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 *(Faculty/Team Lead, Grants Office Representative, Academic Affairs Office Representative, etc.)*	Grants Office Representative		
Applicant Name *(Faculty/Team Lead; must be an implementing faculty member)*	Barbara Davis		
Applicant Email Address	brdavis@sheltonstate.edu		
Applicant Phone Number	205.391.2943; 205.333.1897		
Applicant Job Title and Department, Division, School, etc.	Adjunct Biology Instructor, Division of Natural Sciences, Shelton State Community College		
Applicant Institution Name	Shelton State Community College		
Other Team Members *(Name, Title, Department, Institutions if different, and email address for each)*	Tina Jones Biology Instructor Shelton State Community College tjones@sheltonstate.edu		
Sponsor Names, Title, Department, Institution *(for each letter of support)*	Ginger Glass Associate Dean of Academic Services Shelton State Community College		
Proposal Title	Open Educational Resources for Introduction to Biology II (BIO 102)		
Award Category *(Check only one):*	☒ **Small-Scale Alteration ($250 - $1,000**	☐ **Medium-Scale Conversion ($1,000 - $3,000)**	☐ **Large-Scale Transformation ($3,000 - $5,000)**
Amount of Funding Requested:	**$1,000**	**$**	**$**
Projected Impact	**Estimated Number of Students Impacted Annually** (From GRAND TOTAL "A", Page 2)	**Projected Total Annual Student Cost Savings** (From GRAND TOTAL "B", Page 2)	**Average Projected Cost Savings Per Student** (Divide GRAND TOTAL "B" by GRAND TOTAL "A"
	60	$19,003.80	$316.73

Information on Courses Targeted for OER Implementation

Course Number and Name *(Example: ENG 101 English Composition 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)*	**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 102: Introduction to Biology II	Shelton State Community College	60	$316.73	$0.00	$316.73	60 x $316.73 = $19,003.80
A. GRAND TOTAL:		60	**B. GRAND TOTAL:**			$19,003.80

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 two main goals associated with this pilot project: ***1) increase and improve student access and success and 2) develop and implement an effective open educational resource curriculum for Biology 102: Introduction to Biology II.***

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 physically access information for learning purposes. By increasing access to educational materials for students enrolled in Biology 102, students will experience greater levels of success without the financial burden.

The second goal for this project is ***curriculum development/implementation***. The Faculty/Team Lead will revise the current Biology 102 curriculum and associated course materials to reflect more affordable means of learning the introduction to biology 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 two goals will be accomplished by the start of the second semester (Spring 2018) so that this course is offered as a full OER. 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 Resource (OER) design.

As a secondary outcome removed from the initial action plan and to 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 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, students that take Biology 102 after taking Biology 101 have an advantage. Both of the purchases necessary for students to receive the full breadth of instruction in Biology 101 can also be used in Biology 102. However, students do not necessarily take these courses in sequence and based on student enrollment data, rarely take BIO 101 after taking BIO 102.

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.

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[A4] approach to the objectives previously mentioned. All of the objectives will be conducted and completed by the Faulty/Team Lead, Biology Instructor Barbara Davis. If funded for this project, Ms. Davis will develop, implement, and instruct the Biology 102 OER course online, in the fall semester of 2018. With the assistance of Tina Jones, Full-Time Biology Instructor responsible for implementing BIO 101, Barbara Davis 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 Barbara Davis is the main faculty/team lead responsible for the activities of this project, she will have assistance and support from other areas of the College. Aside from the support and guidance that Tina Jones will provide, one key area of support identified to assist with the development of this project is 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 compensation made to Ms. Davis for instructing this course ($5,824). The $1,000 amount being requested through this grant will serve as a contractual stipend for Ms. Davis's work implementing BIO 102 as an open educational resource course.

(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 102, Barbara Davis, is also responsible for implementing the course under traditional OER guidelines. Barbara Davis, with assistance from Fullt-Time Biology Instructor, Tina Jones will be responsible to maintaining the course through reoccurring management of the various modules to ensure that current material is being taught. Barbara and Tina will also maintain and troubleshoot hyperlinks used throughout the life of this course. As time progresses, both faculty 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 Mrs. 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
	$	$	$
Compensation for Adjunct Instructor	N/A	$5,824.00	$5,824.00
Contractual Stipend for Course Development	$1,000.00	N/A	$1,000.00
GRAND TOTALS	$1,000.00	$5,824.00	$6,824.00

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 102 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 Barbara Davis' initiative to implement an OER course design for *Biology 102: Introduction to Biology II* (BIO 102). Both Mrs. Jones and Ms. Davis are effective instructors in the Division of Natural Sciences. They are seeking to leverage their passion and experience to increase student access to learning materials through more affordable and accessible means. Ms. Davis, with guidance and support from Mrs. Jones, has taken the lead role in developing a fully functional BIO 102 OER curriculum to release in the fall semester of 2018. With support from ACCS and the Alabama Commission on Higher Education, Ms. Davis is eager to develop the OER content, launch a pilot Biology 102 OER course, troubleshoot any technical or academic content issues that arise, and continue to increase her knowledge and expertise in OER course delivery. In reference to sustainability for this project, the instructors will work with other biology instructors and the Division of Library Services to ensure that the course modules are properly maintained and that the content remains current. As an institution, we are confident that providing these type of resources through course delivery will result in increased student success. We are eager to measure that success and hope to increase the amount of course offerings provided through this OER model.

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

Ginger Glass
Associate Dean of Academic Services