Affordable Materials Grants, Round 18:

Transformation Grants

(Fall 2020 – Fall 2021)

Proposal Form and Narrative

# Notes

* The proposal form and narrative .docx file is for offline drafting and for our review processes. Submitters must use the online Google Form for proposal submission.
* The only way to submit the official proposal is through the online Google Form. The link to the online application is on the [Round 18 RFP Page](https://www.affordablelearninggeorgia.org/about/rfp_r18).
* The italic text provided below is meant for clarifications and can be deleted.

# Applicant and Team Information

| Requested information | Answer |
| --- | --- |
| Institution(s) | East Georgia State College |
| Applicant name | Martiana Sega |
| Applicant email | msega@ega.edu |
| Applicant position/title | Associate Professor |
| Submitter name | Martiana Sega |
| Submitter email | msega@ega.edu |
| Submitter position/title | Associate Professor |

Please provide the first/last names and email addresses of all team members within the proposed project. Include the applicant (Project Lead) in this list. Do not include prefixes or suffixes such as Ms., Dr., Ph.D., etc.

| Team member | Name | Email address |
| --- | --- | --- |
| Team member 1 | Martiana Sega | msega@ega.edu |
| Team member 2 | Jimmy Wedincamp | wedincamp@ega.edu |
| Team member 3 |  |  |
| Team member 4 |  |  |
| Team member 5 |  |  |
| Team member 6 |  |  |

If you have any more team members to add, please enter their names and email addresses in the text box below.

|  |
| --- |
|  |

# Project Information

| Requested information | Answer |
| --- | --- |
| Priority Category / Categories | *none* |
| Requested Total Amount of Funding  10 000 |  |
| Final Semester of Project | Fall 2021 |
| Using OpenStax Textbook? | *Yes* |

# Impact Data

Please fill in the data below with impact data in below with *one course taught by one instructor* in each table, and only include courses and instructors that are specifically part of the scope of this grant proposal. Add or remove tables as needed. **Please only put a single averaged or totaled (as appropriate) number in each box. Do not put ranges or mathematical equations in any of these boxes.**

For a multi-course project, if a significant amount of students are assumed to take courses in a sequence and only one textbook is used for these courses, please take this into account in your total *(i.e. only include that book in the first course they would purchase it for OR adjust the number of students affected. Please explain in the notes section if making such adjustments).*

## Course 1

| Row # | Requested information | Answer |
| --- | --- | --- |
| N/A | Course title and number | BIOL 1103 |
| N/A | Course instructor | Jimmy Wedincamp |
| 1 | Average number of students enrolled per section | 30 |
| 2 | Average number of affected course sections scheduled in a summer semester | 1 |
| 3 | Average number of affected course sections scheduled in a fall semester | 3 |
| 4 | Average number of affected course sections scheduled in a spring semester | 3 |
| 5 | Total number of course sections scheduled in an academic year  *Add up rows 2-4.* | 7 |
| 6 | Total number of student section enrollments per academic year  *Multiply row 1 and row 5.* | 210 |
| 7 | Original required commercial materials  *Include each title, author, price for a new copy purchased from either your campus bookstore, the publisher, or Amazon, and a URL to the book showing the price.* | Biology 1103 require the following textbook Campbell, Concepts and Connections 9th edition  Authors: Neil Campbell, Jane Reece, Martha Taylor, Eric J. Simon and Jean Dickey  **Mastering Biology with e-text ISBN 9780134606125**  **$113.25**  https://www.bkstr.com/egscstore/follett-discover-view/booklook |
| 8 | Original cost per student section enrollment  *Add up the cost of all materials in row 7.* | $113.25 |
| 9 | Average post-project cost per student section enrollment | 0 |
| 10 | Average post-project savings per student section enrollment  *Subtract row 9 from row 8.* | $113.25 |
| 11 | Projected total annual student savings per academic year  *Multiply row 10 and row 6.* | $23,730.00 |

## Course 2

|  |  |  |
| --- | --- | --- |
| Row # | Requested information | Answer |
| N/A | Course title and number | BIOL 1103 |
| N/A | Course instructor | Martiana Sega |
| 1 | Average number of students enrolled per section | 28 |
| 2 | Average number of course sections scheduled in a summer semester | 1 |
| 3 | Average number of course sections scheduled in a fall semester | 1 |
| 4 | Average number of course sections scheduled in a spring semester | 1 |
| 5 | Total number of course sections scheduled in an academic year  *Add up rows 2-4.* | 3 |
| 6 | Total number of student section enrollments per academic year  *Multiply row 1 and row 5.* | 84 |
| 7 | Original required commercial materials  *Include each title, author, price for a new copy purchased from either your campus bookstore, the publisher, or Amazon, and a URL to the book showing the price.* | Biology 1103 require the following textbook Campbell, Concepts and Connections 9th edition  Authors: Neil Campbell, Jane Reece, Martha Taylor, Eric J. Simon and Jean Dickey  **Mastering Biology with e-text ISBN 9780134606125**  **$113.25**  https://www.bkstr.com/egscstore/follett-discover-view/booklook |
| 8 | Original cost per student section enrollment  *Add up the cost of all materials in row 7.* | 113.25 |
| 9 | Average post-project cost per student section enrollment | 0 |
| 10 | Average post-project savings per student section enrollment  *Subtract row 9 from row 8.* | 113.25 |
| 11 | Projected total annual student savings per academic year  *Multiply row 10 and row 6.* | 9,513 |

## Course 3

|  |  |  |
| --- | --- | --- |
| Row # | Requested information | Answer |
| N/A | Course title and number |  |
| N/A | Course instructor |  |
| 1 | Average number of students enrolled per section |  |
| 2 | Average number of course sections scheduled in a summer semester |  |
| 3 | Average number of course sections scheduled in a fall semester |  |
| 4 | Average number of course sections scheduled in a spring semester |  |
| 5 | Total number of course sections scheduled in an academic year  *Add up rows 2-4.* |  |
| 6 | Total number of student section enrollments per academic year  *Multiply row 1 and row 5.* |  |
| 7 | Original required commercial materials  *Include each title, author, price for a new copy purchased from either your campus bookstore, the publisher, or Amazon, and a URL to the book showing the price.* |  |
| 8 | Original cost per student section enrollment  *Add up the cost of all materials in row 7.* |  |
| 9 | Average post-project cost per student section enrollment |  |
| 10 | Average post-project savings per student section enrollment  *Subtract row 9 from row 8.* |  |
| 11 | Projected total annual student savings per academic year  *Multiply row 10 and row 6.* |  |

## Course 4

|  |  |  |
| --- | --- | --- |
| Row # | Requested information | Answer |
| N/A | Course title and number |  |
| N/A | Course instructor |  |
| 1 | Average number of students enrolled per section |  |
| 2 | Average number of course sections scheduled in a summer semester |  |
| 3 | Average number of course sections scheduled in a fall semester |  |
| 4 | Average number of course sections scheduled in a spring semester |  |
| 5 | Total number of course sections scheduled in an academic year  *Add up rows 2-4.* |  |
| 6 | Total number of student section enrollments per academic year  *Multiply row 1 and row 5.* |  |
| 7 | Original required commercial materials  *Include each title, author, price for a new copy purchased from either your campus bookstore, the publisher, or Amazon, and a URL to the book showing the price.* |  |
| 8 | Original cost per student section enrollment  *Add up the cost of all materials in row 7.* |  |
| 9 | Average post-project cost per student section enrollment |  |
| 10 | Average post-project savings per student section enrollment  *Subtract row 9 from row 8.* |  |
| 11 | Projected total annual student savings per academic year  *Multiply row 10 and row 6.* |  |

If you have more courses to add, copy the table as many times as needed to complete all courses on the grant.

# Narrative Section

## 1. Project Goals

1. Create learning objectives for each chapter covered in the Introductory Biology I (BIOL1103) class.
2. Develop assessment tools to measure the learning outcomes corresponding to our learning objectives.
3. Develop learning activities to align with the learning objectives & assessment.
4. Check OER textbook content to conform with the required objectives.
5. Identify any additional OERs for the required content not covered by the OpenStax textbook.
6. Search for online available videos to be used as tools or supplementary material for teaching.
7. Create PPT lecture slides for each chapter to be in alignment with all objectives and learning activities.
8. Redesign the syllabus for online and face-to-face classes to include the links to the free textbook chapters.
9. Check and modify all the materials to adhere to basic accessibility standards.
10. Create a master course in Georgia View – Brightspace (D2L) with all the course materials – available to all faculty at EGSC.
11. Collect data and analyze.
12. If needed, identify opportunities to improve and implement in the next round.

## 2. Statement of Transformation

East Georgia State College is an open access institution that continues to stride to provide affordable higher education to unprivileged regions of Georgia. The college offer education through different means, face-to-face and online, serving students at different locations, Swainsboro, Statesboro, Augusta. Majority of our students are full-time employed (90%) and 78% receive financial aid, with 100% of our first-time, full-time students receiving grant aid. Most of the students enroll in Introductory Biology course (BIOL 1103) with the idea of pursuing a career in nursing once transferred to another institutions like Augusta University or Georgia Southern. Also, 97% of our BIOL 1103 students surveyed during Fall 2020 agreed with having a free online textbook. This proposal is aimed at serving our unprivileged students to overcome the financial burden of college life and reach their future goals. The project will save students around $33,000 or more over the course of three semesters (summer included). Moreover, we will use D2L to administer the course materials including learning activities and assessments. D2L requires no additional websites registration since it is in the student main college account, saving time related to online access and solving technical issues.

This project is an opportunity to collaborate with colleagues and develop new ideas based on our personal teaching and learning experiences. The learning activities will be developed first independently then analyzed and improved using our combined previous class experiences. We will use a reversed design approach which recommends first to develop the learning outcomes that the students will have to reach. In this case each chapter learning objectives must follow our college general learning objectives and course objectives. Then, we design the assessments to measure the students learning outcomes. Finally, we create and discuss learning activities, materials etc. (see below). Based on the model of backward design the instruction is developed to have our student, the learner, as a focus (Wiggins, G., 1998 and Bowen, R., 2017).

Traditional teaching done by the educator lecturing for the whole time combined with the short-term attention span is one of the most passive and ineffective methods of learning. Except for few students that practice self-awareness, most of the others rely on reading the lecture slides right before the exam and fail to develop critical thinking skills (personal experience). In this respect we decided to take this opportunity and create learning activities that will engage the students with the new and previously learned material. Repeating previously discussed material in a new context is a way of repeated retrieval, a key process important for long-term learning (Karpicke, 2012). Since most of our students are also employed, additional helping materials would allow them to have a flexible studying program. For this purpose, a folder with videos explaining the information for each chapter will be created in D2L. Depending on the situation some of these videos will be used for in-class teaching and others will be used in the homework learning activities.

Knowledge will be assessed using questions in the form of quizzes, exams and learning activities developed specifically to allow students to apply learned material. Most of the questions used in the past were provided via online through registration to a third-party learning platform. Hence, we will have to develop new assessment questions for all the quizzes and exams (with some exceptions). The assessments, activities and other instructional materials will be created in accordance with the principle of alignment (see Quality Matters standards). This stipulates that what is used in teaching should serve one main purpose, that of reaching the learning outcomes of the learning process.

## 3. Action Plan

Sega

* Create learning objectives and compare to the OpenStax textbook
* Create learning activities and assessment tools
* Identify, review, select additional OERs, videos to be used for teaching
* Create PPT slides
* Check and modify all materials created to be compatible with accessibility standards.
* Collect and analyze data
* Develop a master course in D2L

Wedincamp

* Create learning objectives and compare to the OpenStax textbook
* Create learning activities and assessment tools
* Identify, review, select additional OERs, videos to be used for teaching
* Create PPT slides
* Check and modify all materials created to correspond with accessibility standards.
* Collect and analyze data

Additional personnel are available for support:

* EGSC Information and Technology team to create a course in D2L
* Dr. Terri Brown – support with accessibility standards.

## 4. Quantitative and Qualitative Measures

Quantitative

* The following are to be used to assess for student learning outcomes: a standardized test will be used before and after each semester; quizzes for each chapter; specific questions on the exams.
* Collected data will be analyzed using chi-square test.
* The drop, fail, withdraw rates (DFW) will also be compared using a z-test (comparing proportions).

Qualitative

* A survey will be used to evaluate students’ attitude towards learning and record their feedback on their learning experience using a free online textbook and D2L.
* An IRB request has been submitted to Mr. David Gribbin at EGSC for approval.

## 5. Timeline

* November, December 2020
  + Develop learning objectives for each chapter in BIOL 1103
* January 2021
  + Develop learning assessments for each chapter
* February, March 2021
  + Develop learning activities for each chapter
* April, May 2021
  + Find additional OER materials to be used for teaching
  + Ensure course sections affected by this implementation are designated as low-cost materials in the course schedule.
* Summer 2021
  + Develop PPT slides for each chapter
  + Develop syllabus
  + Check and modify all the materials to correspond with accessibility standards.
* Fall 2021
  + Implement the use of OER textbook and materials in face-to-face classes and/or online.
  + Collect and analyze data
  + Final project report
* Spring – Fall 2022
  + Participate in professional meetings to report on our results from ALG 18 grant.

## 6. Budget

* $5,000 for each member of the team for salary and travel.

## 7. Sustainability Plan

* The links to our free textbook and videos will be verified at the start of each semester by each faculty that will use the OER textbook and materials.
* Each faculty will continue to improve their students learning experience and modify their original activities if that will increase student success.
* All materials will be available to be used by any faculty in the EGSC department in the future. The results of our implementation will be discussed at the level of department and if successful we hope for adoption by the whole department.
* All the materials and the process of creating them following Quality Standards will be shared at future teaching conferences.

# Creative Commons Terms

*I understand that any new materials or revisions created with ALG funding will, by default, be made available to the public under a Creative Commons Attribution License (CC-BY), with exceptions for modifications of pre-existing resources with a more restrictive license.*

# Accessibility Terms

*I understand that any new materials or revisions created with Affordable Learning Georgia funding must be developed in compliance with the specific accessibility standards defined in the* [*Request for Proposals*](https://www.affordablelearninggeorgia.org/about/rfp_r18)*.*

# Letter of Support

*The Department Chair from the corresponding project, or the Department Chair’s direct report such as the Dean or Provost, must provide a signed Letter of Support for the project. This letter should acknowledge the following:*

* *The department will provide support for fund disbursement in correspondence with the Grants/Business Office.*
* *The department approves of the work on the proposal by the applicant(s).*
* *The department acknowledges the sustainability of the use of these affordable resources after the grant work is complete.*

*In the case of multi-institutional affiliations, all participants’ institutions must provide a letter of support.*

*Please provide the name and title of the department chair (or other administrator) who provided you with the Letter of Support.*

|  |
| --- |
| *John Cadle* |

# Grants or Business Office Letter of Acknowledgment

*Institutional Grants/Business Offices will be responsible for fund disbursement, often in correspondence with the Department Chair, including expense and travel reimbursement. Applicants will need to provide a short Letter of Acknowledgment stating that the Grants/Business Office knows about the applicant’s intent to apply for an Affordable Materials Grant. Either the Department Chair or the Project Lead can work with the Grants/Business Office to get this signed letter.*

*In the case of multi-institutional affiliations, all participants’ institutions must provide a letter of acknowledgment.*

*Please provide the name and title of the grants or business office representative who provided you with the Letter of Acknowledgment.*

|  |
| --- |
| *Sheila Wentz* |