

Week	Lecture (Tue, 12-2pm, LT19)	Tutorial / Lab (Wed-Fri, COM1-B1-02)	Deadlines
1	Introduction to Concurrency		
2	Threads, Tasks, and Synchronization Primitives in Modern C++	T0.5: Startup with Modern C++ (no class)	
3	PH: CNY (no class)	T1: Threads and Synchronization in C++ Release A1	
4	Shared Memory and Lock-free Programming in Modern C++	T2: Atomics in C++	Sun, 8pm - Quiz 1
5	Examples of Lock-based and Lock-free Programming	T3: Lock-free Programming in C++	
6	Testing and Debugging Concurrent C++ Programs	T4: Debugging	Sun, 8pm - Quiz 2
Recess		T4.5: Startup with Go (no class)	Sat, 2pm – Assignment 1
7	Concurrency in Go	T5: Introduction to Go Release A2	
8	Concurrency Patterns in Go	T6: Synchronization in Go	
9	Classic Synchronization Problems in C++ and Go	T7: Comparison of Different Synchro Problems in C++ / Go	Sun, 8pm - Quiz 3
10	Safety in Rust	T7.5: Startup with Rust (no class) T8: Introduction to Rust	Sat, 2pm – Assignment 2
11	Asynchronous Programming in Rust	T9: Asynchronous Programming in Rust Release A3	Sun, 8pm - Quiz 4
12	Formal Verification and Model Checking	PH: Good Friday (no class)	
13	Recap	T10: Implementing Synchronization Primitives	Sat, 2pm - Assignment 3
Exam	In-person Open-book Exam		4 May, 9am - Exam

Grading:

- 8% - Tutorial attendance
- 12% - 4 Quizzes, in weeks 4, 6, 9, 11, to be completed between Wednesday to Sunday, 8pm.
- 40% - 3 Assignments
 - Modern C++ (C++20) ~20%
 - Golang ~ 10%
 - Rust ~ 10%
- 40% - In-person open-book final exam