	\$1,000.00	\$7,413.00	\$8,413.00

REFERENCES & ATTACHMENTS: *A letter of support must be provided from the sponsoring area (unit, office, department, school, library, campus office of the Vice President for Academic Affairs, etc.) that will be responsible for administration of funding. Letters must reference sustainability. In the case of multi-institutional affiliations, all participants' institutions/departments must provide a letter of support.*



SHELTON STATE

COMMUNITY COLLEGE

May 31, 2018

Alabama Community College System
P.O. Box 302130
Montgomery, AL 36130-2130

Re: Biology 101 Open Educational Resources Grant

To Whom It May Concern:

The Alabama Community College System (ACCS) is poised to help make a difference in the lives of many citizens in our state. As a member of ACCS, Shelton State Community College (SSCC) is positioned to help make that difference in the lives of the students whom we serve. One way that we can increase our reach and impact on education statewide is by increasing student access to educational resources. In particular, open educational resources (OER) represent a unique course design that removes both the physical and the financial barriers to educational resource access for our students. The attached grant application serves as an initial step toward providing such resources. Should this project be funded, SSCC anticipates that increased interest from faculty in offering this type of course will arise.

The purpose of this letter is to state my support for Tina Jones and her initiative to implement an OER course design for *Biology 101: Introduction to Biology I* (BIO 101). Mrs. Jones is a very passionate biology instructor whose knowledge and expertise highlight her ability to be one of our most effective instructors in the Division of Natural Sciences. Mrs. Jones seeks to leverage her passion and experience to increase student access to learning materials through more affordable and accessible means. She has taken the lead role in developing a fully functional BIO 101 OER curriculum to release in the fall semester of 2018. With support from ACCS and the Alabama Commission on Higher Education, Mrs. Jones is eager to develop the OER content, launch a pilot Biology 101 OER course, troubleshoot any technical or academic content issues that arise, and continue to increase her knowledge and expertise in OER course delivery methods by attending the annual OER conference in Niagara Falls, NY. Most theory and methodology within the field of natural sciences remain unchanged from year to year, so the time and effort to maintain the course content should be minimal when compared to other subjects. Once implemented, her project will be sustained through general and technical upkeep of the course each semester. Mrs. Jones will work with other biology instructors and the Division of Library Services to ensure that the course modules are properly maintained and that the project is sustained.

If you have any questions or concerns, then please contact our Director of Grants, Dr. Jonathan Koh, at jkoh@sheltonstate.edu or 205.391.2471. Thank you for your consideration of this matter.

Sincerely,

Ginger Glass
Associate Dean of Academic Services