

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 existing OER. Mini-grant participants 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).

While mini-grants do not normally require the Letter of Support process that larger Textbook Transformation Grants require, multi-institution collaborations on a mini-grant project do require a Letter of Support from each institution. This is to ensure that not only the Project Lead's institution is aware of the grant.

Applicant Name *

Sheryne Southard

Applicant Position *

Professor

Applicant Institution *

Clayton State University

Applicant Email Address *

Please use your institutional email address.

SheryneSouthard@Clayton.edu

Other Team Members

Please provide both names and email addresses here.

X Name: Xueyu Cheng and Email: XueyuCheng@clayton.edu

Type of Project *

- Revision of pre-existing OER
- Creation of ancillaries for pre-existing OER
- Other:

Course Number(s)

TECH 3111 & Tech 3115

Course Title(s)

Applied Economics and Legal Issues-Admin./Tech. Managers

Final Semester of the Project *

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

Spring 2021

Summer 2021

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.

\$4,780

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

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

1. Principles of Economics by OpenStax, ISBN 1938168232 at <https://openstax.org/details/books/principles-economics-2e>
 2. Foundations of Business Law and the Legal Environment by The Saylor Foundation at <https://www.saylor.org/site/textbooks/Foundations%20of%20Business%20Law%20and%20the%20Legal%20Environment.pdf>
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Project Description *

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

Goal:

The goal of this project is to create ancillary text-based and multimedia resources for two courses in the Bachelor of Applied Science degree program - Applied Economic (Tech 3111) and Business Law (Tech 3115). These two courses could benefit substantially from additional supplemental resources because the subject matter is perceived by many students as complex and arduous. We selected multimedia as the delivery method for much of the ancillary content because the research reveals that use of multimedia as an instructional tool allows the students to learn the material faster; understand the content better; and retain the information longer. (Krippiek, McKee, & Moody, 2010). Our objective is to organize and publish the deliverables so that it can be used with a variety of OER textbooks. This will broaden the reach of the project by allowing the materials to be readily available to improve the student outcomes in all economics and business law courses that utilize OER textbooks. We have identified eight existing OER Economic textbooks and five existing OER Business Law textbooks that the materials will be able to supplement. We will make no reference to the book, page and specific reading selection to ensure that the content is universally applicable. Instead, we will categorize the content by the common topics covered in the OER textbooks.

Description:

The previous adoption of OER textbooks for Tech 3111 and Tech 3115 received overwhelmingly positive feedback. A large percentage of the student population at Clayton State University are low income as 71% received Pell Grant assistance in 2019. Consequently, the use of a free textbook is extremely attractive to our students, many of whom are constrained by limited financial resources. While the students have responded positively to the current use of the OER textbook, the instructors see the value of strengthening the OER content by creating materials to substantially support the instruction of the courses.

The instructors will begin by editing and streamlining the OER content. Next, the instructors will create audio-visual instructional materials that are aligned with the streamlined content. These materials will be learner-centered in two ways: 1) the organization of the content, and 2) the variation of the modality. First, the instructional materials will be segmented by topic or sub-topic in mini lectures that do not exceed 6 minutes. Segmentation is a "design principle in which the learning materials are divided into short units and distributed over [a] series of instructional events, such as topics or lessons referred to as segments" (Clark, Nguyen, & Sweller, 2006). It will involve segmenting chunks of "dynamic visualizations that have an identifiable start and end point and which are distinguished by inserting pauses between different segments" (Ibrahim, 2012). With respect to the time limit of each segment, the research indicates that student engagement in the online learning environment is greater with videos that do not exceed 6 minutes (Guo, Kim, & Rubin, 2014). Second, the instructors will utilize multimodal instructional techniques for delivering the content. Animations, short videos, light board lectures, and narrated PowerPoints will be employed to provide the students with a variety of learning experience formats. This approach is designed to enhance student engagement with variation to mitigate the potential for monotony.

We have successfully used this multimedia approach for other material in the classes. The student feedback below is representative of the positive sentiments:

"Integrative approach in presenting the course materials. This layered approach combined great short power point lectures. I wish all online courses were presented in the style and ... outstanding!"

"The modules you created are amazing, with the videos and the separation of each subject matter allows me to process the information more efficiently."

"I enjoy your videos in the modules, they are not long and boring rather straightforward and to the point."

We will expand upon the multimodal materials to develop an even larger variety of resources to supplement the OER textbooks.

Deliverables:

The resources that the applicants will create are designed to enhance their current online classes and provide rich and dynamic instructional materials for other faculty to use with the OER textbooks:

1. Applied Economics – The following deliverables will be created for Principles of Economics by OpenStax:

- Book Modification – OpenStax has done an excellent job in releasing new edition of the textbook and providing support to instructors. However, adding ancillaries to the existing OER will enhance instructional effectiveness of this 100% online course. The book is ideal for a two-semester principles of economics course. TECH 3111 Applied Economics is a one-semester survey course in Economics. The book will be modified to make it appropriate for a one-semester survey of economics course. The book contains 34 chapters and 17 chapters will be selected to be used for a survey course in Economics. The chapters will be reordered and condensed by leaving out certain technical details to make it more comprehensible.
- Narrated PPT Slides – The PowerPoint slides provided by OpenStax will be customized to meet the course needs. Narrated PowerPoint slide videos will be created for each of the 17 chapters using Camtasia.
- Light Board Lectures - At least 10 short light board lectures will be created on concepts such as Demand, Supply and Equilibrium, Perfect Competition, Monopoly, Monopolistic Competition, Oligopoly, Unemployment, Inflation, Aggregate Demand and Aggregate Supply, Fiscal Policy, and Monetary Policy.
- Cartoon Animation – At least 5 cartoon animations will be created on intelligible concepts such as Production Possibilities Curve, Price Elasticity, Production Theory, and Comparative Advantage, Specialization and Trade.
- Quizzes, Tests and Writing Assignment- OpenStax provides a test bank in word document. Many questions in the test bank are inappropriate for the current course. New quiz and test questions will be created. Five tests (each covering 3-4 chapters) and 17chapter quizzes will be created. A writing assignment will also be created based on the best-selling book Freakonomics.
- Study Guides – Study guides will be created to align with each test.

2. Legal Issues-Admin./Tech. Managers – The following deliverables will be created for Foundations of Business Law and the Legal Environment. The ancillary materials will be created by topic so that it can be used by any instructor that teaches this subject matter, irrespective of the book.

- Streamline Chapters – The text from at least four of the chapters will be condensed to make it more concise and intelligible.
- Video Lectures: At least 10 video introductions will be added to the chapters to create context for the subject matter.
- Narrated PPT Slides – At least 20 segmented PowerPoint slide show videos will be added to illustrate the concepts. Particular focus will be made on concepts, such as contract construction, business organizations, intellectual property, and employment law.
- Cartoon Animation – At least 5 cartoon animations will be created to make the content more engaging and easier to understand. Particular focus will be made on the concepts that are historically the most challenging, such as agency/employment law document (Respondeat Superior and mutual consideration).
- Assignments and Tests – Four tests (each covering 4 chapters), six quizzes and two assignments will be created.
- Study Guides - Study guides will be created to align with each test.

References:

- Clark, R.C. & Mayer, R.E. (2002). E-Learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning. San Francisco: Jossey-Bass.
- Guo, P., Kim, J., Rubin, R. (2014). Proceedings of the first ACM Conference on Learning @ Scale Conference: How Video Production Affects Student Engagement: An Empirical Study of MOOC Videos, (41 – 50). Atlanta, Georgia.
- Ibrahim, M. (2012). Implications of Designing Instructional Video Using Cognitive Theory of Multimedia Learning. *Critical Questions in Education*, 3:2 (83–104).
- Krippiek, G., McKee, A.J., Moody, J (2010). Multimedia Use in Higher Education: Promises and Pitfalls. *Journal of Instructional Pedagogies* (1-8).
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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.

Xueyu Cheng will be responsible for creating the materials for Tech 3111 and Sheryne Southard will be responsible for creating the materials for Tech 3115.

June 2020 through July 2020

Tech 3111 - Review Principles of Economics reorder the chapters and modify the content in each chapter (Cheng). Proofread Principles of Economics chapter modifications and edits. (Economics Student Assistant)

Tech 3115 - Review Foundations of Business Law and the Legal Environment and streamline the text to make it more concise and intelligible (Southard). Proofread Foundations of Business Law and the Legal Environment chapter modifications and edits. (Business Law Student Assistant)

August 2020

Tech 3111 – Review the current content and plan the assignment of topics and sub-topics to the best suited multimedia medium (light board, narrated PowerPoint slides and cartoon animation) (Cheng)

Tech 3115 – Review the current content and plan the assignment of topics and sub-topics to the best suited multimedia medium (video, narrated PowerPoint slides and cartoon animation) (Southard)

September 2020 through Mid-November 2020

Tech 3111 – Plan and create multimedia videos (Cheng). Proofread scripts. (Economics Student Assistant)

Tech 3115 – Plan and create multimedia videos (Southard). Proofread scripts. (Business Law Student Assistant)

Mid-November through December 2020

Tech 3111 – Create new quizzes, tests and assignments (Cheng). Proofread new assessments. (Economics Student Assistant)

Tech 3115 – Create new quizzes, tests and assignments (Southard). Proofread new assessments. (Business Law Student Assistant)

Spring 2021 – Incorporate the new deliverable into the courses and in Galileo for use by other instructors. The team members will assess the effectiveness of the materials and subsequently update the materials if necessary. (Cheng and Southard)

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.

The total budget is \$4,780.

Sheryne Southard overload pay to develop the materials - \$2,000

Xueyu Cheng overload pay to develop the material - \$2,000

Two Student Assistants - \$780

The two student assistants will proofread and edit and PowerPoint slides, text in all multimedia story boards, tests, assignments and other instructional materials. One student will work for 26 hours on the Applied Economics course. Another student will work for 26 hours on the Legal Issues for Administrative and Technology Managers course. The rate of pay will be \$15 per hour. (\$15 per hour for 52 hours).

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