**Affordable Learning Georgia Affordable Materials Grants  
Continuous Improvement Grants Final Report**

*(or Mini-Grants, for R17 and earlier)*

# General Information

Date: **12/09/2025**

Grant Round: **Round 26**

Grant Number: **M309**

Institution Name(s): **University of Georgia**

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

1. **Bradley Barnes, Principal Lecturer, School of Computing,** [**bjb211@uga.edu**](mailto:bjb211@uga.edu)
2. **Michael Cotterell, Senior Lecturer, School of Computing,** [**mepcott@uga.edu**](mailto:mepcott@uga.edu)
3. **Bill Hollingsworth, Senior Lecturer, School of Computing,** [**billh@uga.edu**](mailto:billh@uga.edu)

Project Lead: **Dr. Bradley Barnes**

Course Name(s) and Course Numbers: **Software Development (CSCI 1302)**

Final Semester of Project: **Fall 2025**

***If applicable to your project:***

Average Number of Students Per Course Section: ~**50**

Number of Course Sections Affected by Implementation of Revised Resources: **8**

Total Number of Students Affected by Implementation of Revised Resources: ~**400**

# Project Narrative

*Describe the course of your revision or ancillary creation project, including*

* *A summary of your project’s purpose, plan, and timeline.*
* *The original works which were revised or added to, with links. For example, if you revised an open textbook, give the title, author, and link.*
* *A narrative description of how the project’s plan was carried out.*
* *Lessons learned, including anything you would do differently next time.*

The goal of this project was to update each chapter in [our textbook](https://cs1302uga.github.io/cs1302-book/) to include two types of scaffolded practice questions:

* In-section, “Test Yourself” questions to give the students an opportunity to stop, reflect, and think about the content they have just read. They questions vary in type. Some require the students to understand and reflect on terms and definitions while others require them to apply the material by reading and writing code solutions to problems.
* End-of-section multiple-choice questions provide a review of the module and give students further out-of-class practice with the content.

Each week, the instructors reviewed the upcoming content and created questions that aligned with the material and added them at the appropriate places in the book. The content of the chapters and questions were reviewed by the third instructor and our undergraduate student workers who provided feedback to the instructors. Once comments were considered and adjustments were made, we released the content to the students to read.

We are happy with the questions we have added, but there is always room for improvement! We will continue to iterate on the content and make adjustments as we move forward. The undergraduate student workers proved to be invaluable. Their comments and insights gave us a much better understanding of how students view the content and we found conversations with them to be extremely helpful. I would encourage anyone working on a similar project to consider getting input from strong undergraduate students.

# Materials Description

*Describe all the materials you have created or revised as part of this project. These descriptions may be used in the* [OpenALG](https://alg.manifoldapp.org/) *repository description field. Include the* [*open license your materials will be shared under*](https://creativecommons.org/share-your-work/)*—for most materials, this will be an Attribution 4.0 License (CC BY) as required in the Grants Request for Proposals.*

We updated our [online textbook](https://cs1302uga.github.io/cs1302-book/) (<https://cs1302uga.github.io/cs1302-book/>) for CSCI 1302 Software Development. The work is licensed under CC-BY-NC-SA 4.0.

# Materials Links

*If you are hosting your materials in places other than OpenALG, please provide these links in this section. Otherwise, leave blank. Note: we cannot access D2L or Canvas links.*

Here is a link to our [online textbook](https://cs1302uga.github.io/cs1302-book/) (<https://cs1302uga.github.io/cs1302-book/>) for CSCI 1302 Software Development.

# Future Plans

* *Describe any planned or actual papers, presentations, publications, or other professional activities that you expect to produce that reflect your work on this project.*
* *Describe any plans to revise or add to these materials in the future.*

Next semester, we will continue to iterate and improve the work done on our Round 26 grants. We also received two Round 28 grants to create additional materials for the book which include updated lesson plans, summary videos, ancillary content videos, and automated code visualizations.