Affordable Learning Georgia Textbook Transformation Grants
Round 2
Summer 2015, Fall 2015, Spring 2016
Transformation To Scale
Proposal Form and Narrative

Please complete per inline instructions; the completed document is not to exceed four pages. The italicized text is provided for your assistance; please do not keep the italicized text in your submitted proposal. Proposals that do not follow the instructions may be returned.

<table>
<thead>
<tr>
<th>Institution Name(s)</th>
<th>Albany State University</th>
</tr>
</thead>
</table>
| Team Members (Name, Title, Department, Institutions if different, and email address for each) | Principal Investigator, Anthony Cooper, Assistant Professor Biology, Department of Natural and Forensic Sciences, anthony.cooper@asurams.edu  
John Williams, Assistant Professor Biology, Department of Natural and Forensic Sciences, John.Williams@asurams.edu  
Kendra Merchant, Assistant Professor Biology, Department of Natural and Forensic Sciences, Kendra.Merchant@asurams.edu  
AntaSha Jones, Assistant Professor Biology, Department of Natural and Forensic Sciences, AntaSha.jones@asurams.edu |
<p>| Sponsor, Title, Department, Institution | Dr. K.C. Chan, Chair Department of Natural and Forensic Sciences |
| Course Names, Course Numbers and Semesters Offered (Summer 2015, Fall 2015, or Spring 2016) | Human Anatomy and Physiology Online, Biology 2411, Fall 2015 |
| Average Number of Students Per Course Section | 30 |
| Number of Course Sections Affected by Implementation in Academic Year 2016 | 8 |
| Total Number of Students Affected by Implementation in Academic Year 2016 | 240 |</p>
<table>
<thead>
<tr>
<th>Award Category (pick one)</th>
<th>☐ No-Cost-to-Students Learning Materials</th>
<th>☐ OpenStax Textbooks</th>
<th>☐ Course Pack Pilots</th>
<th>☒ Transformations-at-Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>List the original course materials for students (including title, whether optional or required, &amp; cost for each item)</td>
<td>[Material Title, optional or required]</td>
<td>[Cost]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Textbook: Hole’s Human Anatomy and Physiology 13th edition</td>
<td>Textbook Cost: 178.75 x 240= $42,900.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab Book: Hole’s Human Anatomy and Physiology 13th edition</td>
<td>Lab Manual Cost: 120.75 x 240=$28,980.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory Manual</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximate Total Cost Saving: $71,880.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plan for Hosting Materials</td>
<td>☒ OpenStax CNX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☒ D2L</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ LibGuides</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Per Student Cost</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projected Per Student Savings (%)</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. **PROJECT GOALS**

*List the goals you’re trying to achieve in the proposal*

The primary goal of this proposal is to reduce the cost of educational learning materials for students enrolled in eight sections of a biology course in anatomy for the Department of Natural and Forensic Sciences. It has been shown that the high cost of learning materials is a continuing challenge for students in higher education. Hilton et al. (2013) concluded that a barrier to higher education has resulted from the high costs textbooks. Data presented by Perry (2012) revealed that the cost of textbooks rose 812% in the U.S. between 1978 and 2012. The U.S. Government Accountability Office developed estimates showing that students were facing an average of $900 in textbook costs annually (2005). A study done by the Student Public Interest Research Group presented that there was an increase in the rate of textbooks four times higher than inflation over the past twenty years (Allen, 2010).

Thus, additional goals for this proposal include the following:

- Reducing student expenses related to book purchases for to zero dollars at scale
- Providing access to course materials on the first day of class using Open Stax
- Allowing student access to free Open Education Resources (OER) and Galileo
- Lowering the cost of college and improve overall student retention for Traditional and None Traditional
- Increasing student retention and graduation rate

1.1 **STATEMENT OF TRANSFORMATION**

- **Describe the transformation:**
  Benefits resulting from transformation include advancing knowledge for all students, expanding access to all learners traditional and non-traditional, providing resources that promote student and faculty learning and allowing students to access material made available from other institutions (Williams, 2010). Therefore, the transformation for this team cohort will involve the adoption of free Open Stax textbooks for lecture and laboratory and several instructional lectures from several other Open Education Resources at no cost to the students.

- **Identify stakeholders affected by the transformation:**
  The stakeholders affected by the transformation will be traditional and non-traditional undergraduate first year, second year, junior and senior students enrolled in fall 2015 within eight sections of BIOL 2411: Human Anatomy and Physiology Online, Biology 2411 in the Department of Natural and Forensic Sciences at Albany State University.

- **Describe the impact of this transformation on stakeholders and course success:** The transformation process will help remove and eliminate the cost of increasing book prices for students, and provide students with access to course learning material on the first day of class. The impact will be a reduction in the students’ cost of attendance, improved student retention and graduation, and student access to a variety of Open Education Resources (OER) such as free online Open Stax books and Galileo.

- **Category 4 only: Describe the transformative impact on the program, department, institutions, access institution, and/or multiple courses.**
The transformation impact of providing access to the student Open Education Resources and/or Openstax is the following—1) the cost savings for each student to be realized is approximately $300 and nearly $72,000 for the Department and University, 2) the educational experience for the students will be improved by students having access to the course materials on the first day of class, and 3) student retention and achievement will increase by students having access to the course materials.

1.2 TRANSFORMATION ACTION PLAN

The action plans will address the identification, review, selection, and adoption/adaptation/creation of the new course materials.

**Identification:** The identification of quality course materials will focus on using sites known for providing open education resources (OER). The main source will be Affordable Learning Georgia (ALG) resources. Additional OER sources will be examined from sites such as Merlot, Khan Academy, Open Stax Human Anatomy and Physiology text book, Sapling Learning, Wiley, Learning Pod, Simbio, and Anatomy Zone. Any new materials made available in anatomy and physiology since the spring 2015 identification process of Round 1 will be identified for the review process.

**Review:** The review process for the resources will involve the team examining new and existing identified sources obtained from these sites to determine if new information needs to be added.

**Selection:** The team will add new materials to existing materials that correspond to the instructor developed course curriculum. If there is a new textbook, materials with lecture content videos, and online laboratory experiments that are deemed better than the current materials, they will be selected after the comparison.

**Adoption:** The materials will be adopted by the team. They may consist of the spring 2015 resources along with any new items and included in the syllabi. Students will not be required to print the online textbooks. Further, lecture content videos selected from ALG Open Education Resources, Merlot, and Khan Academy will be incorporated into the syllabi again. Lastly, laboratory assignments selected from ALG Open Education Resources, Merlot, McGraw-Hill free online laboratory experiments will be added to the syllabi.

**Adaptation:** The team of instructors will select and assign reading content from Open Stax Human Anatomy and Physiology online book. Additionally, the team of instructors will provide online lectures from Merlot, ALG, Khan Academy to reinforce the content for the lecture and lab materials.

**Creation of New Course Material:** The team will create additional study guide and chapter learning outcome questions to direct student in preparation for exams and quizzes.

**Syllabus:** The syllabi will be made available in D2L for each course by the team. It will contain the following—1) a brief introduction to Open Education Resources (OER), 2) the importance of Open Education Resources, 3) how to use Open Education in this class, 4) lecture and lab information link from all selected Open Education Resources (OER) sites, 5) assignment, quizzes and exam due dates, and 6) an explanation on how the lecture will be presented using OER.

**Course Redesign:** The course is redesigned by the team from using the regular hard copy text book/manual during the lecture and lab to using Open Education Resources (OER) sites where students will access the information. They will be required to read specific items in the Open Stax Human Anatomy and Physiology online textbook and/or complete online laboratory
experiments, view assigned videos related to reading assignments and/or laboratory experiments, complete learning objectives, and submit objectives before completing quizzes and exams.

**Instructor Design:** The instructor team will design the course to ensure that the OER will be easily accessible through the primary online Learning Management System. The D2L courses will contain all the links and/or downloaded content from selected Open Education Resources (OER) sites.

- **The activities expected from each team member and their role(s): subject matter experts, instructional designer, librarian, instructor of record, et al.**

  **Team member:** Anthony Cooper, Principle Investigator

  **Instructor of Record:** Anthony Cooper

  **Subject Matter Expertise:** General Biology, Human Anatomy and Physiology

  **Expected Activities:** The expected activities are the following: Conduct the Affordable Learning Georgia course. Coordinate and manage the team development and implementation of Open Education Resource course content and syllabi development and implementation. Coordinate the development and administration of the ALG survey to collect student participation data related to course.

  **Team members:** John Williams, Kendra Merchant, and AntaSha Jones

  **Instructors of Record:** John Williams, Kendra Merchant, and AntaSha Jones

  **Subject Matter Expertise:** Biology-2411-Human Anatomy and Physiology

  **Expected Activities:** The expected activities are the following: Conduct the course by coordinating and managing Openstax course content, select and determine study material for all quizzes, exams and assignment, complete and submit all grade related data for the course to the Principle Investigator for analysis.

- **The plan for providing open access to the new materials.**

  - Open Stax Human Anatomy and Physiology online textbook reading assignments will be presented two chapters at a time, will be supplemented with subject topic video Lecture, and will be supplemented with a study guide and learning outcome question in preparation for quizzes and exams.

  - Online Laboratory activities will be selected from Simbio, and/or McGraw-Hill. Students will be required to submit the online lab report before accessing quizzes.

  - Lecture and Laboratory activities will take place in assigned computer-ready rooms.

  - Students can access OER content using D2L and/or Open Stax CNX, which allows students to access using IPads, Laptops and phones since wireless access is available on campus.

1.3 **QUANTITATIVE AND QUALITATIVE MEASURES**

**Quantitative Measures:** The cost savings from not purchasing books, retention in course, classification, major area of study, and other demographic data, passing and failing rate, drop and withdraw rate, and overall academic success of students completing course will be the major quantitative measures. Descriptive statistics will be used to analyze this data. More specifically, counts, percentages, frequencies, and means will be used. Cross-Tabulations will also be used. Table and graphs will be employed to present the data. Survey monkey will be used to collect the survey data that will be calculated using Excel. Additionally, the Independent Group T-Test will be used to compare the students by section.
Qualitative Measures: Several open-ended questions will be asked to collect qualitative data from the student participants to capture their experience. The qualitative data will be analyzed by reviewing the responses to identify themes. The themes will be presented with tables. Such questions include:

- What does the term Open Education Resources mean to you?
- How has having Open Education Resources available helped your academic learning experience in this course?
- What were the best aspects of using the Open Education Resources?
- What were the challenges of using the Open Education Resources?

1.4 TIMELINE (TENTATIVE)

June-July 2015: The team completes transformation action plan tasks

August: Classes begin and the team introduces to OpenStax textbooks and syllabi

September: The team collects data on student cost saving from not purchasing books by students, retention in course, classification, major area of study

October: Mid-Term grade reports

December: The team collects remaining data on student passing and failing rate, drop and withdraw rate, and overall academic success of students completing course and final grade reports

January 2016 – Data analysis and final report submitted

1.5 BUDGET

Personnel (Salary and Fringe Benefits)

- Anthony Cooper, Principal Investigator $5,000
- John Williams, Team Member $3,000
- Kendra Merchant, Team Member $3,000
- AntaSha Jones, Team Member $3,000

Consultants

- Data Analyst (ASU Faculty TBA) $1,500

Equipment/Supplies: $2,500

Travel/Conference: $800

Total: $18,800

1.6 SUSTAINABILITY PLAN

This Round 2 transformation to scale proposal for Biology-2411-Human Anatomy and Physiology is to build on the Round 1 grant to expand the number of instructors for this course using OER. The selected course is a major class that is taken by students majoring in Nursing, Education and Physical Education. Therefore, the course is scheduled to be offered each semester to address the needs of the student demand. The Department will have the capacity to continue providing this ALG course and ability to increase the number of faculty who offer other courses through OER by building on the $71,880.00 cost savings on textbooks for the 240 students for the fall 2015.
1.7 REFERENCES & ATTACHMENTS


Perry, M. (2012). The college textbook bubble and the “open educational resources” movement is going up against the textbook cartel. Retrieved from American Enterprise Institute http://www.aei.org/publication


PROPOSAL SUBMISSION: ALL PROPOSAL DOCUMENTS, REFERENCES, AND ATTACHMENTS MUST BE SUBMITTED IN A SINGLE EMAIL TO ALG@GATECH.EDU.

DEADLINE FOR CATEGORIES 4: 5:00 PM, DECEMBER 8, 2014
December 8, 2014

Anthony Cooper, Assistant Professor
Department of Natural and Forensic Sciences
Albany State University
504 College Drive
Albany, GA 31705

Dear Mr. Cooper:

I am pleased to write in support of your latest effort to further expand the Department’s ability to lower the rising cost of textbooks for students enrolled in our biology courses. In that this Affordable Learning Georgia (ALG) Round 2 – Category Transformation at Scale proposal will include additional instructors also adopting the OpenStax Textbooks sources, even more students will benefit from the reduced costs of textbooks.

Moreover, the Department will continue to support resources needed by instructors participating with this proposal to enhance the success of the endeavor. The opportunity to increase our students’ achievement and retention rates through the ALG Textbook Transformation Grant is very important.

I congratulate you on submitting your third proposal for the ALG Program and hope that you are successful with this scaled proposal as well.

Sincerely,

Sincerely yours,

K. C. Chan, PhD
Interim Chair
Professor of Physics
Department of Natural and Forensic Science

HSHT Project Director
RIMI Project Coordinator
(229) 430-1728; kcchan@asuram.edu