

**Affordable Learning Georgia Textbook Transformation Grants  
Proposal Form**

*Please complete per inline instructions; completed form not to exceed four pages.*

<b>Institution Name</b>	Dalton State College		
<b>Team Members</b> (Name, Title, Department and email address for each)	Dr. Marina G. Smitherman, Director, Center for Academic Excellence & Associate Professor of Biology  with Dr. Chuck Fink, Assistant Professors of Biology		
<b>Sponsor, Title, Department</b>	Dr. Andrew Meyer, Associate Vice President for Academic Affairs & Professor of Biology		
<b>Course Name, Course Number and Semester Offered (Spring 2015 Required)</b>	BIOL 2212 – Human Anatomy & Physiology I offered Spring 2015  BIOL 2213 – Human Anatomy & Physiology II offered Spring 2015		
<b>Average Number of Students in the Course</b>	24-48	<b>Number Course sessions per Academic year</b>	14
<b>Award Category (pick one)</b>	<input type="checkbox"/> No-Cost-to-Students Learning Materials <input checked="" type="checkbox"/> OpenStax Textbooks <input type="checkbox"/> Course Pack Pilots		
<b>List the original course materials for students (including title, whether optional or required, &amp; cost for each item)</b>	1. Human Anatomy & Physiology 10 <sup>th</sup> Edition (0321696395) Textbook with Mastering A&P – required.  2. Human Anatomy & Physiology 11 <sup>th</sup> edition (0321918924) Cat lab Manual – required.	<i>\$275.25 at our bookstore new</i>  <i>\$143.75 at our bookstore new</i>  <b>Total Cost: \$419</b>	
<b>Projected Per Student Cost</b>	\$0-\$35	<b>Projected Per Student Savings (%)</b>	65%

## 1. PROJECT GOALS

- Redesign new A&P I & II lecture materials (64 sets) using the framework and images from the OpenStax Anatomy & Physiology textbook;
- Trial the free online Anatomy & Physiology OpenStax textbook in Human Anatomy & Physiology I in one lecture class alongside a second one using the regular textbook, both to be run by the same Professor (Dr. Fink);
- Trial the free online Anatomy & Physiology OpenStax textbook in Human Anatomy & Physiology II in a class that has already taken A&PI and has the regular textbook (Dr. Smitherman);
- Compare and contrast during assessments any impact on whether students succeed in meeting the learning outcomes for the courses in the classes with the regular textbook versus those with the OpenStax one;
- Run a survey of the students trialed to assess the student preferences for either book and their opinions on the financial aspects of the textbook chosen;
- Feed back to fellow A&P faculty on the relative merits of both books and encourage a switch in the department should the OpenStax be as effective at lower cost.

### 1.1 STATEMENT OF PROBLEM

- Students at Dalton State are among the lowest socioeconomic groups within the University System
- Many of our Nursing and PreMed students taking A&P are non-traditional, coming back to studying with families and jobs.
- Consequently students routinely fail to purchase textbooks because money is required for more basic things for them and their families
- Many of our students work several jobs on top of studying
- Textbooks in Human Anatomy & Physiology alone are around \$420 for new books let alone pre-requisites.

### 1.2 TRANSFORMATION ACTION PLAN

- A&P syllabus redesign
- A&P course redesign, instructional design, etc.)
- Eight student experience surveys
- Four student success surveys, including an analysis of GPA, DWF rates and meeting of student learning objectives for final assessment.

### 1.3 TIMELINE:

- Sept 28<sup>th</sup> 2014 –
  - Grant notification

- Complete contractual timeline.
- Sept 28<sup>th</sup> onwards –
  - Plan and attend online and in-person training before project initiation.
  - Begin collaborative redesign of lecture and other course materials required for implementation of the OpenStax online textbook.
  - Choose chapters for book comparison
  - produce student comparison materials.
- Oct 21<sup>st</sup> –
  - Attend the free online USG Monthly series Kissing Pricey Textbooks Goodbye: Teaching with Open Access, Presenter: Susan E. Hrach, PhD.
- Nov 26<sup>th</sup> –
  - Have completed the online and in-person training before project initiation.
- Dec 19<sup>th</sup> -
  - Complete collaborative redesign of lecture and other course materials
- January 30<sup>th</sup>
  - First student experience survey, comparison of Marieb Chapter 4 with OpenStax Chapter 4 (Tissues) in A&PI and Marieb Chapter 18 compared to OpenStax Chapter 19 (Heart) in A&PII.
- February 27<sup>th</sup>
  - Second student experience survey, comparison of Marieb Chapter 6 with OpenStax Chapter 6 (Bone Tissue) in A&PI and Marieb Chapter 21 compared to OpenStax Chapter 21 (Immune System) in A&PII.
- March 16<sup>th</sup>
  - Midterm grades due
- March 20<sup>th</sup>
  - Midterm collaborative survey to determine any impact on student success in Spring 2015 class with OpenStax textbook as opposed Marieb in this Spring 2015 semester compared to the equivalent classes run in Spring 2014 by the same professor in API (Dr. Fink) and A&PII (Dr. Smitherman).
- March 27<sup>th</sup>
  - Third student experience survey, comparison of Marieb Chapter 11 with OpenStax Chapter 12 (Nervous Tissue) in A&PI and Marieb Chapter 22 compared to OpenStax Chapter 22 (Respiratory System) in A&PII.
- April 30<sup>th</sup>
  - Fourth student experience survey, comparison of Marieb Chapter 16 with OpenStax Chapter 17 (Endocrine System) in A&PI and Marieb Chapter 25 compared to OpenStax Chapter 25 (Urinary System) in A&PII.
- May 6<sup>th</sup>
  - Final grades for class due
- May 15<sup>th</sup>

- Final collaborative survey to determine any impact on student success in Spring 2015 class with OpenStax textbook as opposed Marieb in this Spring 2015 semester compared to the equivalent classes run in Spring 2014 by the same professor in API (Dr. Fink) and A&PII (Dr. Smitherman).
- May 20<sup>th</sup>
  - Begin work on final report
- June 1<sup>st</sup>
  - Submit final report
- July 1<sup>st</sup>
  - Communication of findings and meeting with other colleagues currently teaching Anatomy & Physiology to discuss moving to that should student achievement and experience results be comparable across the two books.

#### **1.4 BUDGET**

\$5,000 – Dr. Fink, salary for redesign of course materials, surveys of student success and experiences and preparation of initial project initiation materials and final report for Anatomy & Physiology I

\$5,000 – Dr. Smitherman, salary for redesign of course materials, surveys of student success and experiences and preparation of initial project initiation materials and final report for Anatomy & Physiology II.

\$800 – Campus Auxillary services charge \$35 per student average cost of producing printed materials similar to that needed including photocopying costs for student chapters from Marieb for comparison materials in A&PI.

#### **1.5 SUSTAINABILITY PLAN**

There are usually 13-14 sections of Human Anatomy & Physiology taught every semester with 24 students, a total of 312 students in these classes per semester. Saving them the \$275.12 cost of the textbook, assuming it does not go up for Spring 2015, would save a total of \$85800 for our group of students. A cost saving of 60% would be significant for our students, attending one of the lowest cost institutions in the United States, the implication of which is that tuition is a cost. Our students often struggle to purchase textbooks of any kind, and if the results are comparable between the two books, a switch would significantly impact our students livelihoods .

#### **1.6 REFERENCES & ATTACHMENTS**

*This could include any citations, references, your administrative letter of support, etc. Letters 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 receipt and distribution of funding. Letters should reference sustainability.*

Please see letter of support from Dr. Andrew Meyer, our Associate Vice President for Academic Affairs and a fellow Biologist in support of our plan.

**PROPOSAL SUBMISSION: ALL PROPOSAL DOCUMENTS, REFERENCES, AND ATTACHMENTS SHOULD BE SUBMITTED IN A SINGLE EMAIL TO [ALG@GATECH.EDU](mailto:ALG@GATECH.EDU) BY 5:00 PM, EST, SEPTEMBER 8, 2014.**