

Application Details

Manage Application: Textbook Transformation Grants: Round Ten

Award Cycle: Round 10

Internal Submission Deadline: Friday, September 29, 2017

Application Title: 344

Application ID: 001884

Submitter First Name: Sue

Submitter Last Name: Mastrario

Submitter Title: Associate Director

Submitter Email Address: smastrario@abac.edu

Submitter Phone Number: 229-391-4899

Submitter Campus Role: Sponsored Programs Office

Applicant First Name: April

Applicant Last Name: Abbott

Co-Applicant Name(s): --

Applicant Email Address: aabbott@abac.edu

Applicant Phone Number: 229-391-5161

Primary Appointment Title: Mathematics Lab Coordinantor

Institution Name(s): Abraham Baldwin Agricultural College

Submission Date: Monday, October 2, 2017

Proposal Title: 344

Proposal Category: No-Cost-to-Students Learning Materials

Are you using an OpenStax textbook?: Yes

Final Semester of Instruction: Fall 2018

Team Members (Name, Title, Department, Institutions if different, and email address for each):

All team members are from Abraham Baldwin Agricultural College's Math Department.
 April Abbott, Mathematics Lab Coordinator, aabbott@abac.edu
 Gary Dicks, Assistant Professor, gdicks@abac.edu
 Dr. Jan Gregus, Assistant Professor, jgregus@abac.edu
 Avi Kar, Assistant Professor, akar@abac.edu
 Dr. Buddhi Pantha, Assistant Professor, bpantha@abac.edu
 Melanie Partlow, Assistant Professor, mpartlow@abac.edu
 Lori Pearman, Assistant Professor, lpearman@abac.edu
 Amanda Urquhart, Assistant Professor, aurquhart@abac.edu
 Dr. Eunkyung You, Associate Professor, eyou@abac.edu

Sponsor, (Name, Title, Department, Institution):

Dr. Joe Falcone, Head, Science and Mathematics, Abraham Baldwin Agricultural College,
 jfalcone@abac.edu

Course Names, Course Numbers and Semesters Offered:

College Algebra, MATH 1111 (Spring, Summer, and Fall)

Trigonometry, MATH 1112 (Spring, Summer, and Fall)

Statistics, MATH 2000 (Spring, Summer, and Fall)

List the original course materials for students (including title, whether optional or required, & cost for each item):	College Algebra/Trigonometry textbook and MML software bundled: \$195.35 Title: Precalculus by Sullivan and Sullivan Statistics textbook and Connect software bundled: \$235.00 Title: Elementary Statistics
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Average Number of Students per Course Section:	30
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Number of Course Sections Affected by Implementation in Academic Year:	55
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Average Number of Course Sections Per Semester:

College Algebra

Avg. Fall – 28

Avg. Spring – 14

Avg. Summer - 3

Trigonometry

Avg. Fall – 4

Avg. Spring – 5

Avg. Summer – 1

Statistics

Avg. Fall – 5

Avg. Spring – 5

Avg. Summer - 1

Total Number of Students Affected by Implementation in Academic Year:	1650
Requested Amount of Funding:	\$26,636
Original per Student Cost:	\$195.35/\$235.00
Post-Proposal Projected Student Cost:	\$22.95
Projected Per Student Savings:	\$172.40/\$212.05
Projected Total Annual Student Savings:	\$300,000

Project Goals:

- To provide our students with significant without compromising the quality of instruction or our commitment to an internationalized general education curriculum.
- To maintain or improve our current D/W/F math rates.
- To maintain or improve our course outcome rates.
- To improve upon the materials and resources created by Ms. April Abbott and Dr. Eunkyung You when they completed a similar mini-grant in 2016 for College Algebra.
- To create a course schedule for Trigonometry and Statistics courses using the OpenStax books.
- To create WebAssign assignments for Trigonometry and Statistics courses. Dr. You and Ms. Abbott have already created WebAssign courses for College Algebra.

To create any supplemental materials for Trigonometry and Statistics.

Statement of Transformation:

- During the rest of this fall semester and winter break, the math faculty will work to switch College Algebra, Trigonometry, and Statistics over to OpenStax and WebAssign. Course schedules, homework selections, and online homework selections will be created for each course. If any supplemental material is needed, worksheets will be printed and presented to the students free of cost.
- The stakeholders affected by this transformation are the math faculty and students of ABAC.
- The math faculty will have to work to make sure the change is as seamless as possible for the students. The students will benefit from having no/low cost courses. From a previous implementation of a mini-grant, there is expected to be no change to current course success rates.

A no/low cost College Algebra will impact students enrolling in Trigonometry and Statistics thereafter. They will already be familiar with the WebAssign software and how to access the free textbook on their phones. Our Calculus classes are also using WebAssign and the no/low cost students will be even more familiar with the program by that point.

Transformation Action Plan:

-

Once the grant has been approved, faculty will start reviewing the OpenStax book.

College Algebra, Trigonometry, and Statistics course and syllabus will be redesigned as needed for the transformation.

Given what the OpenStax books lack, new materials will be created to supplement instruction as needed.

Each team member is responsible for documenting all their time working on the grant. All faculty members are responsible for keeping College Algebra up to date. You, Dicks, and Urquhart are responsible for Trigonometry. Gregus and Pantha are responsible for Statistics. Any newly created materials will be placed on D2L and faculty websites for the students to access for free. These materials will also be attached to the final report for grant.

Quantitative & Qualitative Measures: -The data will be analyzed from every team member who teaches a no/low course and will be compared to that instructor's spring 2017/fall 2017 average. This data includes DWF rates and Learning Objective success. All ABAC MATH courses have their final assessed and each team member gives the same final. The learning outcomes are assessed from questions on the final. The faculty will survey the students to obtain qualitative and quantitative data. A Likert-type survey has already been created by Dr. You and Ms. Abbott which was used by students to rate their opinions on the OpenStax book and WebAssign. This survey may be modified to provide more information. Quotes will be taken from open-response questions on the survey. The math faculty are prepared to fill out similar reports to the final reports that Dr. You and Ms. Abbott filled out.

Timeline:

Timeline	Action
October 25, 2017: Notification Date	Start reviewing OpenStax books and creating course items such as schedule, homework selection, and WebAssign assignments
November 6, 2017: Kickoff Meeting	At least two faculty members will attend this meeting.
Nov-January	Complete review of textbooks and creation of course items.
January 8 th , 2018	Classes start and the no/low cost courses begin
January 22, 2018: Round Eleven Deadline for applications	Submit Application for Round 11
February 15, 2018: Notification Date	Prepare to attend the kickoff meeting
February 26, 2018: Kickoff Meeting	At least two faculty members will attend this meeting.
Third week of May	Compile findings and submit report to the grant

Budget:

Large-Scale Transformation: Textbook transformation projects within one or more courses or sections or department-wide adoptions with 500 or more students enrolled on average per academic year total.

\$30,000 maximum award

\$5,000 maximum per team member

\$800 for travel and expenses

Course	Professor- Spring 2018	Professor- Fall 2018	Amount
MATH 1111- College Algebra	Abbott	Abbott	\$2,000
	Pantha	Pantha	\$2,000
	Partlow	Partlow	\$2,000
	Pearman	Pearman	\$2,000
	You	You	\$2,000
		Gregus*	\$1,000
		Urquhart	\$1,000
MATH 1112- Trigonometry	Dicks	Dicks	\$2,000
	Urquhart	Urquhart	\$2,000
	You	You	\$2,000
MATH 2000- Statistics	Gregus	Gregus	\$2,000
	Pantha	Pantha	\$2,000
		Pearman*	\$1,000
-Tentative		Partlow	\$1,000
			\$24,000
Benefits (7.65% FICA)			\$1,836
Travel/ overall project expenses			\$800
		TOTAL REQUEST	\$26,636

The Abraham Baldwin Agricultural College (ABAC) Office of Research and Sponsored Programs will be responsible for the receipt and distribution of any award funds based upon the proposal budget. The funds will be used to cover the participant's time (salary/release

time/overload/replacement coverage), project expenses including related department needs, and travel expenses.

Sustainability Plan:

The faculty plan to continue offering no/low cost courses into fall of 2018. The faculty plan to continue offering the classes if there is no difference in our success rates. We will continue to improve WebAssign assignments every semester to better suit the needs of the students. We will review and implement new OpenStax editions. If needed, we will create and provide our students with supplemental material that we find lacking in the new editions.



ABRAHAM BALDWIN AGRICULTURAL COLLEGE

School of Arts and Science

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229-391-5100 • Fax 229-391-5101

www.abac.edu

September 29, 2017

Affordable Learning Georgia Textbook Transformation Grants
University System of Georgia
270 Washington Street, S.W.
Atlanta, GA 30334

Dear Review Committee;

It is my pleasure to write in support of Ms. April Abbott's application to participate in "Open Mathematics in Action: Expanding the Successful Use of OER in Mathematics Courses" grant opportunity.

This opportunity would be a substantive benefit to our student body. Our students, many of whom are first generation college students, are often unprepared for class for lack of the ability to afford their textbooks. Through this grant the Department of Science and Mathematics will transform our College Algebra, Statistics, and Trigonometry classes into low-to-no-cost-to-student classes, which is expected to result in better student performance in these classes. The new course material will be accessed online through the D2L course shell that will direct students and instructors to pre-existing GALILEO materials, including full-text magazines, journals, encyclopedias, e-books, audio recordings, films, and other electronic resources. The faculty who are proposing this grant all have significant experience teaching the course that is targeted in the proposal. I believe the effort of this project to be sustainable over the long term, and am excited at the potential financial savings our students would experience.

The Abraham Baldwin Agricultural College (ABAC) Office of Research and Sponsored Programs will be responsible for the receipt and distribution of any award funds based upon the proposal budget. The funds will be used to cover the participant's time (salary/release time/overload/replacement coverage), project expenses including related department needs, and travel expenses.

Thank you for this opportunity to assist our students and others in obtaining an affordable quality learning opportunity through participation in the ALGTT grant program.

Sincerely;

Joseph M. Falcone Ph.D.

Department Head of Science and Mathematics
School of Arts and Science

Affordable Learning Georgia Textbook Transformation Grants

Round Nine

For Implementations beginning Summer Semester 2017

Running Through Spring Semester 2018

Proposal Form and Narrative

- *The proposal form and narrative .docx file is for offline drafting and review. Submitters must use the InfoReady Review online form for proposal submission.*
- **Note: The only way to submit the proposal is through the online form in Georgia Tech’s InfoReady Review at:**
<https://gatech.infoready4.com/#competitionDetail/1757803> _
- *If you are copying and pasting into InfoReady Review from this form, first convert the file to **plain text** and copy/paste from the plain text file.*
 - o *In Word, go to File > Save As... > and change the file format to “Plain Text (.txt).”*
 - o *Copy and paste from the .txt file.*
 - o *Be sure to save both copies in case you are asked to resubmit.*
- *Microsoft Word Document formatting pasted into InfoReady Review will render the reviewer copy unreadable. **If you paste Word-formatted tables into InfoReady Review, you may be asked to resubmit your application if time permits.***
- *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.*

Submitter Name	Sue Mastrario
Submitter Title	Associate Director
Submitter Email	smastrario@abac.edu

Submitter Phone Number	(229)391-4899
Submitter Campus Role	Sponsored Programs Office
Applicant Name	April Abbott Team Lead
Applicant Email	aabbott@abac.edu
Applicant Phone Number	(229)391-5160
Primary Appointment Title	Mathematics Lab Coordinator
Institution Name(s)	Abraham Baldwin Agricultural College
Team Members	<p>All team members are from Abraham Baldwin Agricultural College's Math Department.</p> <p>April Abbott, Mathematics Lab Coordinator, aabbott@abac.edu</p> <p>Gary Dicks, Assistant Professor, gdicks@abac.edu</p> <p>Dr. Jan Gregus, Assistant Professor, jgregus@abac.edu</p> <p>Avi Kar, Assistant Professor, akar@abac.edu</p> <p>Dr. Buddhi Pantha, Assistant Professor, bpantha@abac.edu</p> <p>Melanie Partlow, Assistant Professor, mpartlow@abac.edu</p> <p>Lori Pearman, Assistant Professor, lpearman@abac.edu</p> <p>Amanda Urquhart, Assistant Professor, aurquhart@abac.edu</p> <p>Dr. Eunkyung You, Associate Professor, eyou@abac.edu</p>
Sponsor, Title, Department, Institution	Dr. Joe Falcone, Head, Science and Mathematics, Abraham Baldwin Agricultural College, jfalcone@abac.edu

Proposal Title	Textbook Transformation Grants: Rounds Ten and Eleven				
Course Names, Course Numbers and Semesters Offered	College Algebra, MATH 1111 (Spring, Summer, and Fall) Trigonometry, MATH 1112 (Spring, Summer, and Fall) Statistics, MATH 2000 (Spring, Summer, and Fall)				
Final Semester of Instruction	Fall 2017				
Average Number of Students Per Course Section	30	Number of Course Sections Affected by Implementation in Academic Year	55	Total Number of Students Affected by Implementation in Academic Year	1650
Average Number of Course Sections Per Semester	<u>College Algebra</u> Avg. Fall – 28 Avg. Spring – 14 Avg. Summer - 3 <u>Trigonometry</u> Avg. Fall – 4 Avg. Spring – 5 Avg. Summer – 1 <u>Statistics</u> Avg. Fall – 5 Avg. Spring – 5 Avg. Summer - 1				
Award Category (pick one)	<input checked="" type="checkbox"/> No-or-Low-Cost-to-Students Learning Materials <input type="checkbox"/> Specific Core Curriculum Courses				
Are you planning on using an OpenStax textbook?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				

List the original course materials for students (including title, whether optional or required, & cost for each item)	WebAssign Software, \$22.95/student per course or lab, per term
Requested Amount of Funding	\$26,636
Original Per Student Cost	College Algebra/Trigonometry textbook and MML software bundled: \$195.35 Statistics textbook and Connect software bundled: \$235.00
Post-Proposal Projected Per Student Cost	\$22.95
Projected Per Student Savings	College Algebra/Trigonometry savings: \$172.40 Statistics Savings: \$212.05
Projected Total Annual Student Savings	Using the average number of College Algebra courses and Statistics courses, it can be estimated that the ABAC students would save almost \$300,000 in textbook and software costs.

NARRATIVE

1.1 PROJECT GOALS

- To provide our students with significant without compromising the quality of instruction or our commitment to an internationalized general education curriculum.
- To maintain or improve our current D/W/F math rates.
- To maintain or improve our course outcome rates.
- To improve upon the materials and resources created by Ms. April Abbott and Dr. Eunkyung You when they completed a similar mini-grant in 2016 for College Algebra.
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1.2 STATEMENT OF TRANSFORMATION

- During the rest of this fall semester and winter break, the math faculty will work to switch College Algebra, Trigonometry, and Statistics over to OpenStax and WebAssign. Course schedules, homework selections, and online homework selections will be created for each course. If any supplemental material is needed, worksheets will be printed and presented to the students free of cost.
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1.7 SUSTAINABILITY PLAN

What is your plan for offering the course in the future, including maintenance and updating of course materials?

The faculty plan to continue offering no/low cost courses into fall of 2018. The faculty plan to continue offering the classes if there is no difference in our success rates. We will continue to improve WebAssign assignments every semester to better suit the needs of the students. We will review and implement new OpenStax editions. If needed, we will create and provide our students with supplemental material that we find lacking in the new editions.

1.8 REFERENCES & ATTACHMENTS

The letter of support is attached.