Summer 2018

Principles of Nutrition (GHC)

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Grants Collection
Georgia Highlands College

Lisa Jellum, Jason Hitzeman, Mark Knauss, Sharryse Henderson,
Tom Harnden, and Cynthia Elsberry

Principles of Nutrition
Grants Collection

Affordable Learning Georgia Grants Collections are intended to provide faculty with the frameworks to quickly implement or revise the same materials as a Textbook Transformation Grants team, along with the aims and lessons learned from project teams during the implementation process.

Each collection contains the following materials:

- Linked Syllabus
  - The syllabus should provide the framework for both direct implementation of the grant team’s selected and created materials and the adaptation/ transformation of these materials.
- Initial Proposal
  - The initial proposal describes the grant project’s aims in detail.
- Final Report
  - The final report describes the outcomes of the project and any lessons learned.

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

Team Members:

Lisa Jellum, Associate Professor of Physical Education, Division of Natural Science and Physical Education, Georgia Highlands College, ljellum@highlands.edu

Jason Hitzeman, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, jhitzeman@highlands.edu
Mark Knauss, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, mknauss@highlands.edu

Sharryse Henderson, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, shenders@highlands.edu

Tom Harnden, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, tharnden@highlands.edu

Cynthia Elsberry, Instructor of Physical Education, Division of Natural Science and Physical Education, Georgia Highlands College, celsber@highlands.edu

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

Dr. Renva Watterson, Academic Vice President, Office of Academic Affairs, Georgia Highlands College, rwatters@highlands.edu

Course Names, Course Numbers and Semesters Offered:

Principles of Nutrition, BIOL 2190, an institutional option for the completion of associate degrees for all students at Georgia Highlands College. This course is offered in the Fall, Spring and Summer semesters in face-to-face and online settings.

Principles of Human Nutrition, PHED 2202 is an institutional elective requirement for the completion of associate degrees for all students, as well as a pathway option for Associates of Nursing and Dental Hygiene for all students at Georgia Highlands College. This course is also offered in the Fall, Spring, and Summer semesters in online settings.

| Average Number of Students per Course Section: Average Number of Students Per Section (BIOL 2190) | 25.12 |
| Number of Course Sections Affected by Implementation in Academic Year: Number of Course Sections Affected Per Year (BIOL 2190) | 25 |
| Total Number of Students Affected by Implementation in Academic Year: Total Number of Students Affected by Implementation in Academic Year (BIOL 2190) | 628 |
| Number of Course Sections Affected by Implementation in Academic Year: Number of Course Sections Affected Per Year (PHED 2202) | 6 |
| Total Number of Students Affected by Implementation in Academic Year: Total Number of Students Affected by Implementation in Academic Year (PHED 2202) | 157 |
List the original course materials for students (including title, whether optional or required, & cost for each item):

Currently, the cost of the textbook for the BIOL 2190 course is about $134 through our campus bookstore while the cost of the PHED 2202 course text is approximately $86. Both are required.

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

Requested Amount of Funding: 30,000

Original per Student Cost: 134; 86 Respectively

Post-Proposal Projected Student Cost: 0

Projected Per Student Savings: 134; 86

Projected Total Annual Student Savings: 97,890

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

Desire2Learn (D2L) – GHC’s teaching management software

LibGuides

Project Goals:

* Identify and adopt appropriate Open Educational Resources (OERs) to best complement student learning outcomes for BIOL 2190 and PHED 2202.

* Generate new OERs, if appropriate OERs are not currently available, and make them freely-accessible using LibGuides (see below) and D2L

* Redesign all course materials (including course objectives and student learning outcomes) for BIOL 2190 and PHED 2202 using the OER framework and available OER ancillary materials (images, tables, test banks, etc.).

* Survey students enrolled in the redesigned courses, and faculty who teach them, to assess adopted OERs with regard to 1) convenience and ease-of-use, 2) effectiveness and quality, and 3) attainment of student learning outcomes.

* Improve student grades in BIOL 2190 and PHED 2202 and reduce drop/fail/withdraw rates for these courses.

Statement of Transformation:

Georgia Highlands College (GHC) is a limited four-year college in the University System of
Georgia that serves more than 6,000 students in Northwest Georgia and Northeast Alabama. GHC offers transfer associate degree programs, career associate degree programs, and targeted baccalaureate degree programs, as well as instruction on five diversified teaching sites, which provides the opportunity to develop, implement and compare new teaching materials and pedagogies across all locations. Projects initiated on one site can and will be replicated and expanded across all sites to prove scalability. Participation of faculty from our various locations will be utilized in the development process to assist in this process. Furthermore, we will be implementing this project in courses taught in all formats including face-to-face, online, and hybrid formats.

Mean annual income in the geographic areas served by GHC is about $60,825 (U.S. Department of Commerce American Community Survey, 2014). According to the 2014-2015 Georgia Highlands College Fact Book, the average student at GHC is a 23.9 year-old female. Furthermore, approximately 45.4% of GHC students are eligible for Pell Grant and many of our students have fulltime jobs in addition to undertaking a full course load (at least 12 hours). Currently, the cost of the textbook for the BIOL 2190 course is about $134 through our campus bookstore while the cost of the PHED 2202 course text is approximately $86. Adoption of open source materials will provide every student access to all course materials at no charge. We expect this to reduce the incidence of DWFs in future OER-supplied BIOL 2190 and PHED 2202, courses compared to past BIOL 2190 and PHED 2202 courses that used traditional texts.

Course materials will be stored within a master course on GHC’s learning management system, currently Brightspace by D2L (http://www.brightspace.com), as well as in the LibGuides by SpringShare (http://springshare.com/libguides), the content management system used by thousands of libraries worldwide. Consequently, any student enrolled in either Nutrition course, and any faculty teaching at GHC, within the USG, or across the country, will have 24-hour-access to our OERs and their ancillary materials.

Transformation Action Plan:

The action plan will consist of identifying an OER that would be suitable for the needs and student learning outcomes in BIOL 2190 and PHED 2202. This process could have either an adoption of an existing OER, the creation of an OER with instruction materials, or a combination of both. After the adoption of the new OER, quantitative and qualitative data will be collected to show the efficacy of the OER.

Training: Two team members will travel to Macon to attend the Kick-Off Meeting. Other training that could be used to the team member’s benefit could be the OER consortium offered by the USG, webinars offered by OpenStax and any other publisher training available within the nutrition discipline.

Review and Adoption: Open Educational Resources will be identified and pooled for review by
the team. Possible sources will include OER’s already available through CNX, Cool4Ed, Merlot, Saylor Academy, GALILEO, Lumen Learning, and others.

Adaptation and Creation: Each team member will adapt instructional materials in the content areas to which they are assigned. This will be split evenly between the group members. Any instructional materials found to be lacking, will be created and then evaluated by the team.

Course Syllabi: Master syllabi for each course will be created and made available for faculty and students on D2L. The master syllabi will 1) provide consistency of instruction and assessment in all sections of the course, 2) provide clear instructions on how to access newly created course materials, 3) provide a list of assigned readings and associated deadlines from the OER textbook, and 4) a list of assigned multimedia screencasts and dates of use.

**Quantitative & Qualitative Measures:** Both quantitative and qualitative methods will be used to measure and gauge the success of our transition from the use of traditionally-available to OER materials. Quantitative methods will consist of pre- and post-course surveys that measure the number of students who use the textbook, the frequency in which they access the textbook, the ways in which they use the textbooks, and reasons they accessed the textbook. Similarly, pre- and post-course surveys will quantify faculty use of, and any problems associated with, the open source textbooks and their ancillary materials. Faculty will also be asked to provide detailed qualitative critiques of the new materials adopted for each course. A mandatory discussion forum on D2L will also be devised to elicit additional qualitative feedback from students with regard to ease of material access and use, including text design, quality and readability, and appropriateness of ancillary materials. Students will also be asked to compare their experiences in the redesigned course compared to classes using traditional texts. Data on DFW rates from the past three years in PHED 2202 and BIOL 2190 (when traditional texts were used) will be compared to DFW rates for the courses that use the redesigned OER materials. All data will be compiled, analyzed and presented in a project report.

**Timeline:**
June 5, 2017 through December 31, 2017
* Submit Service Level Agreement (SLA) to University System Office

* Invoice USG

* Attend Grant Kick-off meeting

* Identify open source text and accompanying resources (e.g., short films, web-based resources, interactive exercises, etc.)

* Develop pre- and post-course surveys for faculty and students

* Develop question guide for D2L discussion (see above)

* Create 50% new materials where applicable

January 1, 2018 through May 1, 2018

* Assess course learning objectives (CLOs) with reference to new text adoption and resources

* Finalize surveys and methodology to analyze surveys

* Finalize question guide for D2L discussion

* Create D2L master course shell for all sections and include CLOs, open source textbook and resource materials, and surveys and discussion

* Compile and analyze Fall 2017 data

* Revise surveys, D2L Master course and CLO’s, if necessary

* Generate final report summarizing study findings

* Create remaining 50% of learning materials where applicable

May 2, 2018 through July 31, 2018

* Conduct workshop to train teaching faculty in the use of selected open source materials

Budget:

We are requesting the second level of funding appropriate for multiple-sections /courses/department-wide funding ($30,800) to be used as follows:

Release Time for Project Team Members: $30,000
Lisa Jellum, Associate Professor and Principal Investigator: $5,000

Jason Hitzeman, Professor: $5,000

Sharryse Henderson, Professor: $5,000

Tom Harnden, Professor: $5,000

Mark Knauss, Professor: $5,000

Cynthia Elsberry, Instructor: $5,000

Travel for Team members to attend Grant Kick-Off Meeting: $800

Lisa Jellum, Associate Professor and Principal Investigator: $400

Jason Hitzeman, Professor: $400

**Sustainability Plan:**

To ensure sustainability, we will review and update all generated course materials in the master course templates three times during the academic year (August, January, and May). We will also regularly review external links to online materials to ensure they are all still active. Outdated materials/information will be replaced and appropriate new material added, as needed. This maintenance process is vitally important to ensure the most up-to-date offerings are available for students and faculty.
April 28, 2017

Dear ALG Grants Committee Members:

I am pleased to write this letter in support of this splendid group of Natural Science and Physical Education professors, as they seek grant funding to incorporate free and open texts and other instructional materials for two courses, BIOL 2190 and PHED 2202. There are numerous reasons of efficiency, pedagogy, and instructional transformation which compel me to support this initiative.

First, this outstanding team of collegiate educators will engage in a thoughtful process that will broadly affect the student body at Georgia Highlands College. We expect to affect nearly 800 students per year through redesign of these courses, a significant number of students needing to complete the health science pathway. Specifically, it would directly impact about 13% of our entire college population.

Second, money saved through this plan’s implementation would provide opportunity for both economy and learning. Case in point, with textbook costs rising at an unheard of rate, swell documented in this proposal, our students could be saving nearly $100,000 by replacing current texts with open educational resources and through the generation of new lab manual and open learning materials that will be freely available to all students. We know this affects our students’ foundational learning, tenacity, and ability to thrive in this class.

Finally, this affordable learning grant will serve as a catalyst for enhanced teaching and learning. It will serve as a springboard for innovation on the part of faculty who work to make those materials more creative, applied, and relevant in today’s biology classroom. It will send the message that GHC faculty members care about their students, economically, socially and intellectually. It will urge students to persist and to complete in a discipline that too often is a stumbling block to college completion.

I wholeheartedly endorse this ALG Transformation Grant application from these forward-thinking, action-oriented professors. Their plan is noteworthy and laudable. Please allow them to continue their essential work through the approval of the grant.

Sincerely,

[Signature]

Renva Watterson, Ed.D.
Submitter: Dr. Renva Watterson, Vice President of Academic Affairs

Applicant Name: Lisa Jellum

Team Members:
Lisa Jellum, Associate Professor of Physical Education, Division of Natural Science and Physical Education, Georgia Highlands College, ljellum@highlands.edu
Jason Hitzeman, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, jhitzeman@highlands.edu
Mark Knauss, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, mknauss@highlands.edu
Sharryse Henderson, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, shenders@highlands.edu
Tom Harnden, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, tharnden@highlands.edu
Cynthia Elsberry, Instructor of Physical Education, Division of Natural Science and Physical Education, Georgia Highlands College, celsber@highlands.edu

Other supporting offices/division/faculty/staff:
GHC Office of Institutional Research and GHC Librarians

Sponsor/Title/Department/Institution:
Dr. Renva Watterson, Academic Vice President, Office of Academic Affairs, Georgia Highlands College, rwatters@highlands.edu

Proposal:
ALG Textbook Transformation Project to Adopt and/or create an Open Educational Resource for institutional courses Principles of Nutrition (BIOL 2190) and Principles of Human Nutrition (PHED 2202).

Course Names:
Principles of Nutrition, BIOL 2190, an institutional option for the completion of associate degrees for all students at Georgia Highlands College. This course is offered in the Fall, Spring and Summer semesters in face-to-face and online settings.

Principles of Human Nutrition, PHED 2202 is an institutional elective requirement for the completion of associate degrees for all students, as well as a pathway option for Associates of Nursing and Dental Hygiene for all students at Georgia Highlands College. This course is also offered in the Fall, Spring, and Summer semesters in online settings.

Project will begin in Fall of 2017 and conclude in Summer of 2018.
Final Semester of Instruction – Summer 2018

Average Number of Students Per Section (BIOL 2190)
All students per academic year (BIOL 2190): $84,309
All students per academic year (PHED 2202): $13,581
All students per academic year combined: $97,890

Plan for Hosting Materials
  Desire2Learn (D2L) – GHC’s teaching management software
  LibGuides
  Other

Note: Materials created in a grant project, excluding instructor-only tests and quizzes, must be made freely-accessible to the public, preferably under a Creative Commons open license.

Requested Amount of Funding
$30,800

NARRATIVE
1.1 PROJECT GOALS
The cost of college textbooks has risen over 1000% in the last 37 years with only five publishers currently controlling 85% of the market (NBC News, 2015). The cost of these materials has risen three times faster than the rate of inflation since 1978 - far outpacing medical expenses and home prices (Bureau of Labor Statistics, 2015). Such figures have prompted the inclusion of textbook provisions in two acts to the U.S. Congress: the Higher Education Opportunity Act in 2008, and the Affordable College Textbook Act in 2013 and 2015 (Scholarly Publishing and Academic Resources Coalition, 2015). Exorbitantly high textbook prices have also negatively impacted various aspects of college enrollment as documented in 2014 by the U.S. Public Interest Group report: Fixing the Broken Textbook Market (U.S. Public Interest Research Group, 2014). In surveying the STEM courses at GHC, 65% of students chose not to purchase a textbook for at least one class, even though 94% of them believed this choice would harm their grade. Moreover, nearly half the students stated that textbook prices directly impacted their decision regarding the number and types of
courses in which they enrolled. Similarly, this group believes students enrolled in Biology and Physical Education courses fail to purchase the required text, or the current edition of the text, as a result of financial limitations.

How this problem impacts Northwest Georgia college students.
Socioeconomic status is a major indicator in the successful attainment of postsecondary education (National Center for Education Statistics, 2015). This statement does not bode well for Northwest Georgia, which is characterized by a large number of families (14.4%) living below poverty level (U.S. Department of Commerce American Community Survey, 2014). In addition, it has also been well-documented that K-12 students, specifically in Northwest Georgia, have lower access to books than students in other parts of the state due to local school system budget cuts (The Atlantic, 2014; Georgia Budget and Policy Institute, 2013, 2014; Atlanta Journal and Constitution, 2013; Ledger-Inquirer, 2015). With the above in mind, participation by Georgia Highlands College (GHC) in ALG will make post-secondary education more affordable and accessible to economically disadvantaged individuals who might not otherwise consider pursuing a college education. Lower textbook prices will also contribute to student retention, progression and graduation, which aligns with GHC’s mission to serve Northwest Georgia students. Our goal is to provide Open Educational Resources (OERs) for BIOL 2190 (Principles of Nutrition) and PHED 2202 (Principles of Human Nutrition), which are offered every semester (Fall, Spring, Summer) of the academic year and use the same textbook, respectively. These courses are both popular options for completion of an Associate’s degree from GHC, and fulfill the requirements for transfer to multiple programs within the USG, saving students the cost of the book and indirectly, the difference in cost of taking the course at a more expensive 4-year institution. Thus, the redesign of these courses, and the inclusion of OERs, will impact about 13% of our student population every academic year.

Our project goals are to:
* Identify and adopt appropriate Open Educational Resources (OERs) to best complement student learning outcomes for BIOL 2190 and PHED 2202.
* Generate new OERs, if appropriate OERs are not currently available, and make them freely-accessible using LibGuides (see below) and D2L.
* Redesign all course materials (including course objectives and student learning outcomes) for BIOL 2190 and PHED 2202 using the OER framework and available OER ancillary materials (images, tables, test banks, etc.).
* Survey students enrolled in the redesigned courses, and faculty who teach them, to assess adopted OERs with regard to 1) convenience and ease-of-use, 2) effectiveness and quality, and 3) attainment of student learning outcomes.
* Improve student grades in BIOL 2190 and PHED 2202 and reduce drop/fail/withdraw rates for these courses.

1.2 STATEMENT OF TRANSFORMATION
Georgia Highlands College (GHC) is a limited four-year college in the University System of Georgia that serves more than 6,000 students in Northwest Georgia and
Northeast Alabama. GHC offers transfer associate degree programs, career associate degree programs, and targeted baccalaureate degree programs, as well as instruction on five diversified teaching sites, which provides the opportunity to develop, implement and compare new teaching materials and pedagogies across all locations. Projects initiated on one site can and will be replicated and expanded across all sites to prove scalability. Participation of faculty from our various locations will be utilized in the development process to assist in this process. Furthermore, we will be implementing this project in courses taught in all formats including face-to-face, online, and hybrid formats.

Mean annual income in the geographic areas served by GHC is about $60,825 (U.S. Department of Commerce American Community Survey, 2014). According to the 2014-2015 Georgia Highlands College Fact Book, the average student at GHC is a 23.9 year-old female. Furthermore, approximately 45.4% of GHC students are eligible for Pell Grant and many of our students have fulltime jobs in addition to undertaking a full course load (at least 12 hours). Currently, the cost of the textbook for the BIOL 2190 course is about $134 through our campus bookstore while the cost of the PHED 2202 course text is approximately $86. Adoption of open source materials will provide every student access to all course materials at no charge. We expect this to reduce the incidence of DWFs in future OER-supplied BIOL 2190 and PHED 2202, courses compared to past BIOL 2190 and PHED 2202 courses that used traditional texts.

All course materials will be stored within a master course on GHC’s learning management system, currently Brightspace by D2L (http://www.brightspace.com), as well as in the LibGuides by SpringShare (http://springshare.com/libguides), the content management system used by thousands of libraries worldwide. Consequently, any student enrolled in either Nutrition course, and any faculty teaching at GHC, within the USG, or across the country, will have 24-hour-access to our OERs and their ancillary materials.

1.3 TRANSFORMATION ACTION PLAN

The action plan will consist of identifying an OER that would be suitable for the needs and student learning outcomes in BIOL 2190 and PHED 2202. This process could have either an adoption of an existing OER, the creation of an OER with instruction materials, or a combination of both. After the adoption of the new OER, quantitative and qualitative data will be collected to show the efficacy of the OER.

Training: Two team members will travel to Macon to attend the Kick-Off Meeting. Other training that could be used to the team member’s benefit could be the OER consortium offered by the USG, webinars offered by OpenStax and any other publisher training available within the nutrition discipline.

Review and Adoption: Open Educational Resources will be identified and pooled for review by the team. Possible sources will include OER’s already available through CNX, Cool4Ed, Merlot, Saylor Academy, GALILEO, Lumen Learning, and others.
Adaptation and Creation: Each team member will adapt instructional materials in the content areas to which they are assigned. This will be split evenly between the group members. Any instructional materials found to be lacking, will be created and then evaluated by the team.

Course Syllabi: Master syllabi for each course will be created and made available for faculty and students on D2L. The master syllabi will 1) provide consistency of instruction and assessment in all sections of the course, 2) provide clear instructions on how to access newly created course materials, 3) provide a list of assigned readings and associated deadlines from the OER textbook, and 4) a list of assigned multimedia screencasts and dates of use.

The Following team members will have the following
* Lisa Jellum: Principle Investigator; will oversee project from start to finish including: submission of ALG transformation proposal, identification and adoption of appropriate OERs, development of related course materials; administration of surveys and data collection, and creation of project final report. She will also serve as a curriculum expert for the PHED 2202 course by searching and identifying OER materials or creating new materials for the course
* Jason Hitzeman: Curriculum expert; will work with the library faculty to identify, review, select, and adopt appropriate OERs for BIOL 2190. Specific to BIOL 2190, he will seek out OER materials.
* Sharryse Henderson: Curriculum expert; will participate in the development of multimedia resources, work with library faculty to identify, review, select, and adopt appropriate OERs for BIOL 2190, and assist in the creation of surveys.
* Tom Harnden: Curriculum expert; will participate in the development of multimedia resources, work with library faculty to identify, review, select, and adopt appropriate OERs for BIOL 2190, and assist in the creation of surveys.
* Mark Knauss: Curriculum expert; will participate in the development of multimedia resources, work with library faculty to identify, review, select, and adopt appropriate OERs for BIOL 2190, and assist in the creation of surveys.
* Cynthia Elsberry: Curriculum expert; will participate in the development of multimedia resources, work with library faculty to identify, review, select, and adopt appropriate OERs for PHED 2202, and assist in the creation of surveys.
* Christin Collins: Library support staff; will collaborate with team members to identify and adopt OERs and make OER materials created during this project freely accessible on LibGuides.
* Amanda West: Research assistant; will provide past DFW data for PHED 2202 and BIOL 2190 courses, compile/analyze data from student and faculty surveys, and provide DFW rates in transformed PHED 2202 and BIOL 2190 courses.

1.4 QUANTITATIVE AND QUALITATIVE MEASURES
Both quantitative and qualitative methods will be used to measure and gauge the success of our transition from the use of traditionally-available to OER materials. Quantitative methods will consist of pre- and post-course surveys that measure the number of students who use the textbook, the frequency in which they access the textbook, the ways in which they use the textbooks, and reasons they accessed the textbook. Similarly, pre- and post-course surveys will quantify faculty use of, and any problems associated with, the open source textbooks and their ancillary materials. Faculty will also be asked to provide detailed qualitative critiques of the new materials adopted for each course. A mandatory discussion forum on D2L will also be devised to elicit additional qualitative feedback from students with regard to ease of material access and use, including text design, quality and readability, and appropriateness of ancillary materials. Students will also be asked to compare their experiences in the redesigned course compared to classes using traditional texts. Data on DFW rates from the past three years in PHED 2202 and BIOL 2190 (when traditional texts were used) will be compared to DFW rates for the courses that use the redesigned OER materials. All data will be compiled, analyzed and presented in a project report.

1.5 TIMELINE
June 5, 2017 through December 31, 2017
* Submit Service Level Agreement (SLA) to University System Office
* Invoice USG
* Attend Grant Kick-off meeting
* Identify open source text and accompanying resources (e.g., short films, web-based resources, interactive exercises, etc.)
* Develop pre- and post-course surveys for faculty and students
* Develop question guide for D2L discussion (see above)
* Create 50% new materials where applicable

January 1, 2018 through May 1, 2018
* Assess course learning objectives (CLOs) with reference to new text adoption and resources
* Finalize surveys and methodology to analyze surveys
* Finalize question guide for D2L discussion
* Create D2L master course shell for all sections and include CLOs, open source textbook and resource materials, and surveys and discussion
* Compile and analyze Fall 2017 data
* Revise surveys, D2L Master course and CLO’s, if necessary
* Generate final report summarizing study findings
* Create remaining 50% of learning materials where applicable

May 2, 2018 through July 31, 2018
* Conduct workshop to train teaching faculty in the use of selected open source materials

1.6 BUDGET
We are requesting the second level of funding appropriate for multiple-sections /courses/department-wide funding ($30,800) to be used as follows:

Release Time for Project Team Members: $30,000
   Lisa Jellum, Associate Professor and Principal Investigator: $5,000
   Jason Hitzeman, Professor: $5,000
   Sharryse Henderson, Professor: $5,000
   Tom Harnden, Professor: $5,000
   Mark Knauss, Professor: $5,000
   Cynthia Elsberry, Instructor: $5,000

Travel for Team members to attend Grant Kick-Off Meeting: $800
   Lisa Jellum, Associate Professor and Principal Investigator: $400
   Jason Hitzeman, Professor: $400

1.7 SUSTAINABILITY PLAN
To ensure sustainability, we will review and update all generated course materials in the master course templates three times during the academic year (August, January, and May). We will also regularly review external links to online materials to ensure they are all still active. Outdated materials/information will be replaced and appropriate new material added, as needed. This maintenance process is vitally important to ensure the most up-to-date offerings are available for students and faculty.

1.8 REFERENCES & ATTACHMENTS
Atlanta Journal and Constitution (MyAJC, 2013): Cobb Math Teachers Fret Over Lack of Textbooks


Georgia Budget and Policy Institute (GBPI, 2013): Cutting Class to Make Ends Meet

Georgia Budget and Policy Institute (GBPI, 2014): Cutting Class to Make Ends Meet

Data compiled for the following Northwest GA Counties: Bartow, Carroll, Chattooga, Cobb, Douglas, Floyd, Gordon, Paulding, and Polk.
https://app3.doe.k12.ga.us/ows-bin/owa/fin_pack_revenue.entry_form

Georgia Highlands College Fact Book: Academic Year 2014-2015
Ledge-Inquirer (2015): In Heated Emails, MCSD Board Debates Whether District Has Textbook Shortage

Ledge-Inquirer (2015): Textbooks: Center of Debate but No Longer Center of Classroom

NBC News (2015): College Textbook Prices Have Risen 1041% since 1977

National Center for Education Statistics (NCES, 2015): Postsecondary Attainment: Differences by Socioeconomic Status

Scholarly Publishing and Academic Resources Coalition (SPARC, 2015): Support the Affordable College Textbook Act
http://www.sparc.arl.org/advocacy/national/act

THE ATLANTIC (2014): Why Poor Schools Canít Win at Standardized Testing

U.S. Department of Commerce ñ American Community Survey (2014)
Data from the following Northwest GA Counties: Bartow, Carroll, Chattooga, Cobb, Douglas, Floyd, Gordon, Paulding, and Polk.

U.S. Public Interest Research Group (USPIRG, 2014): Fixing the Broken Textbook Market
Syllabus
COURSE INFORMATION:

<table>
<thead>
<tr>
<th>SEMESTER/YEAR:</th>
<th>Spring 2018</th>
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<td>LECTURE DAY/TIME:</td>
<td>Online</td>
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<td>LAB DAY/TIME:</td>
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<tr>
<td>CREDIT HOURS:</td>
<td>4 credit hours</td>
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</tbody>
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INSTRUCTOR INFORMATION:

COURSE DESCRIPTION:

Biology 2190: PRINCIPLES OF NUTRITION

(3-0-3) Prerequisites: Successful completion of BIOL 1010K, 2107K, or 2121K with a grade of C or better.

BIOL 2190 covers the fundamental principles of human nutrition from a biological perspective. Included will be the study of the major nutrient classes, nutrition and related diseases, role of major nutrients, consumer concerns about foods, and the requirements of various stress groups. [Georgia Highlands Catalog 2015-2016]

STUDENT LEARNING OUTCOMES FOR SCIENCE:

Georgia Highlands College Educational Effectiveness Goal for Science: Students will demonstrate knowledge of the fundamental concepts of at least one scientific discipline, and an understanding of the interplay between theory, experimentation, and observation undergirding those concepts.

Georgia Highlands College Student Learning Outcomes for Science: Students will demonstrate knowledge of the fundamental concepts of at least one scientific discipline, and an understanding of the interplay between theory and experimentation and observations undergirding those concepts.

1. Students will demonstrate competency of one discipline in the sciences in terms of its informational content.
2. Students will demonstrate competency of one discipline in the sciences in terms of its terminology.
3. Students will demonstrate competency of one discipline in the sciences in terms of its commonly used units of measurement.
4. Students will demonstrate the ability to operate basic instrumentation, gather data, analyze data, and generate conclusions in a laboratory or observational setting.
5. Students will demonstrate the ability to apply discipline content to problem solving.

COURSE OBJECTIVES AND COMPETENCIES FOR BIOL 2190:

Upon completion of this course, students should be able to:

1. Identify the classes of nutrients and describe their role in the human body
2. Explain the criteria of a “healthy” diet
3. Summarize the process of hunger as well as the mechanics of ingestion, digestion, absorption, transport, and excretion of nutrients in the human body.

4. Explain the role of nutrition regarding metabolism, body composition, weight management, and eating disorders.

5. Discuss the processes of food production, distribution, and safety and explain how these have an impact on food choices and planning a “healthy” diet.

6. Describe how and why nutrient intakes differ throughout various stages of life.

7. Critically evaluate the myriad of factors that have an impact on food insecurity/security.

REQUIRED TEXT:

Text: *Principles of Nutrition, Various Authors*, 1st edition. This course is an Open Educational Resource (OER) distributed via D2L. The text is FREE of charge in its online format. This book is not sold in hard copy format however, students are welcome to print copies of the text at their own expense.

Technology Requirements:

**Respondus LockDown Browser and Monitor:** Students taking this course will be using Respondus LockDown Browser and Monitor for their exams. In order to use Respondus LockDown Browser and Monitor personal computers/electronic media must have the following:

- Windows: 10, 8, 7, Vista
- Mac: OS X 10.7 or higher
- For Mac users: Safari must function properly on the computer
- iOS: 7.0+ (iPad only). Must have a compatible LMS integration. Details.
- Adobe Flash Player
- Web camera (internal or external) & microphone
- A broadband internet connection

**Technical Help:**

- If you have trouble accessing the course or any other technical issues associated with Georgia View D2L then please click on the following link and contact Vista technical help: https://d2lhelp.view.usg.edu/
- If you have trouble with Respondus Lockdown Browser with Monitor, then please click on the following link and contact Respondus technical help: http://support.respondus.com/support/
- If you have trouble with LearnSmart Labs, then please contact McGraw-Hill technical help by clicking on the “Support Center” link at the bottom of the login page and if that doesn’t work you can go to http://mpss.mhhe.com/ or http://mpss.mhhe.com/products.php
- If you have trouble and need to contact a specific department at GHC (e.g. eLearning), then you can click on http://www.highlands.edu/site/ghc411
- You may also contact me if you have issues with any of the learning software, but I usually do not have the accessibility within the software to help. However, this will provide me with a record of issue you are having in case it causes a delay in finishing an assignment.

**ATTENDANCE POLICY:**

In any science course, there is a direct correlation between class participation and academic performance. Attendance will be recorded for advisory purposes and administrative record keeping. It is the student’s sole responsibility to obtain all materials or announcements that were missed as a result of an absence. Please note that the instructor reserves the right to administer a participation grade during any or all classes. Failure to participate will result in the loss of all points associated with an in-class participation grade.

**EXTENDED ABSENCE POLICY:**

Students, who have circumstances that prevent them from continuing to attend classes over an extended period of time, sometimes request that the faculty member permit them to submit work in absentia to receive credit to
complete the course. If the concurrent absences will constitute more than 15% of the class sessions for the
term, then written permission from the Division Chair is required before any course assignments can be
completed while missing class. The student must be in good academic standing in the course to make the
request. All approved coursework must be completed by the end of the semester in which the course was
begun. (Note: If a program has a more stringent absence policy than this, then the program policy prevails.)

INCLEMENT WEATHER POLICY:
In the event of weather related cancellation of classes, the schedule will pick up the sequence of lectures herein
described as classes resume. The semester may then be extended, or double lectures designed as we go. If we
have covered all material for a test, the test will be given on the first day back to class. If there is inclement
weather, the college posts necessary announcements on www.highlands.edu. Cancellation notices for Floyd or
Cartersville locations will be reported to radio stations and WXIA-TV in Atlanta. However, please be advised that
station regulations may not allow for clarity in location-specific announcements such as “Georgia Highlands,
Cartersville only.” Generally speaking, stations simply broadcast something like “Georgia Highlands is closed.”
Classes in Paulding, Douglasville, or Marietta will be cancelled when, respectively, North Metro Technical
College, University of West Georgia, or Kennesaw State University close. Policies for distance-learning courses
relative to inclement weather are different. It is assumed that all distance-learning courses are considered
accessible even during periods of inclement weather. Campus closings do not necessarily impact or alter online
scheduled. Refer to D2L for more information in these cases.

EVALUATION METHODS and GRADING:

<table>
<thead>
<tr>
<th>GRADE ITEM</th>
<th>% OF COURSE GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Course Exams</td>
<td>60%</td>
</tr>
<tr>
<td>Course Assignments (Homework, Discussions, Quizzes, Etc.)</td>
<td>40%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

89.5-100% = A  79.5-89.4% = B  69.5-79.4% = C  59.5-69.4% = D  < 59.5% = F

THERE WILL BE NO OPPORTUNITIES FOR EXTRA CREDIT IN THIS COURSE!

DESCRIPTION OF COURSE GRADES:

**COURSE EXAMS:** The exams for this course are continually comprehensive. Exams will be made up of 10-15
questions from each current chapter, as well as 5 questions from each of the previous chapters (except for Exam
#1 which has no previous chapters.) Therefore, each exam will be a little longer than the previous exam, and by
the end of the term will be made up of more old questions than new. This is likely different than you’ve done in
other courses but it is a method I’ve had good success with. As long as you stay up on reviewing old
material/exams, you should be very successful.

Exams will be available for 36 hours over 2 calendar days (from 7am on day 1 until 7pm on day 2). So please refer
to the exam schedule and plan your personal schedule accordingly. The test can be taken anytime it’s
available, but only once. Students will have a time limit to complete the exam that is equal to 1 minute per
question with a 10% grace period at the end. Students will not be allowed to use their notes, textbook, the
Internet or any other outside materials during the exams. Students will not be allowed to take notes or
document in any way the questions during the exams. Old exams will be made available for student viewing
online after the exam deadline has passed.
All exams require the use of Respondus LockDown Browser and Monitor.

ONE exam may be made up without penalty based on the student’s word. The student must contact me immediately to schedule a make-up. Any further make-up will require a documentable excuse and are given at the discretion of the instructor. Without a valid excuse, students can still make-up exams but those are subject to a 50% reduction in their grade! You must contact me in order to make up any exam (excused or unexcused).

CLASS ASSIGNMENTS
There will be a variety of assignments given throughout the term. Most are in the format of discussions and a variety of homework assignments that you will complete. More information will be provided on each of these as they are assigned throughout the term.

MAKE-UP WORK: Because of the format & flexibility of the class, as well as the long duration you have to complete most assignments, make-up work will generally incur a 10% per day late penalty, with a maximum deduction of 50%.

EARLY GRADES:
Georgia Highlands College offers a variety of part-of-term classes to allow our students to have flexible schedules. However, there are only three Semesters each year; Spring, Summer and Fall. It is only at the end of each Semester that grades are rolled to academic history and available on the official transcript. After each part-of-term, as soon as Instructors have entered grades, they may be viewed online by logging into the SCORE (https://discovery.highlands.edu:9986/pls/SCORE/twbkwbis.P_WWWLogin). Transcripts may also be request at any time by logging into the SCORE. Prior to the end of term, should a student need an early grade letter sent to another institution they may complete the request form and submit it to the Registrar’s Office for processing (http://www.highlands.edu/site/registrar-forms). Please contact the Registrar’s Office at registrar@highlands.edu for assistance.

EARLY WARNING PROGRAM:
Georgia Highlands College requires that all faculty members report their students’ progress throughout the course of the semester as part of the institution-wide Early Warning Program (EWP). The objective of the program is to support academic success by reviewing early indicators of satisfactory student progress. In accordance with EWP, faculty members will provide the Registrar’s Office with academic reports of each student enrolled in their course(s) at check points staggered throughout the semester. The following success factors are reported at their corresponding checkpoint:

Week 2: Notification of Non-Attendance
Week 6: Satisfactory or Unsatisfactory Progress

UNDER GEORGIA LAW, GRADES CANNOT BE DISTRIBUTED BY TELEPHONE OR EMAIL, OR POSTED BY SOCIAL SECURITY NUMBER.

FINANCIAL AID:
This message applies only to students receiving financial aid = "Federal regulations state that if a student did not attend classes and received failing grades, then the grades were not earned and financial aid needs to be reduced accordingly. Please be advised that any student receiving a 0.00 GPA will be required to prove that the 0.00 GPA was earned by attending classes or completing requirements for each class. Students who have earned at least one passing grade for the semester will not be affected by this regulation. If a student has properly withdrawn from all classes, the student's financial aid should be adjusted from the time they signed the withdrawal form". 
TOBACCO-FREE CAMPUS:
Georgia Highlands College prohibits the use of tobacco products on any property owned, leased, or controlled by GHC. All faculty, staff, students, visitors, vendors, contractors, and all others are prohibited from using any tobacco products (i.e. cigarettes, eCigarettes, cigars, smokeless tobacco, snuff, chewing tobacco, etc.) while on GHC property.

CAMPUS CARRY:
For guidance on HB280 Campus Carry, please visit the USG website: www.usg.edu/hb280.

IMPORTANT CLASS DATES:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drop/Add Period</td>
<td>March 1-2</td>
</tr>
<tr>
<td>Non-Attendance Reporting</td>
<td>March 7</td>
</tr>
<tr>
<td>Progress Reporting</td>
<td>March 21</td>
</tr>
<tr>
<td>Last day to withdraw</td>
<td>April 9</td>
</tr>
<tr>
<td>Last day of Class</td>
<td>April 30</td>
</tr>
<tr>
<td>Course Final Exam</td>
<td>April 30</td>
</tr>
<tr>
<td>Grades Due</td>
<td>May 10</td>
</tr>
</tbody>
</table>

EXAM POLICIES:

1. Be sure all cell phones are turned OFF prior to starting a test. If a student's phone rings or vibrates during a test, the student will be required to turn in their test, leave the room, and not return until the next class meeting. The student will not be allowed to complete the test and the test will be graded "as is".

2. If a lecture test is missed for a documented emergency (i.e. hospitalization or death of an immediate family member, jury duty, military deployment, illness verified by a medical note, etc.), a make-up test over the material missed may be administered at the discretion of the instructor and at a time convenient to the instructor. Students must present documentation of the emergency upon returning to school. Proper documentation includes: doctor's statement, hospital record, court appearance letter, police report of a traffic accident, funeral program, letter from employer, tow truck bill, etc. A letter from a student's mother does not constitute proper documentation.

3. Students must contact the professor within 24 hours of the absence to schedule a make-up test. Failure to contact the instructor within 24 hours of the absence will result in a loss of all rights to take a make-up test. If the student chooses to leave an email message for the instructor, the student must leave a phone number or email address where they can be contacted. Failure to check email or voicemail does not constitute an excuse for missing a make-up date and will not extend the amount of time to take the makeup.

4. Only one make-up test is allowed for the entire course! There will be no "re-takes". Make-up tests can be in any format and may include any or all of the following: essay, multiple-choice, fill in the blank, matching.

GENERAL COURSE ETIQUETE & POLICIES:

1. **EMAIL**: GHC email is the official means of communication used by the college. If a student experiences technical difficulties with their Georgia Highlands College email, they should contact the IT Office immediately. The Cartersville IT Office is located in Room 171a. The instructor is not responsible for technical difficulties that arise with email (especially if the student is using an email account other than the provided Georgia Highlands College email account). Students may opt to have their GHC email forwarded to their
personal email account however, the instructor will not respond to emails coming from personal email accounts.

2. **DISRUPTIVE BEHAVIOR:** Board of Regents policy: "Any student, faculty member, administrator, or employee, acting individually or in concert with others, who clearly obstructs or disrupts, or attempts to obstruct or disrupt any teaching, research, administrative, disciplinary, or public service activity, or any other activity authorized to be discharged or held on any campus of the University System is considered by the Board to have committed an act of gross irresponsibility and shall be subject to disciplinary procedures, possibly resulting in dismissal or termination of employment" (BR Minutes, 1968-69, pp. 166-168; 1970-71, p. 98) source: *USG Manual*

3. **TECHNOLOGY:** The instructor is not responsible for technical difficulties that arise with D2L. A "Getting Started Tutorial with D2L" is available at: [http://www.highlands.edu/d2l](http://www.highlands.edu/d2l). Students can get 24 Hour online Assistance at: [https://d2lhelp.view.usg.edu](https://d2lhelp.view.usg.edu). Students can retrieve their D2L login credentials from the GHC ID Lookup link at: [http://www.highlands.edu/site/banner-portal](http://www.highlands.edu/site/banner-portal).

**WITHDRAWAL POLICY:**

Any student withdrawing from Georgia Highlands College following registration must notify the Registrar’s Office so that an official withdrawal can be made. This procedure also applies to veterans receiving allowance under any act of Congress and to students receiving financial aid. Students under eighteen years of age are expected to secure the consent of their parents before withdrawing from the College. Withdrawals without penalty will not be permitted past the mid-point of the semester except in cases of hardship as determined by the Vice President for Academic Affairs. Students must complete a student withdrawal request form, available on all campuses, to withdraw officially from all classes. Students with financial aid awards should be aware that fees may be owed if their withdrawal affects their financial aid. The official withdrawal date is indicated by the student’s intention the signed and dated form. Student accounts will be refunded according to a graduated percentage scale beginning the second meeting day of classes. Hardship withdrawals and grade appeals must be filed by the end of the academic semester immediately following the academic semester in which the withdrawal or appeal is requested.

If a student decides not to attend the College the semester for which he/she has registered and paid fees, the student may officially withdraw. Students who abandon classes without following proper procedures will receive a grade of F in all classes.

**DISABILITY STATEMENT:**

If any student in the class feels that he or she needs accommodation due to a disability, please feel free to discuss this with the instructor early in the term. Georgia Highlands College has resources available for students with certain disabilities. Accommodations may be made (such as providing materials in alternative formats, assuring physical access to classrooms or being sensitive to interaction difficulties that may be posed by communication and/or learning disabilities) through Student Support Services on all campuses. For more information please contact: Cartersville 678-872-8004; Douglasville and Floyd 706-368-7536; Marietta 678-915-5021; Paulding 678-946-1029.

**ACADEMIC INTEGRITY**

Cheating is strictly prohibited. Any evidence of cheating, or collaboration in cheating will result in a zero on the assigned materials and possible further disciplinary actions which may include failure in the course. Behavior that may be perceived as cheating includes any of the following immediately before, after, and/or during the administration of an exam:

- Talking
- Looking in the direction of another student's exam or towards notes, textbook, etc.
- Fumbling through a book-bag, knapsack, purse, etc.
- Use of scrap paper, note cards, or other documents
- Use of a cell phone or other electronic device during an exam
- Having anything other than a pencil and the test at your desk
- Using a graphing calculator or cell phone calculator during an exam

Any appearance of cheating will be regarded as cheating so students should avoid any and all behaviors that could even be construed as cheating. Policies on student conduct and academic integrity are located in the GHC “Student Guide and Planner” and in the Student Handbook at [http://www.highlands.edu/site/academic-integrity-documents](http://www.highlands.edu/site/academic-integrity-documents).

### TENTATIVE EXAM SCHEDULE

**Spring 2018**

**NOTE:** This is a tentative lecture schedule for BIOL 2190. The instructor(s) teaching these classes reserves the right to alter this schedule at his/her discretion. Any changes in this schedule will be announced to the students as soon as it is possible. We have 20 chapters to cover in 8 weeks, so it is critical that you stay on schedule and not get behind.

<table>
<thead>
<tr>
<th>DATE</th>
<th>CONTENT</th>
<th>CHAPTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 1</td>
<td>First Day of Class</td>
<td>Syllabus Agreement Module</td>
</tr>
<tr>
<td>March 2</td>
<td>Last Day to Add/Drop the Course</td>
<td></td>
</tr>
<tr>
<td>March 5</td>
<td>Last Day to Confirm Enrollment in the Class by taking the Syllabus Quiz in D2L. Students who haven’t completed the quiz by this day will be dropped from the class.</td>
<td>Course Syllabus</td>
</tr>
<tr>
<td>March 8</td>
<td>Exam #1 (Closes at 11:59pm)</td>
<td>1-2</td>
</tr>
<tr>
<td></td>
<td>Notice the times D2L will be unavailable below and plan accordingly.</td>
<td></td>
</tr>
<tr>
<td>March 15</td>
<td>Exam #2 (Closes at 11:59pm)</td>
<td>3 &amp; 4 + all previous material</td>
</tr>
<tr>
<td>March 23</td>
<td>Exam #3 (Closes at 11:59pm)</td>
<td>5 &amp; 6 + all previous material</td>
</tr>
<tr>
<td>March 15</td>
<td>D2L Maintenance</td>
<td></td>
</tr>
<tr>
<td>D2L will be down from 10:00pm on 3/16 until 7:00am on 3/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>March 23</td>
<td>Exam #3 (Closes at 11:59pm)</td>
<td>5 &amp; 6 + all previous material</td>
</tr>
<tr>
<td>April 9</td>
<td>Last Day to Withdraw</td>
<td></td>
</tr>
<tr>
<td>April 2</td>
<td>Exam #4 (Closes at 11:59pm)</td>
<td>7 &amp; 8 + all previous material</td>
</tr>
<tr>
<td>Date</td>
<td>Exam Number</td>
<td>Due Date</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>April 9</td>
<td>Exam #5</td>
<td>(Closes at 11:59pm)</td>
</tr>
<tr>
<td>April 17</td>
<td>Exam #6</td>
<td>(Closes at 11:59pm)</td>
</tr>
<tr>
<td>April 25</td>
<td>Exam #7</td>
<td>(Closes at 11:59pm)</td>
</tr>
<tr>
<td>April 30</td>
<td>Exam #8</td>
<td>(Closes at 11:59pm)</td>
</tr>
<tr>
<td>May 7</td>
<td>ALL Late and Make-Up Work is Due by 11:59pm NO EXCEPTIONS!</td>
<td></td>
</tr>
</tbody>
</table>

GOOD LUCK! HAVE FUN! And remember, I am here to help you succeed in this course. Please do not hesitate to ask questions if you need assistance.

In order to access detailed course materials including lecture notes, PowerPoints, practice quizzes, and study guides, students must log into D2L: [https://highlands.view.usg.edu/](https://highlands.view.usg.edu/)

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Final Report
Affordable Learning Georgia Textbook Transformation Grants

Final Report

To submit your Final Report, go to the Final Report submission page on the ALG website: http://affordablelearninggeorgia.org/site/final_report_submission

General Information
Date: 5/25/2018
Grant Round: Nine
Grant Number: 324
Institution Name(s): Georgia Highlands College
Team Members (Name, Title, Department, Institutions if different, and email address for each):

Lisa Jellum, Associate Professor of Physical Education, Division of Natural Science and Physical Education, Georgia Highlands College, ljellum@highlands.edu

Jason Hitzeman, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, jhitzeman@highlands.edu

Mark Knauss, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, mknauss@highlands.edu

Sharryse Henderson, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, shenders@highlands.edu

Tom Harnden, Professor of Biology, Division of Natural Science and Physical Education, Georgia Highlands College, tharnden@highlands.edu

Cynthia Elsberry, Instructor of Physical Education, Division of Natural Science and Physical Education, Georgia Highlands College, celsber@highlands.edu

Gregory Ford, Dean of the Division of Natural Science and Physical Education, Georgia Highlands College, gford@highlands.edu

Course Name(s) and Course Numbers: Principles of Nutrition; BIOL 2190 and PHED 2202
Semester Project Began: Summer 2017
Final Semester of Implementation: Spring 2018
Total Number of Students Affected During Project: 331

1. Narrative
Summary of your transformation experience, including challenges and accomplishments

In the overall implementation and selection of a survey level nutrition course that suited both the PHED as well as BIOL student learning outcomes became a hard task. So because of this, we developed a repository of material that would be used for the courses. We derived material from two OER’s to make a place where instructors could use material from both books and in most cases throughout the project, instructors were writing their own material to subsidize material, or change material to fit the need of the student learning outcomes, needs of the instructors, or needs of the students. This method seemed to work very well!

The material is found at the GHC LibGuide and it is free and ready to use for the public. This material can be found: https://getlibraryhelp.highlands.edu/c.php?g=844309

The material is divided into sections due to the differences in chapter numbers from the BIOL 2190 course to the PHED 2202. Each course teaches slightly different amounts of depth into the nutrition topics so the material is divided by topic and then instructors can choose how to align book topics with the material they teach. Students have access to all material in tabs. This helps both the instructor as well as the student know what they are looking for. We found that the students accessed material readily and were using the material that professors found in place of a paid for text.

Transformative impacts on your instruction and students and their performance

The transformative impacts that were seen on the instruction of the course were positive granted the students didn’t have to pay for a textbook as well as the students were able to access quality material. The material was derived and created to keep the rigor intact in the courses. The nutrition LibGuides house the materials, resources and links all in the same place.

In the implementation phase of the textbook adoption we found that 83% of students either strongly agreed or agreed that textbook costs were important in the decision on taking a certain course. 89% of students agreed or strongly agreed with the OER’s in the course. This statistic was overwhelmingly positive that students felt as though they used material frequently. When the students were accessing material in a frequent manner, 88% of students either agreed or strongly agreed that the textbook was adequate for the success of the students in the course. This lead to 87% of students being satisfied with the textbook. This was very positive feedback for a first semester implementation of the book.

Overwhelmingly, the textbook had positive feedback from the students. This positive feedback goes hand in hand with the positive data that was obtained on student’s DFW rate as well as GPA. The students taking nutrition in the fall there was a 31% DFW rate, whereas the spring classes that used a free text only had a 21% DFW rates. This is a significant decrease in students failing or withdrawing from the courses.
Describe lessons learned, including any things you would do differently next time.

During the selection and adoption phase there were many professors that didn’t take as much time as they would have needed to select a material list that was as extensive as they needed to teach the course. This mistake in the implementation phase caused a lot of people to re-evaluate how much material, and what ancillaries were needed to teach. This step although time consuming was great to bring to light all of the things necessary to add to a textbook to successfully teach a rigorous course in nutrition.

2. Quotes

“I found the free textbook very useful in my course. I likely would have not purchased the book so I was grateful for the version the instructor provided. It allowed me to better complete my assignments and do well on the exams. Without it I would have relied only on my notes and likely not does as well in the course.”

“The video links with each chapter were very useful. I watched a lot of them and often watch some of the other suggested videos after watching the video from the text. I’m more of a visual learner so it is always beneficial to be able to see the concepts demonstrated visually whenever possible. The book did a good job of that.”

“I liked the open source textbook the instructors gave us. Some of it wasn’t easy to follow, but there were a lot of video and helpful links in each chapter to help me through the harder material. I’m not sure I would have been able to get through the material on just the notes and lectures. The book really helped me. I also like that it is free and I didn’t have to spend a lot of money on a textbook like I do for other classes.”

3. Quantitative and Qualitative Measures

3a. Uniform Measurements Questions

The following are uniform questions asked to all grant teams. Please answer these to the best of your knowledge.

**Student Opinion of Materials**

Was the overall student opinion about the materials used in the course positive, neutral, or negative?

Total number of students affected in this project: ____312_____

- Positive: ___89___ % of ____74____ number of respondents
- Neutral: ____6____ % of ____74____ number of respondents
- Negative: ____5____ % of ____74____ number of respondents
Student Learning Outcomes and Grades

Was the overall comparative impact on student performance in terms of learning outcomes and grades in the semester(s) of implementation over previous semesters positive, neutral, or negative?

*Student outcomes should be described in detail in Section 3b.*

Choose One:

- __x__ Positive: Higher performance outcomes measured over previous semester(s)
- ___ Neutral: Same performance outcomes over previous semester(s)
- ___ Negative: Lower performance outcomes over previous semester(s)

Student Drop/Fail/Withdraw (DFW) Rates

Was the overall comparative impact on Drop/Fail/Withdraw (DFW) rates in the semester(s) of implementation over previous semesters positive, neutral, or negative?

*Drop/Fail/Withdraw Rate:*

Depending on what you and your institution can measure, this may also be known as a drop/failure rate or a withdraw/failure rate.

___21___% of students, out of a total __312_____ students affected, dropped/failed/withdrew from the course in the final semester of implementation.

Choose One:

- __X__ Positive: This is a lower percentage of students with D/F/W than previous semester(s)
- ___ Neutral: This is the same percentage of students with D/F/W than previous semester(s)
- ___ Negative: This is a higher percentage of students with D/F/W than previous semester(s)
3b. Measures Narrative

- Include measures such as:
  - Drop, fail, withdraw (DFW) delta rates
    - Fall 2017- DFW= 31%
    - Spring 2018- DFW=21%
  - Course retention and completion rates
    - Fall 2017- Withdraw= 12%
    - Spring 2018- Withdraw=8%
  - Average GPA
    - Fall 2017- GPA= 2.39
    - Spring 2018- GPA=2.66
  - Student success in learning objectives
    - Fall 2017:
      - SLO #1 – 6.1% success
      - SLO #2 – 51.0% success
    - Spring 2018:
      - SLO #1 – 33.3% success
      - SLO #2 – 63.9% success
  - Surveys, interviews, and other qualitative measures
I frequently used the open (free) educational resources in my course?

Answered: 74    Skipped: 0

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>67.57%</td>
</tr>
<tr>
<td>Agree</td>
<td>22.97%</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
<td>2.70%</td>
</tr>
<tr>
<td>Disagree</td>
<td>2.70%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>4.06%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
</tr>
</tbody>
</table>
When registering for courses, I am concerned about the cost of the textbook.

Answered: 74    Skipped: 0

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
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<td>62.16%</td>
</tr>
<tr>
<td>Agree</td>
<td>21.62%</td>
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<tr>
<td>Neither agree nor disagree</td>
<td>9.46%</td>
</tr>
<tr>
<td>Disagree</td>
<td>5.41%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>1.35%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>74</td>
</tr>
</tbody>
</table>
In comparison to traditional textbooks, I feel as though the material available in this course was adequate for my success?

Answered: 74   Skipped: 0

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strongly agree</strong></td>
<td>58.11%</td>
</tr>
<tr>
<td><strong>Agree</strong></td>
<td>29.73%</td>
</tr>
<tr>
<td><strong>Neither agree nor disagree</strong></td>
<td>6.76%</td>
</tr>
<tr>
<td><strong>Disagree</strong></td>
<td>5.41%</td>
</tr>
<tr>
<td><strong>Strongly disagree</strong></td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
</tr>
</tbody>
</table>
I am satisfied with the course materials.

Answered: 74   Skipped: 0

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>58.11%</td>
</tr>
<tr>
<td>Agree</td>
<td>29.73%</td>
</tr>
<tr>
<td>Neither Agree or Disagree</td>
<td>6.76%</td>
</tr>
<tr>
<td>Disagree</td>
<td>4.05%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>1.35%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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</table>
4. Sustainability Plan

The sustainability of this project is a commitment that the division of natural sciences and PE to continue to give our students free and reduced cost text books. Because of this commitment and the commitment to make our classrooms the best they can be, the book becomes a priority to continue to change and morph into the best it can be. The team from both sides will continue to meet to change the book in ways that will suit the division as a whole in the best way possible.

5. Future Plans

The future plans of the grant work are to be able to expand the repository to include videos, PowerPoints, and other ancillaries. The application process will occur where the mini-grant will be applied for to expand the material that the students are able to access that would be applicable for continuing to increase the rigor and ease for both the students and the instructors of the nutrition courses at GHC. Continuing to increase the material that is available with allow for the students to have more material to learn from.

6. Description of Photograph

In the photo is Lisa Jellum, Jason Hitzeman, Mark Knauss, Sharysse Henderson, Tom Harnden and Cynthia Elsberry.