

Application Details

Manage Application: ALG Textbook Transformation Grants

Award Cycle: Round 6

Internal Submission Deadline: Monday, August 1, 2016

Application Title: 244

Application ID: #001136

Submitter First Name: Renva

Submitter Last Name: Watterson

Submitter Title: Vice President of Academic Affairs

Submitter Email Address: rwatters@highlands.edu

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Submitter Campus Role: Provost / Academic Affairs Office

Applicant First Name: Thomas

Applicant Last Name: Harnden

Applicant Email Address: tharnden@highlands.edu

Applicant Phone Number: 404-660-0881

Primary Appointment Title: Professor of Biology

Institution Name(s): Georgia Highlands College

Submission Date: Monday, August 1, 2016

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

Katie Bridges, Instructional Designer, Division of eLearning, kbridges@highlands.edu

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

Greg Ford, Ph.D., Dean of Natural Science and Physical Education, Georgia Highlands College

Proposal Title: 244

Course Names, Course Numbers and Semesters Offered:

BIOL 1020 Plants, Society, and the Environment

Final Semester of Instruction:	Spring 2017
Average Number of Students per Course Section:	30
Number of Course Sections Affected by Implementation in Academic Year:	6
Total Number of Students Affected by Implementation in Academic Year:	180
List the original course materials for students (including title, whether optional or required, & cost for each item):	PLants and Society, levetin and McMahan, 7th Edition, McGraw Hill, ISBN 9780078023033, \$222.33
Proposal Category:	No-or-Low-Cost to Students Learning Materials
Requested Amount of Funding:	10,800
Original per Student Cost:	222.33
Post-Proposal Projected Student Cost:	0
Projected Per Student Savings:	222.33
Projected Total Annual Student Savings:	40,019.40

Creation and Hosting Platforms Used ("n/a" if none):

All material will be located in a Lib-Guide specific for the class. It will be called "BIOL 1020 Plants, Society, and the Environment." Students will use D2L for the course and materials from the Lib-Guide will be embedded into D2L either directly or through the use hyperlinks.

Project Goals:

There are four primary goals related to this project:

Development of an *informational repository* in the form of a BIOL 1020 Lib-Guide containing free articles, electronic books, movies, animations, videos, newscasts, websites, and other educational resources - this repository will be used to create modules that support both science and course-specific learning objectives

Development of **course modules** that contain course-specific concepts using an inquiry based learning format that aligns with the course learning objectives - each modules will be designed to help students to develop and use analytical and critical lens regarding specific information situated in a contemporary society

Development of **innovative exercises** that use graphics, animations, and short videos - the diversity of exercises will aid students with various learning styles

Development of **sustainable framework** - a mandatory project referred to as a *Webquest* will be developed and implemented with a dual purpose of enabling a student to explore a unique course-related concept as well as use their references to continually expand the informational repository,

Statement of Transformation:

Describe the transformation

Resource transformation - rather than relying on a single course text, an informational repository of free resources materials will be identified and housed in a Lib-Guide

Course Transformation - the course will be concept-driven and module in nature rather than using a traditional chapter structure

Perspective transformation - students will explore various issues regarding plants and their role in today's society

Identify stakeholders affected by the transformation

Students - will save a minimum of \$222.33 or more if there was a loan associated with the purchase of a traditional text

Faculty - due to the modular nature of the course and the potential plethora of resources housed in one location, faculty at any institution can teach the course from various perspectives yet still satisfy the course-specific learning objectives

Describe the impact of this transformation on the stakeholders and course success

In comparison to a static text, over time the informational repository will continually expand and include a compilation of very diverse educational materials. Traditional texts, on the other hand, will increase text costs if they include small updates in newer editions. Therefore, the savings of as a result of this project will increase over time.

This project offers an increased opportunity for student-student and student-faculty collaboration. The framework of this project enables increased collaboration and supports the notion of "Learning through Action."

Module learning will help students for focus on specific concepts more effectively and will nurture both self-interest and self-direction.

Describe the transformative impact on the course, program, department, institution, access institution, and/or multiple courses

In sum, this course will not only be cost effective but the informational repository will continually expand and enable any institution to teach the same course yet possibly offer a different lens or perspective regarding the concepts covered

Transformation Action Plan:

The identification, review, selection, and adoption/creation of the new course materials

The course contains eight overarching learning objectives, each are subdivided into a module containing 3-4 learning outcomes

The concepts in each module will be used to guide the adoption of resources for the informational repository

Biology faculty at Georgia Highlands College and at various colleges in the USG with a background in plant biology will be asked to review the informational repository regarding its depth and breadth of information and exercises as well as invite them to participate in adding more resources.

The course and syllabus instructional design/redesign necessary for the transformation

The course will be offered primarily online and the conceptual framework of the course will be translated into a distance-learning format

The Lib-guide for the course will be embedded in the course management system for easy access

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

Dr. Tom Harnden will serve as the SME, faculty of record, and Lib-Guide developer. Using the course learning objectives and module learning outcomes, he will gather various free resources that support those objectives and outcomes and organize them into a Lib-Guide Ms. Katie Bridges will serve as the instructional designer. Using her background in distance education and graphic design, she will not only help develop interactive activities but will aid in the course design and delivery.

The plan for providing open access to the new materials

The informational repository will be housed in a Lib-Guide that is accessible to all USG faculty and students.

Quantitative & Qualitative Measures: Quantitative measures A course assessment containing objective questions tied directly to learning objectives and outcomes will be designed and implemented There is an expectation set whereby 65% of the class will correctly answer each question on the course assessment Outcomes of the assessment will be used to inform the course design as well as update the informational repository Qualitative measures A survey containing probing subjective questions will be created so as to characterize a student's perspective regarding the use of the alternative educational resources as well as the modular nature of the course The survey will include questions focusing on the various formats of the educational resources used (e.g., text, graphics, movies, pictures, etc...) and their effectiveness Answers from the survey will help guide the redevelopment of the course and adoption of course materials

Timeline:

Fall 2016

August through October - Dr. Tom Harnden will search for all possible educational resources that will support the learning objectives and outcomes. It is expected that the resources will be in various formats to support the myriad and of learning styles. Additionally, the information will be organized to fit the modular structure of the course. Ms. Katie Bridges will search for programs that will help in the designing of graphs, animations, and videos for the creation of exercises.

September through November - Dr. Tom Harnden will construct the Lib-Guide for the course using specific tabs for each module of the course and contents in each tab will be organized according to specific concepts covered. Ms. Katie Bridges, in consultation with Dr. Tom Harnden, will start developing exercises for specific concepts covered in the course.

October through November - Dr. Tom Harnden will construct the master course shell as well as develop both the quantitative and qualitative surveys as well as the course assessment. Ms. Katie Bridges will organize the master course shell to Quality Matters (QM) standards, load exercises into the master course shell and convert both assessments into the specific course management system format.

Spring 2017

Two sections of BIOL 1020 will be offered

Data from the assessments and surveys will be collected

Summer 2017

One section of BIOL 1020 will be offered

Dr. Tom Harnden and Ms. Katie Bridges will analyze the data from the Spring 2017 (and Summer 2017, time permitting) surveys and assessment

The analysis will then be used to determine if any changes to the course framework needs to occur and if so, then those changes will be made prior to the next course offering in the Fall 2017

Fall 2017

Offer two sections of BIOL 1020 with any updates that were made

Collect and analyze the data from the course survey and assessment

Generate a final report summarizing the project's findings

Budget:

Dr. Tom Harnden, Professor of Biology - \$5,000 for project work and \$400 for travel

Ms. Katie Bridges, Instructional Designer, \$5,000 for project work and \$400 for travel

Sustainability Plan:

Dr. Tom Harnden will serve as faculty of record for BIOL 1020. In this role he will conduct an annual review of all aspects of the course including, but not limited to, the master course shell design and development, course Lib-Guide content and updates, and data collected from the course assessment and surveys. Furthermore, the intended Galileo WebQuest course project will help to continually expand the informational repository.

GEORGIA HIGHLANDS



COLLEGE

FLOYD CAMPUS
3175 Cedartown Highway
Rome, GA 30161

VICE PRESIDENT
FOR ACADEMIC AFFAIRS

July 27, 2016

Dear ALG Grant Decision-Makers:

It is my pleasure to write in support of Dr. Tom Harnden and Ms. Katie Bridges who seek funding to innovate a curriculum and benefit the students at Georgia Highlands College as they do it. The proposed project represents tremendous opportunity for heightened teaching and learning experiences, reduced or no-cost text materials, and engaging studies in a vital area of science education.

As you will read, this is a sound, thorough proposal rooted in instructional design transformation, open source materials application, and modular course development. The work will generate new best practices in the field of plant biology, excellent library guides for extended understanding, as well as creative exercises and mechanisms for welcome sustainability over time. In addition, we will be able to save each student over \$200 through open access to high-quality instructional materials, a significant difference for their already too-stretched college funds.

Please give this fine proposal your earnest consideration. At Georgia Highlands, we are so grateful for your backing of other worthwhile OER initiatives; I see this one as just as valuable and necessary to meet the dual mission of both access and success for our outstanding students.

Best regards,

Renva Watterson, Ed. D.

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Affirmative Action / Equal Employment and Educational Opportunity Institution

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