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

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

# General Information

Date: May 15th, 2025

Grant Round: 25

Grant Number: M260

Institution Name(s): Augusta University

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

* Clément Aubert, Associate Professor, Computer Sciences, [caubert@augusta.edu](mailto:caubert@augusta.edu)
* Richard DeFrancisco, Assistant Professor, Computer Sciences, [rdefrancisco@augusta.edu](mailto:rdefrancisco@augusta.edu)
* Gursimran Walia, Associate Dean of Academic Affairs, Computer Sciences, [gwalia@augusta.edu](mailto:gwalia@augusta.edu)

Project Lead: Clément Aubert

Course Name(s) and Course Numbers:

* CSCI 1301 - Principles of Computer Programming I
* CSCI 1302 - Principles of Computer Programming II

Final Semester of Project: Spring 2025

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

Average Number of Students Per Course Section:

* CSCI 1301: ±25
* CSCI 1302: ±25

Number of Course Sections Affected by Implementation of Revised Resources:

- CSCI 1301: ±13 / year (Summer included)  
- CSCI 1302: ±4 / semester

Total Number of Students Affected by Implementation of Revised Resources:

±425

# Project Narrative

The principal goals of the projects were to

1. improve the development and appearance of the existing OER,

2. develop added content in prevision of future curriculum changes,

3. share and improve the evaluation material (projects, labs, quizzes, homework), and

4. introduce automated feedback through the development of our own tool.

Our starting point was the resource previously developed at <https://csci-1301.github.io/> by a team of students and professors at Augusta University.

The plan was carried out by following the items listed previously in order:

1. The website was re-designed using <https://quartz.jzhao.xyz/> , which benefited the navigability of the resources by introducing search function, graph connecting lectures, tagging, etc.
2. Material was added and significantly revised. Material for CSCI 1301 was independently re-designed and hosted at <https://fundamentals-of-computer-science.github.io/FunCS/> , and material for CSCI 1302 was introduced, for example by creating lecture notes and exercises for exceptions handling (<https://princomp.github.io/lectures/misc/exceptions> and <https://princomp.github.io/solutions/misc/exceptions> )
3. Projects are now shared more clearly at <https://princomp.github.io/projects/> instead of being hosted on D2L, quizzes & homework were partially re-designed.
4. Some tools were developed by students, but they unfortunately did not reach a stage mature enough to be used in class.

The project overall followed its course, the main issue was regarding budgeting appropriately for students: while a handful of students helped with the development of the resources and learned from its implementation, none of them could be supported by the grant directly. In the future, relying more on faculty members to conduct the project in its entirety could be more reliable and easier to budget.

# Materials Description

All of our material is under Creative Commons Attribution 4.0 International. In addition to generally revising, improving and updating our resource, particular care was provided to

* Revamping the lecture notes concerning collections ( <https://princomp.github.io/lectures/collections/> )
* Improving how UML class diagrams are shared, cf. <https://princomp.github.io/lectures/oop/abstract#uml-class-diagram-representation> for example.
* Provide additional exercises to students, cf. <https://princomp.github.io/exercises/io/files> for example.
* Providing easier access to source code, cf. the “(Download this code)” link under some code blocks, as in <https://princomp.github.io/lectures/oop/polymorphism#for-methods>

# Materials Links

* The material itself is accessible at <https://princomp.github.io/>
* “The book”, compiling the lecture notes, is accessible in the following format:
  + <https://princomp.github.io/book.pdf>
  + <https://princomp.github.io/book.odt>
  + <https://princomp.github.io/book.docx>
  + <https://princomp.github.io/book> (html)
* The source code is accessible at <https://github.com/princomp/princomp.github.io>

# Future Plans

* The project lead will teach the follow-up class next semester (CSCI 3400 – Datastructures) and will continue developing lecture notes relative to the subject of programming with C#.
* Existing issues have been documented and described at <https://github.com/princomp/princomp.github.io/issues> and we will work toward resolving them.
* A submission to the “Journal of Open Source Education” (<https://jose.theoj.org/> will be prepared once most issues have been resolved.