OER Revisions and Ancillary Materials Creation Mini-Grant Application

Affordable Learning Georgia aims to support the sustainability of previous Textbook Transformation Grants implementations through revisions of created open educational resources or the creation of new ancillary materials for ALG-funded OER. Individuals or teams who would like to apply for an OER Revisions or Ancillary Materials Creation. Mini-grant do not need to be the original creators of the resource(s). While we welcome original authors to revise their original materials, the nature of open licenses allows for the revision and remixing of OER materials by anyone as long as the terms of the license are adhered to.

The final deliverable for this category is the revised or newly-created materials as proposed in the application, which will be hosted through GALILEO Open Learning Materials. All revised or newly-created materials will be made available to the public under a Creative Commons Attribution License (CC-BY), unless the original materials were under a more restrictive license such as the inclusion of SA (Share-Alike) or NC (Non-Commercial).

For the purposes of this grant, we define revision as the major improvement of a resource through updates for accuracy, accessibility, clarity, design, and formatting. We define ancillary materials as any materials created to substantially support the instruction of a course using an existing open educational resource(s).

Applicant Name *

Samuel Mutiti

Applicant Position *

Associate Professor of Geology

Applicant Institution *

Georgia College and State University

Applicant Email Address *

Please use your institutional email address.

samuel.mutiti@gcsu.edu

Other Team Members

Individuals can apply for mini-grants; a team is not required. If you do want to add team members to your grant, please provide the names and email addresses here.

Allison VandeVoort Allison.vandevoort@gcsu.edu
Kalina Manoylov Kalina.manoylov@gcsu.edu
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Type of Project *

- (●) Revision of pre-existing OER
- ( ) Creation of ancillaries for pre-existing OER
- ( ) Other: _____

Final Semester of the Project *

This is the semester in which the materials created/revised will be completed.

- ( ) Spring 2018
- ( ) Summer 2018
- (●) Fall 2018

Proposed Grant Funding Amount: *

This is the total (in a dollar amount) of funding you are requesting for the mini-grant. There is a maximum of $4800, with a maximum of $2000 per team member and $800 for project expenses.

$4800

Currently-Existing Resource(s) to be Revised / Ancillaries Created *

Please provide a title and web address (URL) to each of the currently-existing ALG-funded resources that you are either revising or creating new ancillary materials for below.

http://oer.galileo.usg.edu/biology-textbooks/4/

Project Description *

In at least one paragraph, describe your project's goals and deliverables.

Identified Need: With the exponential growth of the human population on this planet, the Environmental Sciences (ENSC) as a STEM discipline have continued to be one of the fastest growing fields of science. ENSC addresses how the natural world works, how humans affect and alter Earth's ecosystem services and how the surrounding environment affects humans. This field is constantly evolving with new ideas and case studies developing all the time. To stay current and provide the reader with the most update information, the current Environmental Science textbook needs revisions to reflect new knowledge, understanding, and case studies. The text also needs re-organization of chapters to improve flow and usability.

Book Revisions: The authors are proposing to revise most of the book chapters in order to increase clarity and improve flow of the contents. The authors would like to update data and add more examples and problem sets that will increase learning. A major revision of the book will include splitting up Chapter 8 (Water) into two separate chapters (Water and Water Pollution); merging Chapter 2 (Population Ecology) and Chapter 3 (Human Demographics) into one chapter (Population Ecology and Human Demographics) and increasing the depth of content on this subject, particularly with respect to the human population; and revising the Energy Chapters 4 and 5 to incorporate the latest information. Students across four sections of our course, Intro to Environmental Science (ENSC 1000) have been surveyed over the past two semesters to identify sections of content that need further clarification. These survey data will be incorporated into our revision of the chapters. The authors would also like to include more links to virtual labs that students can use to supplement the reading. Another area of focus of this revision will be to increase accessibility by enhancing image quality and using color schemes that work for all readers. Students and faculty have recognized the need to change and improve some of the graphics in the book. In particular, Figure 8.3, 8.8, 8.10, 8.16, and 8.17 in Chapter 8 will be updated. This will increase readability, organization, flow of content and present current data. We will also ensure that our formatting updates to these materials will enhance the accessibility of this document, by making it more understandable through screen-reader programs.

Develop new materials (ancillary material): As part of the edits and additions to the new edition of the Environmental Science textbook, the authors would like to develop more formative assessments (self quizzes), class handouts for group activities, and summative assessments (exams questions) based on the book content. The authors have received requests from faculty from other institutions who have adopted the textbook for these materials.

Timeline and Personnel *

Provide a project timeline with milestones below, keeping in mind your selected Final Semester above. Provide a short description of the roles any additional team members will take on during the activities in your timeline.

Since the original chapters in the textbook were written by separate individuals, the authors are proposing to have each team member review all the chapters in the book. Each science faculty member will edit and proof-read the book.

K. Manoylov: (Review all chapters and add content to new water pollution chapter)
C. Mutiti: (Review all chapters, combine and add content to chapters 2 and 3)
S. Mutiti: (Review all chapters and break Chapter 8: Water into two separate chapters)
A. VandeVoort: (Review all chapters, streamline and format all chapters, revise energy chapters 4 and 5 to incorporate new information)
D. Bennett: (Review all chapters, with attention to formatting, citations, and accessibility)

Timeline
Jan. – March 2018: Add content to Chapter 2 and 3, updated graphics, example, end of chapter questions and some in chapter activities where needed and appropriate. Split Chapter 8 into two chapters. Revise Chapters 4 and 5 to incorporate new information.

March – May 2018: Develop ancillary material (exams, handouts, group activities and self-guided hands-on activities).

May – June 2018: Edit the book chapters for clarity, flow, readability, and accessibility

July 2018: Submit completed second edition to D. Bennett for technical check, Creative Commons Attribution Licensing, and uploading on Libguides

Fall 2018: Teach ENSC 1000, 4 sections (~200 students) using new material.

Dec. 2018: Assessment in ENSC 1000.
Dec. 2018: Analyze assessment data.
Dec. 2018: Submit final report to ALG.

Budget *

Please enter your project's budget below. Include personnel and projected expenses. The maximum amounts for the award are as follows: $4,800 maximum award, $2,000 maximum per team member, $800 maximum for overall project expenses. Unlike standard-scale and large-scale transformations, the maximum of $800 is not a required element of the budget, but rather meant primarily for the purchase of specific tools and software which would help with improving resources.

Drs. Manoylov, C. Mutiti, S. Mutiti, and VandeVoort will receive a stipend totaling $960 (each) salary and benefits. Ms. Bennett will receive a contract overload totaling $960 salary and benefits.

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