

CS371g: Generic Programming

Summer 2017 (86970)

About

This is a course on generic programming. It is also strongly focused on using tools to improve the quality of software development, including:

- automated formatting with [astyle](#)
- using the [Boost](#) library
- code static analysis with [cppcheck](#)
- VM environment with [docker](#)
- automated documentation with [doxygen](#)
- compiling with [g++-8](#)
- code coverage with [gcov](#)
- source control with [git](#)
- continuous integration with [GitLab](#)
- issue tracking with [GitLab](#)
- unit testing with [Google Test](#)
- automated builds with [make](#)

Grading

- blog (5%)
- 5 projects (40%)
- 30 quizzes (15%)
- 2 tests (40%).
- No final.

Instructor

Glenn Downing <downing@cs.utexas.edu>
MF 12-12:45pm
GDC 6.308

Prerequisites

Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

Texts

- [The C++ Standard Library, 2012.](#)
- Several papers on various topics.

Website

<https://www.cs.utexas.edu/users/downing/cs371g/>