

Welcome to

# C++ Deep Dive for C Programmers

(aka c2cpp, c2cxx, or just c2)

Spring 2026 COMS 4995-005

<https://c2cxx.github.io/www/2026-1/>

# Topics covered

- C, plus plus
  - Constructor, destructor, copy, move
  - References, operator overloading
  - Odds & ends like namespaces, exceptions
- Object-oriented programming in C++
  - Polymorphism
  - Multiple & virtual inheritance
  - I/O stream hierarchy
- Generic programming in C++
  - STL containers, iterators, algorithms
  - Function objects and lambda
  - Template metaprogramming & concepts
- RAII paradigm
  - Smart pointers
- Concurrency
  - C vs. C++ threads
  - C++ synchronization

## Reminders

- Fill out CourseWorks evaluation (!!!)
- Remember your pledge: don't share class materials with friends/internet

Thank you!