## GALILEO, University System of Georgia GALILEO Open Learning Materials

**Biological Sciences Grants Collections** 

**Biological Sciences** 

Summer 2018

### Bioethics (GCSU)

Kasey Karen Georgia College and State University, kasey.karen@gcsu.edu

Jennifer Townes

Georgia College and State University, jennifer.townes@gcsu.edu

Follow this and additional works at: https://oer.galileo.usg.edu/biology-collections

Part of the <u>Biology Commons</u>, and the <u>Laboratory and Basic Science Research Commons</u>

#### Recommended Citation

Karen, Kasey and Townes, Jennifer, "Bioethics (GCSU)" (2018). *Biological Sciences Grants Collections*. 23. https://oer.galileo.usg.edu/biology-collections/23

This Grants Collection is brought to you for free and open access by the Biological Sciences at GALILEO Open Learning Materials. It has been accepted for inclusion in Biological Sciences Grants Collections by an authorized administrator of GALILEO Open Learning Materials. For more information, please contact affordablelearninggeorgia@usg.edu.

### **Grants Collection**

Georgia College and State University



Kasey Karen and Jennifer Townes

## **Bioethics**







#### **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
  - o 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.



Unless otherwise indicated, all Grants Collection materials are licensed under a Creative Commons Attribution 4.0 International License.

# **Initial Proposal**

#### **Application Details**

#### Manage Application: Textbook Transformation Grants: Round Ten

Award Cycle: Round 10

**Internal Submission** Friday, September 29, 2017

Deadline:

**Application Title: 338** 

**Application ID:** 001875

Submitter First Name: Kasey

Submitter Last Name: Karen

Submitter Title: Assistant Professor

Submitter Email Address: kasey.karen@gcsu.edu

Submitter Phone Number: 4784455862

**Submitter Campus Role:** Proposal Investigator (Primary or additional)

**Applicant First Name:** Kasey

Applicant Last Name: Karen

Co-Applicant Name(s): Jennifer Townes

Applicant Email Address: kasey.karen@gcsu.edu

**Applicant Phone Number:** 4784455862

Primary Appointment Title: Assistant Professor

**Institution Name(s):** Georgia College & State University

Submission Date: Monday, October 2, 2017

**Proposal Title: 338** 

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

Are you using an OpenStax No

textbook?:

Final Semester of Summer 2018

Instruction:

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

Kasey Karen, Assistant Professor, Biological & Environmental Sciences, Georgia College & State University, kasey.karen@gcsu.edu

Jennifer Townes, Scholarly Communication Librarian, Russell Library,

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

Kelli Brown, Provost, Academic Affairs, Georgia College & State University

#### **Course Names, Course Numbers and Semesters Offered:**

Bioethics, BIOL 4310/5310, Fall 2017, Summer 2018

List the original course Bioethics: An AnthologyHelga Kuhse materials for students (Editor), Udo Schuklenk (Editor), Peter (including title, whether Singer (Editor)Required\$74.95

optional or required, & cost

for each item):

**Average Number of** 20-25 **Students per Course** 

Section:

Number of Course 1
Sections Affected by
Implementation in
Academic Year:

#### **Average Number of Course Sections Per Semester:**

1 when offered

**Total Number of Students** 20-25

Affected by Implementation

in Academic Year:

Requested Amount of 10800

**Funding:** 

Original per Student Cost: 139.67

Post-Proposal Projected 64.72

**Student Cost:** 

**Projected Per Student** 74.95

Savings:

Projected Total Annual 1873.75 Student Savings:

#### **Project Goals:**

Our project goals are to 1) reduce the cost to students in both online and face-to-face sections of the Bioethics (BIOL 4310/5310) course by replacing the published anthology with a no-cost, open access anthology, 2) identify articles that will provide a balanced account of varying perspectives on different bioethical issues, 3) design the anthology to focus on specific issues

that are covered in class with current gaps filled and no extraneous material, and 4) design and share materials on a LibGuide (Library-Specific Springshare Product) that will serve as an easily accessible resource guide for students, as well as faculty at other institutions.

#### **Statement of Transformation:**

Description of transformation: Each year, the Department of Biological & Environmental Sciences offers one section of Bioethics with about 15-20 seats for undergraduates and 5 seats for graduate students. Every odd year, it is offered in the fall semester as a face-to-face course, while it is offered as a fully online summer course in each even year. This course satisfies the 18 upper-level credits in the major requirement for Biology majors and the 9-10 upper-level credits for the Biology minor. The class has been taught 3 times and is currently being taught a 4<sup>th</sup> time this semester and there has always been the same textbook requirement: Scientific Integrity: Text and Cases in Responsible Conduct of Research and Bioethics: An Anthology. I searched through multiple bioethics textbooks these were the best combination of texts I could find for my class. I am very happy with Scientific Integrity, however, there are a few drawbacks to using the anthology. One issue is that there does not appear to be a balanced account of some issues. For instance, there is one article regarding organ allocation and alcoholics and it is clearly a negative view. I have to supplement the text with other articles to give a more balanced view. I stress in the class how important it is to at least explore both sides of an issue before coming to a conclusion so using a text that does not follow that rule itself is problematic. The text is also lacking in articles on historical bioethical issues, such as the Nuremberg Trials and the Tuskeegee Syphilis Study. Additionally, the articles on embryonic stem cells are not sufficient and need to be supplemented. Additionally, there are a lot of other articles that are not used in the class so it is a little wasteful. Finally, the need for two textbooks increases the cost to the students so requiring the purchase of only one of the texts will benefit the students financially. Specifically, with the no-cost anthology that we develop, the students will save \$74.95 each.

Stakeholders affected by the transformation and a description of this impact. Our students will be the direct beneficiaries of this textbook transformation. Our students will save money and they will have course materials that are well aligned with topics covered in class and with the course objective of fully exploring a topic from multiple perspectives. Additionally, this transformation will benefit the students and professor in making it easier to find and assign certain articles. Sometimes there is confusion with the class in terms of what readings are due when since there are essentially 3 locations for the readings. Two textbooks and additional resources in the Content section of D2L. I try to make it as clear as possible with announcements and calendar items on D2L, however, there are still moments in class where students arrive not knowing that an article should have been read or emails about finding the location of an article. It will also make it easier in the sense that the anthology can be organized in the order that the topics are addressed in the class. Currently, we have to jump around in the published anthology.

Impact on the course and program. While we do not expect this transformation to significantly impact student success in the course, we do expect that it would make the course easier to follow. The lower cost of textbooks could also impact the registration and withdrawal rates. Science majors typically spend hundreds of dollars per semester on textbooks, so reducing this cost in any way can help with retention.

#### **Transformation Action Plan:**

Survey and assess current course offering to get control data. The current course offering is using the published textbook along with additional materials supplied by me. We will administer a survey, collect scores on assignments, and administer an assessment at the end of this course. Please see the section on Quantitative and Qualitative measures below for more information.

Identify and review appropriate materials that cover the topics of the course from multiple perspectives. We will review the current set of articles used in Bioethics course and determine if they are open access or if we have access to them in Galileo. For any articles that are copyrighted and require licensing fees, a search for comparable material that is available to us at no cost will be undertaken. Many of the appropriate articles can be found as open access or published in the Journal of Bioethics. We do have access to articles published after 1998 from this journal. We will also search for articles that can supplement the anthology in topics not covered in the text or not balanced in the text.

Develop new materials. This will include writing brief introductions to each unit to give background and context for the articles chosen for that section. For embryonic stem cells, this might include more scientific background on embryos, how embryonic stem cells are made, and what types of therapeutic interventions scientists hope to be able to develop as well as brief descriptions of major arguments addressed in the articles and a timeline of the legality of embryonic stem cell research in the United States.

Organize materials for open access. After we compile all of the material, we will consider how to best present these materials using both D2L and LibGuides. Jennifer Townes will create the LibGuide and provide training for its use.

<u>Teach course</u>. In Summer 2018, the course will be taught as a fully online course. I will use the new course materials in place of the previously required textbook. Based on assessment data, we will revise course material as necessary. We will share challenges and successes through regular meetings.

<u>Assessment of the Summer course offering</u>. Please see the section on Quantitative and Qualitative measures below.

<u>Dissemination of material</u>. The course materials will be hosted in Georgia View (D2L) and open for all students enrolled in the class. In addition, all open-access course materials will be made available on the course LibGuide.

## Measures:

Quantitative & Qualitative Quantitative Measures. We will assess student performance in both the Fall 2017 and Summer 2018 courses using position paper assignments on various topics throughout the course as well as a new assessment that will be developed that aligns with the course learning outcomes. It will assess their ability to identify the major arguments surrounding the topics covered during class and their ability to write moral arguments. These results will be compared with each other to observe student performance in textbook-based versions of the course versus the new no-cost anthology. We do not necessarily expect more students to meet the course outcomes after we replace the textbook, but we will make sure it does not decrease student achievement. Additionally, we will compare DFW rates both before and after the textbook transformation to determine if the no-cost format increases student retention and decreases course failure rates. In order to garner baseline data about students' use of Open Educational Resources, we will administer the questionnaire published in the 2016 Student Textbook and Course Materials Survey by the Florida Virtual Campus Office of Distance Learning & **Student Services** (http://bit.ly/2k4EoWn).Qualitative Measures. Students in the Fall 2017 and Summer 2018 sections (both the traditional anthology and the newly designed one) will complete a Student Assessment of their Learning Gains (www.salgsite.org) at the end of the course. Part of this survey will specifically ask students to rate how well the course resources such as the textbook and online materials, helped their learning. Students also self-describe the learning gains they made for each student learning outcome. We will compare student scores and comments both before and after the textbook transformation.

#### Timeline:

Action	Timeframe

Survey and assess current course offering to get control data	Fall 2017
Identify and review appropriate materials for the new anthology	Fall 2017
Finalize articles for anthology and develop new material	Spring 2018
Organize materials for open access	Spring 2018
Submit interim status report to ALG.	Late Spring 2018
Teach course	Summer 2018
Assessment in Bioethics course	Summer 2018
Analyze assessment data	Summer 2018
Submit final report to ALG	Late Summer 2018

#### **Budget:**

Kasey Karen will receive summer pay totaling \$5,000 salary and benefits. Jennifer Townes will receive a contract overload totaling \$5,000 salary and benefits. This funding will serve for redesigning courses, investigating open access sources, and analyzing data. Project expenses -- including travel to the kick-off meeting, licensing and copyright fees – will total \$800. The total budget request is \$10,800.

#### **Sustainability Plan:**

The Department of Biological & Environmental Sciences is committed to offering BIOL 4310/5310 every year either as a face-to-face course in the Fall or a fully online course in the Summer. The new material would be used in each of these courses and would no longer require students to purchase the traditional anthology. The course material will be reviewed on an annual basis to review selected articles and renew any necessary licenses.

As the summer version of Bioethics uses D2L as the learning platform, it makes sense for us to continue to use this course management software. D2L allows instructors to easily rollover course content into future classes. Course materials will also be shared using a LibGuide. LibGuides are easy to create and edit, offer flexible design, and can be edited by multiple users. Files, links, widgets, video and more can be embedded in the guides, which may be useful for the brief introductions to each unit. In addition, LibGuide usage can be tracked through page views, providing feedback to guide creators. Sharing is encouraged and facilitated in the LibGuides Community, and so course materials can be easily shared with USG and other interested schools.



### Provost and Vice President for Academic Affairs

Campus Box 24 Milledgeville, Georgia 31061-0490 Phone 478-445-4715 Fax 478-445-5151

September 27, 2017

Dear Review Board,

On behalf of Georgia College in Milledgeville, I am pleased to offer this letter of support for our institution's **Affordable Learning Georgia** Textbook Transformation grant application. Georgia College is requesting funding for the development of no-cost-to-students learning materials for Bioethics, an upper level course in the Biology major as well as a graduate-level course. Each year, Georgia College provides 6,600 undergraduate and graduate students with an exceptional learning environment that extends beyond the classroom, with hands-on involvement with faculty research, community service, residential learning communities, study abroad, and internships. Our Biological Sciences program is one of the top majors at Georgia College. As such, we seek to provide high quality, technologically advanced resources that will enable students to obtain a more affordable education.

Assistant Professor of Biology, Dr. Kasey Karen's project will support the creation of a "no-cost-to-students" resource for Bioethics. With support from Scholarly Communication Librarian, Jennifer Townes, this electronic resource will enable students to access topical bioethical articles through the system-wide Desire2Learn (DSL) interface. In the interest of adapting the resource for national replication beyond USG, the university will cover the cost of password-protected LibGuides, a content management system used by thousands of libraries worldwide. Georgia College will also cover the cost of licensing copyrighted material, in order to ensure project sustainability. The Office of the Provost, along with the Office of Grants and Sponsored Projects, will ensure compliance with all State, Board of Regents, and institutional policies and procedures, should we receive funding.

Thank you for your favorable consideration of Georgia College's application. Please contact me should you have any questions regarding this project.

Best Regards,

Kelli Brown, Ph.D.

Provost and Vice President

for Academic Affairs

## Affordable Learning Georgia Textbook Transformation Grants Round 1

#### Spring 2018, Summer 2018, Fall 2018 Proposal Form and Narrative

Institution Name(s)	Georg	gia College & State U	niversi	ity			
Team Members (Name, Title, Department, Institutions if different, and email address for each)	Kasey Karen, Assistant Professor, <u>Kasey.karen@gcsu.edu</u> Department of Biological and Environmental Sciences  Jennifer Townes, Scholarly Communication Librarian, Russell Library, <u>jennifer.townes@gcsu.edu</u>						
Sponsor, Title, Department, Institution	Kelli Brown, Provost, Academic Affairs, Georgia College & State University						
Course Names, Course Numbers and Semesters Offered	BIOL 4310/5310, Bioethics, Fall 2017, Summer 2018						
Average Number of Students Per Course Section	20- 25	Number of Course Sections Affected by Implementation in Academic Year 2016	1	S b ir	otal Numbe tudents Aff y Implemer n Academic 016	ected ntation	20-25
Award Category (pick one)	<ul> <li>No-Cost-to-Students Learning Materials</li> <li>□ OpenStax Textbooks</li> <li>□ Course Pack Pilots</li> <li>□ Transformations-at-Scale</li> </ul>						
List the original course materials for students (including title, whether optional or required, & cost for each item)	Bioethics: An Anthology  Helga Kuhse (Editor), Udo Schuklenk (Editor), Peter Singer (Editor)  (required)  [Cost] \$74.95/stuc			.95/stud			
Plan for Hosting Materials	<b>≥</b> D2	<u>Guides</u>					
Projected Per Student Cost	\$0/stu		_		d Per Savings	100%	

Title: Building a Better Anthology: Developing a balanced and focused anthology for a Bioethics course (BIOL 4310/5310)

#### 1. Project Goals

Our project goals are to 1) reduce the cost to students in both online and face-to-face sections of the Bioethics (BIOL 4310/5310) course by replacing the published anthology with a no-cost, open access anthology, 2) identify articles that will provide a balanced account of varying perspectives on different bioethical issues, 3) design the anthology to focus on specific issues that are covered in class with current gaps filled and no extraneous material, and 4) design and share materials on a LibGuide (Library-Specific Springshare Product) that will serve as an easily accessible resource guide for students, as well as faculty at other institutions.

#### 1.1 Statement of Transformation

Description of transformation: Each year, the Department of Biological & Environmental Sciences offers one section of Bioethics with about 15-20 seats for undergraduates and 5 seats for graduate students. Every odd year, it is offered in the fall semester as a face-to-face course, while it is offered as a fully online summer course in each even year. This course satisfies the 18 upper-level credits in the major requirement for Biology majors and the 9-10 upper-level credits for the Biology minor. The class has been taught 3 times and is currently being taught a 4<sup>th</sup> time this semester and there has always been the same textbook requirement: Scientific Integrity: Text and Cases in Responsible Conduct of Research and Bioethics: An Anthology, I searched through multiple bioethics textbooks these were the best combination of texts I could find for my class. I am very happy with Scientific Integrity, however, there are a few drawbacks to using the anthology. One issue is that there does not appear to be a balanced account of some issues. For instance, there is one article regarding organ allocation and alcoholics and it is clearly a negative view. I have to supplement the text with other articles to give a more balanced view. I stress in the class how important it is to at least explore both sides of an issue before coming to a conclusion so using a text that does not follow that rule itself is problematic. The text is also lacking in articles on historical bioethical issues, such as the Nuremberg Trials and the Tuskeegee Syphilis Study. Additionally, the articles on embryonic stem cells are not sufficient and need to be supplemented. Additionally, there are a lot of other articles that are not used in the class so it is a little wasteful. Finally, the need for two textbooks increases the cost to the students so requiring the purchase of only one of the texts will benefit the students financially. Specifically, with the no-cost anthology that we develop, the students will save \$74.95 each.

Stakeholders affected by the transformation and a description of this impact: Our students will be the direct beneficiaries of this textbook transformation. Our students will save money and they will have course materials that are well aligned with topics covered in class and with the course objective of fully exploring a topic from multiple perspectives. Additionally, this transformation will benefit the students and professor in making it easier to find and assign certain articles. Sometimes there is confusion with the class in terms of what readings are due when since there are essentially 3 locations for the readings. Two textbooks and additional resources in the Content section of D2L. I try to make it as clear as possible with announcements and calendar items on D2L, however, there are still moments in class where students arrive not knowing that an article should have been read or emails about finding the location of an article. It will also make it easier in the sense that the anthology can be organized in the order that the topics are addressed in the class. Currently, we have to jump around in the published anthology.

*Impact on the course and program.* While we do not expect this transformation to significantly impact student success in the course, we do expect that it would make the course easier to follow. The lower cost of textbooks could also impact the registration and withdrawal rates.

Science majors typically spend hundreds of dollars per semester on textbooks, so reducing this cost in any way can help with retention.

#### 1.2 Transformation Action Plan

- Survey and assess current course offering to get control data. The current course
  offering is using the published textbook along with additional materials supplied by me.
  We will administer a survey, collect scores on assignments, and administer an
  assessment at the end of this course. Please see the section on Quantitative and
  Qualitative measures below for more information.
- 2. <u>Identify and review appropriate materials that cover the topics of the course from multiple perspectives</u>. We will review the current set of articles used in Bioethics course and determine if they are open access or if we have access to them in Galileo. For any articles that are copyrighted and require licensing fees, a search for comparable material that is available to us at no cost will be undertaken. Many of the appropriate articles can be found as open access or published in the Journal of Bioethics. We do have access to articles published after 1998 from this journal. We will also search for articles that can supplement the anthology in topics not covered in the text or not balanced in the text.
- 3. <u>Develop new materials</u>. This will include writing brief introductions to each unit to give background and context for the articles chosen for that section. For embryonic stem cells, this might include more scientific background on embryos, how embryonic stem cells are made, and what types of therapeutic interventions scientists hope to be able to develop as well as brief descriptions of major arguments addressed in the articles and a timeline of the legality of embryonic stem cell research in the United States.
- 4. <u>Organize materials for open access</u>. After we compile all of the material, we will consider how to best present these materials using both D2L and LibGuides. Jennifer Townes will create the LibGuide and provide training for its use.
- 5. <u>Teach course</u>. In Summer 2018, the course will be taught as a fully online course. I will use the new course materials in place of the previously required textbook. Based on assessment data, we will revise course material as necessary. We will share challenges and successes through regular meetings.
- 6. <u>Assessment of the Summer course offering</u>. Please see the section on Quantitative and Oualitative measures below.
- 7. <u>Dissemination of material</u>. The course materials will be hosted in Georgia View (D2L) and open for all students enrolled in the class. In addition, all open-access course materials will be made available on the course LibGuide.

#### 1.3 Quantitative and Qualitative Measures

Quantitative Measures. We will assess student performance in both the Fall 2017 and Summer 2018 courses using position paper assignments on various topics throughout the course as well as a new assessment that will be developed that aligns with the course learning outcomes. It will assess their ability to identify the major arguments surrounding the topics covered during class and their ability to write moral arguments. These results will be compared with each other to observe student performance in textbook-based versions of the course versus the new nocost anthology. We do not necessarily expect more students to meet the course outcomes after we replace the textbook, but we will make sure it does not decrease student achievement. Additionally, we will compare DFW rates both before and after the textbook transformation to determine if the no-cost format increases student retention and decreases course failure rates. In order to garner baseline data about students' use of Open Educational Resources, we will administer the questionnaire published in the 2016 Student Textbook and Course Materials

*Survey* by the Florida Virtual Campus Office of Distance Learning & Student Services (http://bit.ly/2k4EoWn).

Qualitative Measures. Students in the Fall 2017 and Summer 2018 sections (both the traditional anthology and the newly designed one) will complete a Student Assessment of their Learning Gains (<a href="www.salgsite.org">www.salgsite.org</a>) at the end of the course. Part of this survey will specifically ask students to rate how well the course resources such as the textbook and online materials, helped their learning. Students also self-describe the learning gains they made for each student learning outcome. We will compare student scores and comments both before and after the textbook transformation.

#### 1.4 Timeline

Action	Timeframe
Survey and assess current course offering to get control data	Fall 2017
Identify and review appropriate materials for the new anthology	Fall 2017
Finalize articles for anthology and develop new material	Spring 2018
Organize materials for open access	Spring 2018
Submit interim status report to ALG.	Late Spring 2018
Teach course	Summer 2018
Assessment in Bioethics course	Summer 2018
Analyze assessment data	Summer 2018
Submit final report to ALG	Late Summer
	2018

#### 1.5 Budget

Kasey Karen will receive summer pay totaling \$5,000 salary and benefits. Jennifer Townes will receive a contract overload totaling \$5,000 salary and benefits. This funding will serve for redesigning courses, investigating open access sources, and analyzing data. Project expenses -- including travel to the kick-off meeting, licensing and copyright fees – will total \$800. The total budget request is \$10,800.

#### 1.6 Sustainability

The Department of Biological & Environmental Sciences is committed to offering BIOL 4310/5310 every year either as a face-to-face course in the Fall or a fully online course in the Summer. The new material would be used in each of these courses and would no longer require students to purchase the traditional anthology. The course material will be reviewed on an annual basis to review selected articles and renew any necessary licenses.

As the summer version of Bioethics uses D2L as the learning platform, it makes sense for us to continue to use this course management software. D2L allows instructors to easily rollover course content into future classes. Course materials will also be shared using a LibGuide. LibGuides are easy to create and edit, offer flexible design, and can be edited by multiple users. Files, links, widgets, video and more can be embedded in the guides, which may be useful for the brief introductions to each unit. In addition, LibGuide usage can be tracked through page views, providing feedback to guide creators. Sharing is encouraged and facilitated in the LibGuides Community, and so course materials can be easily shared with USG and other interested schools.

# Syllabus

#### BIOETHICS BIOL 4310-W01 and W02 Summer 2018

CRN: 50373, 50806

MEETING TIME: M 3pm, 6pm or T 9:30am

MEETING LOCATION: WebEx

CREDIT HOURS: 3

PREREQUISITE: BIOL 2100
INSTRUCTOR: Dr. Kasey Karen
OFFICE LOCATION: Herty Rm. 266

CONTACT INFORMATION: kasey.karen@gcsu.edu; 445-5862

#### COURSE DESCRIPTION:

The course will serve as an introduction to a wide array of bioethical dilemmas faced by researchers, physicians, and the general public. There will be a focus on proper construction of moral arguments, logical reasoning, and an exploration of all sides to different issues. In addition, analysis of these topics will occur by using biological and biotechnological knowledge and performing literature-based research.

#### **INSTRUCTIONAL OBJECTIVES:**

Upon successful completion of this course, the student will be able to:

- Demonstrate knowledge on the history of bioethics.
- Demonstrate an understanding of various topics regarding the responsible conduct of research.
- Apply scientific facts in order to justify choices on bioethical issues.
- Identify bioethical issues found in the contemporary practice of health care services and in modern research techniques.
- Construct and evaluate valid arguments regarding various bioethical issues.

#### **REQUIRED TEXTS:**

Francis L. Macrina. Scientific Integrity. 4th edition. ASM Press. 2014

LibGuide Anthology - provided on GA View free of charge <a href="https://libguides.gcsu.edu/bioethics">https://libguides.gcsu.edu/bioethics</a>

#### **COURSE OUTLINE:**

You will be responsible for completing each aspect of each Learning Module by their respective deadline. Since discussions are an important part of this class, it is important to keep everyone in the class on a relatively similar schedule so there are some assignments or readings with due dates throughout the course. Consult the calendar on GA View for specific due dates.

#### COURSE TOPICS AND SCHEDULE

Learning Module	Readings and Assignments	Due Date
1: Orientation	Orientation quiz	Thursday, June 14
2: Introduction to bioethics	Introduction SoftChalk lecture Moral Arguments worksheet Moral Arguments quiz Moral Theories SoftChalk lecture Moral Theories quiz	Sunday, June 17
3: History of bioethics  Nuremberg Code  Tuskeegee Study	History of Human Experimentation SoftChalk lecture Nuremberg Code group assignment Fifty Years Later article 50 Years Later assignment Racism and Research article/discussion	Sunday, June 24
4: Biomedical experimentation  • Human subjects  • Animal subjects	Readings: Anthology (Biomedical Experimentation), Macrina (Ch.5 and 6) Clinical Research online discussion board Choose 1: Human Experimentation case studies, animal experimentation prompted essay, position paper	Sunday, June 24
<ul> <li>5: Responsible conduct of research</li> <li>Authorship and peer review</li> <li>Intellectual Property</li> <li>Science, Technology, &amp; Society</li> </ul>	Readings: Anthology (Responsible Conduct of Research), Macrina (Ch. 4, 9, and 11) Patenting Human Genes online discussion board Choose 1: Authorship/Peer Review case studies, intellectual property prompted essay, position paper	Sunday, July 1
6: Life and Death	Readings: Anthology (Life & Death) Brain Death & Advance Directives online discussion board Euthanasia discussion board Choose 1: Right to Die case studies, Medically- Assisted Death prompted essay, position paper	Sunday, July 8
7: Organ donation/allocation	Readings: Anthology (Organ Donation & Allocation) Survival Lottery online discussion board WebEx Debate Choose 1: Dead donor rule prompted essay or position paper	Sunday, July 8
8: Genetics and Assisted Reproductive Technologies (ART)  • Genetic counseling/Eugenics  • Genetic screening/editing  • 3-parent IVF	Readings: Anthology Genetics and ART Human Gene Editing discussion board Choose 1: Genetic Counseling case studies, Genetic Screening prompted essay, position paper	Sunday, July 15
9: Abortion and Embryonic stem cells	Readings: Anthology (Abortion and ESC Research)	Sunday, July 22

ESC SoftChalk lecture Abortion discussion board Choose 1: Stem-cell Tourism prompted essay or position paper		
<b>10: Environmental Ethics</b> Readings: Anthology (Environmental Ethics)		
<ul> <li>Conservation Biology</li> </ul>	Conservation Biology discussion board	Sunday, July 29
Climate Change		Juliuay, July 29
	position paper	

By the end, you should complete 3 position papers, 2 prompted essays, and 2 case studies from the "Choose 1" options.

#### **GRADING PROCESS AND CRITERIA:**

LM#2 – Introduction to Bioethics 8%	
LM#3 – History of Bioethics 5%	
Position Papers (3) 15%	ó
Prompted Essays (2) 10%	ó
Case Studies (2) 5%	
Term Paper 20%	ó
Participation 10%	ó
Group work 20%	ó
Outside writing 5%	

Participation in discussions (online and through WebEx) is required and will be kept track of. **Active participation entails both voicing one's opinions and respectfully listening to those of others.** Grades will be recorded on a scale of check, check +, or check -. There will be minimum requirements for online discussions; grades will be assigned on a scale of 0-10. There are multiple ways to obtain a 10; 2 lengthy, well-thought out comments that incorporate an outside source to back up their statement, 4 medium-length (3-4 sentences) comments that make good points but are not necessarily in-depth, or a combination of different quality posts. For group presentations, the members of a group will determine the percentage that each member participated for that project. For a group of 4, a value <23% will result in a check -, 23-26% will be a check, and >26% will be a check +. For a group of 3, a value <32% will result in a check -, 32-34% will be a check, and >34% will be a check +. For a group of 2, a value <45% will result in a check -, 46-54% will be a check, and >55% will be a check +. You will start with 20 points for participation; each check - subtracts one point, each check + adds a point. If you miss a WebEx meeting, you will receive -3 points to your participation grade. Your final participation grade will be the percentage of that score out of 25 points total plus your participation in each of the discussion boards.

Assignments will consist of weekly reading assignments, position papers, prompted essays, case studies, outside writing assignments, and occasional worksheets. Late assignments will be marked down by 10% for each day that it is late. All assignments must be submitted by 5pm on the last day of class (August 2<sup>nd</sup>). Some assignments will be required. Others will be optional for each unit. In the end, you should complete one position paper, prompted essay, or cases study for each unit and you should have a total of 3 position papers, 2 prompted essays, and 2 case studies.

Term paper topics will be determined by the student and approved by the instructor. The topic along with a basic moral argument to be addressed in the paper will be due June  $22^{nd}$ . The paper will be a 2000-3000 word literature review and position paper with at least 7 legitimate references and submitted on GA View in order to use Turnitin.com by August  $2^{nd}$ . An outline and annotated bibliography will be due July  $6^{th}$  and will require a summary of each of your references and an explanation of how it will contribute to your term paper. Additionally, a breakdown of at least one moral argument must be presented with at least one moral premise, one nonmoral premise, and your conclusion.

Students will be divided into groups for a few assignments and a presentation on an assigned topic on the last WebEx session. Your group will also be asked to write an introduction to a unit in the Anthology. I have written a few examples for the first 3 units.

Grade Scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F= below 60%

#### ATTENDANCE POLICY

Students are expected to attend all WebEx sessions punctually.

Prior to mid-semester, you will receive feedback on your academic performance in this course. (Approved by Academic Council, January 2003; modified by Academic Affairs in consultation with the Executive Committee of the University Senate, February 2009).

#### **UNIVERSITY POLICIES:**

#### **RELIGIOUS OBSERVANCE POLICY**

Students are permitted to miss class in observance of religious holidays and other activities observed by a religious group of which the student is a member without academic penalty. Exercising of one's rights under this policy is subject to the GC Honor Code. Students who miss class in observance of a religious holiday or event are required to make up the coursework missed as a result from the absence. The nature of the make-up assignments and the deadline for completion of such assignments are at the sole discretion of the instructor. Failure to follow the prescribed procedures voids all student rights under this policy.

#### ASSISTANCE FOR STUDENT NEEDS RELATED TO DISABILITY

If you have a disability as described by the Americans with Disabilities Act (ADA) and the Rehabilitation Act of 1973, Section 504, you may be eligible to receive accommodations to assist in programmatic and physical accessibility. Disability Services, a unit of the GCSU Office of Institutional Equity and Diversity, can assist you in formulating a reasonable accommodation plan and in providing support in developing appropriate accommodations to ensure equal access to all GCSU programs and facilities. Course requirements will not be waived, but accommodations may assist you in meeting the requirements. For documentation requirements and for additional information, we recommend that you contact Disability Services located in Maxwell Student Union at 478-445-5931 or 478-445-4233.

#### STUDENT OPINION SURVEYS STATEMENT

Given the technological sophistication of Georgia College students, the student opinion survey is being delivered through an online process. Your constructive feedback plays an indispensable role in shaping quality education at Georgia College. All responses are completely confidential and your name is not stored with your responses in any way. In addition, instructors will not see any results of the opinion survey until after final grades are submitted to the University. An invitation to complete the online opinion survey is distributed to students near the end of the semester. Your participation in this very important process is greatly appreciated.

#### **ACADEMIC HONESTY**

The integrity of students and their written and oral work is a critical component of the academic process. The submission of another's work as one's own is plagiarism and will be dealt with using the procedures outlined in the following link <a href="http://catalog.gcsu.edu/ugrad/student-academic-dishonesty.htm">http://catalog.gcsu.edu/ugrad/student-academic-dishonesty.htm</a>. Remember that allowing another student to copy one's own work violates standards of academic integrity. Also see the student Honor Code at the website:

http://www.gcsu.edu/studentlife/handbook/code.htm

# 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: <a href="http://affordablelearninggeorgia.org/site/final report submission">http://affordablelearninggeorgia.org/site/final report submission</a>

Final report submission requires four files:

- This completed narrative document
- Syllabus or syllabi
  - o (if multiple files, compress into one .zip folder)
- Qualitative/Quantitative Measures data files
  - (if multiple files, compress into one .zip folder)
- Photo of your team or a class of your students w/ at least one team member, minimum resolution 800x600px
  - o (nearly all smartphones take photos larger than this size by default)

Follow the instructions on the webpage for uploading your documents. Based on receipt of this report, ALG will process the final payment for your grant. ALG will follow up in the future with post-project grantee surveys and may also request your participation in a publication, presentation, or other event.

#### General Information

Date: 08/14/2018

**Grant Round: 10** 

**Grant Number: 338** 

Institution Name(s): Georgia College & State University

**Project Lead: Kasey Karen** 

Team Members (Name, Title, Department, Institutions if different, and email address for each): Kasey Karen, Associate Professor, Biological & Environmental Sciences, <a href="mailto:kasey.karen@gcsu.edu">kasey.karen@gcsu.edu</a>

Jennifer Townes, Scholarly Communication Librarian, Russell Library, Jennifer.townes@gcsu.edu

Course Name(s) and Course Numbers: Bioethics BIOL 4310/5310

Semester Project Began: Fall 2017

Final Semester of Implementation: Summer 2018

#### **Total Number of Students Affected During Project: 26**

#### 1. Narrative

A. Describe the key outcomes, whether positive, negative, or interesting, of your project. Include:

- Summary of your transformation experience, including challenges and accomplishments
- Transformative impacts on your instruction
- Transformative impacts on your students and their performance
- B. Describe lessons learned, including any things you would do differently next time.

Our project goals were to 1) reduce the cost to students in both online and face-to-face sections of the Bioethics (BIOL 4310/5310) course by replacing the published anthology with a no-cost, open access anthology, 2) identify articles that will provide a balanced account of varying perspectives on different bioethical issues, 3) design the anthology to focus on specific issues that are covered in class with current gaps filled and no extraneous material, and 4) design and share materials on a LibGuide (Library-Specific Springshare Product) that will serve as an easily accessible resource guide for students, as well as faculty at other institutions.

We accomplished each of these goals with very positive responses from students. We implemented the changes in my fully online Bioethics course this summer (June/July). Many students felt that the articles represented a balanced account of various bioethical issues. A couple of students mentioned that they thought some of the units had more articles supporting one side of the argument over others. Fortunately, I can try to identify them and change the articles for the next time the class is taught (Fall 2019).

The anthology that we created was presented as a LibGuide and provided an easy-to-navigate central location for all of the articles to be organized in. Another advantage of this LibGuide is the ability to easily add or remove articles so that I can keep the information and issues at hand up-to-date. For the unit on genetics and assisted reproductive technologies, there are frequently important new advances in the use of CRISPR technology and mitochondrial replacement therapy. It will be easy to update the Anthology to include recent news articles and scientific papers on these topics.

There were a few issues with certain articles being locked and students not being able to access them, but Jennifer addressed these issues in a timely manner and in the end, everyone was able to access all of the articles. Despite these small issues, the students felt overwhelmingly positively about the LibGuide. There were minor negative comments about the technical difficulties, having the link to the LibGuide more centrally located on the Learning Management System, and balancing out some units. All of these issues can easily be fixed in the future and even when students had some negative comments, they often also had positive comments.

Having the ability to pick and choose my own articles allowed me to focus on certain areas that I wanted to rather than the areas that an editor focused on. This will be especially helpful when finding articles to help prepare students for debates. And instead of having to supplement in another location, they can all be centrally located.

Overall, all of these advantages translate to equal to higher performance in the class and a more favorable opinion of the materials in the class.

https://libguides.gcsu.edu/bioethics

#### 2. Quotes

 Provide three quotes from students evaluating their experience with the no-cost learning materials.

Question asked: Other than the technical difficulties, what are your thoughts regarding the LibGuide? If all the links are fixed, was it easy to navigate? Did the articles selected represent multiples sides of the issues? Is there anything you can think of to make it better?

- 1. "Yes, they were very easy to navigate, the articles did represent multiple sides of the issues. They shed light on the different topics in such interesting ways that I would have never even thought to have pondered on myself. I cannot think of anything to make it better, I honestly love the whole set-up of the class."
- 2. "The LibGuide was very easy to navigate. I enjoyed all the articles being available to us, I used many of them for my writing assignments. Besides the problems with accessing them because they were locked, I think the LibGuide was a very useful tool."
- 3. "The lib guide was interesting, I liked the selected articles as they formed a clear understanding of the different sides of the issues. Maybe, instead of discussions each week, submit an additional outside source summary."

#### 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?

То	tal number	of stud	ents affec	ted in	this project:26
•	Positive: _	83	% of	23	number of respondents
•	Neutral: _	13	% of	_23_	number of respondents

• Negative: \_\_\_4\_\_\_\_ % of \_\_\_\_23\_\_\_\_\_ 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.

$\sim$ 1		_	
<i>i</i> n	1005	ם ו	ına.
V .1	いいいこ	NT (.	иιс.

- \_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 r	nay also be l	known as a
drop/failure rate or a withdr	aw/failure rate.			

7.4	$\_\_$ % of students, out of a total $\_$	27	students affected,
dropped/	failed/withdrew from the course	e in the	e 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

In this section, summarize the supporting impact data that you are submitting, including all quantitative and qualitative measures of impact on student success and experience. Include all measures as described in your proposal, along with any measures developed after the proposal submission.

[When submitting your final report, as noted above, you will also need to provide the separate file (or .zip with multiple files) of supporting data on the impact of your Textbook Transformation, such as surveys, analyzed data collected, etc.]

• Include measures such as:

- o Drop, fail, withdraw (DFW) delta rates
- Course retention and completion rates
- o Average GPA
- Pre-and post-transformation DFW comparison
- Student success in learning objectives
- Surveys, interviews, and other qualitative measures
- Indicate any co-factors that might have influenced the outcomes.

Overall, we were not necessarily expecting significantly higher performance by students with the new Anthology, but we wanted to make sure they were not lower. By looking at the overall course grade, the grades on their term paper, and the DFW rate, we can compare courses where they used the traditional Anthology (Summer 2016 – fully online; Fall 2017 – face-to-face) to the course where they used the new Anthology on the LibGuide (Summer 2018 – fully online). I choose to use data from the last fully online course in addition to the more recent traditional textbook course since there are some significant differences between the courses (both in how they're run and in the type of student taking the course).

The face-to-face course (Fall 2017; traditional textbook) has the highest percentage of A's (76.2%), the lowest DFW rate (4.8%), and the highest term paper score (89.2%). However, when I compare the two fully online summer courses, the students in the more recent course with the new LibGuide performed better. In the 2018 course, 51.9% of students earned an A while only 26.7% earned A's in 2016. There was also a lower DFW rate in 2018 as compared to 2016 (7.4% vs. 13.3%). Finally, when comparing the scores on the term paper assignment, the average score in 2018 was 88.6% while it was 87.8% in 2016. Considering the relatively low sample sizes (Fall 2017 – 21; Summer 2016 – 15; Summer 2018 – 27) and relatively similar values, it does not seem like there is much of a significant difference, but if anything the students with the new LibGuide performed better than students the similar fully online course with the old traditional Anthology.

In addition, student opinions on the LibGuide were very positive with 83% positive (19 students), 13% neutral (3 students), and 4% negative (1 student) (see attached for responses). In addition, when asked to rate the LibGuide on a scale of 1 to 5 (5 being the highest) based on how well it helped their learning, the average score was a 4.73. Regarding gains in the learning objectives, nearly all students felt that they achieved all the learning objectives in the course, with only 3 of the 25 students thinking they could have learned more about the history of bioethics (see attached for responses). Additionally, they performed well on the post-test they were given to assess their ability to write and evaluate moral arguments on some of the issues we discussed.

#### 4. Sustainability Plan

• Describe how your project team or department will offer the materials in the course(s) in the future, including the maintenance and updating of course materials.

The next time this course will be taught will be in the Fall 2019 semester. We will review the articles in the LibGuide to make sure that there are no locked or broken links. We will also review the field and update some of the units with more recent articles. Based on the ease of updating the LibGuide, I do not see any problems with this.

#### 5. Future Plans

- Describe any impacts or influences this project has had on your thinking about or selection of learning materials in this and other courses that you will teach in the future.
- Describe any planned or actual papers, presentations, publications, or other professional activities that you expect to produce that reflect your work on this project.

After this experience, and the responses of students to the still-required text, *Scientific Integrity*, I am considering writing additional material to add to the LibGuide to take the place of Scientific Integrity.

#### 6. Description of Photograph

1. On the Final Report Submission page, you will be submitting a photo. In this document, list the names of the people shown in this separately uploaded photograph, along with their roles.

Photo is of the two team members on this grant, Kasey Karen and Jennifer Townes. Kasey Karen compiled the articles for the LibGuide and taught the course, Bioethics. Jennifer Townes determined which articles were open-access or available through the GCSU library and created the LibGuide.