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|------------|---|--|--|--|--|----------|------------|--|--|--|--|--|--|--|--|
| Motivation | C++ is required for efficient programming | | | | | | | | | | | | | | |
| Objective | Fundamentals of the C++20 | | | | | | | | | | | | | | |
| Scope | First 6 Weeks of the Gakwaya C++ course, until Section 31 | | | | | | | | | | | | | | |
| Start Date | 18.06.2025 | | | | | End Date | 28.07.2025 | | | | | | | | |

| Task No | Task Description | Duration | Week 1 | | | | | | | Week 2 | | | | | | | Week 3 | | | | | | | Week 4 | | | | | | | Week 5 | | | | | | | Week 6 | | | | | | | |
|---------|--|-------------|--------|--|--|--|--|--|--|--------|--|--|--|--|--|--|--------|--|--|--|--|--|--|--------|--|--|--|--|--|--|--------|--|--|--|--|--|--|--------|--|--|--|--|--|--|--|
| 1 | Section 11: Data Conversions: Overflow & Underflow | 0 h 36 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Section 12: Bitwise Operators | 1 h 23 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Section 13: Variable Lifetime and Scope | 0 h 12 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Section 14: Control Flow | 2 h 1 min | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Section 15: Loops | 2 h 57 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Section 16: Arrays | 2 h 44 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Section 17: Pointers | 4 h 12 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Section 18: References | 0 h 41 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Section 19: Character manipulation and strings | 5 h 23 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Section 20: Functions | 3 h 50 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Section 21: Enums and Type Aliases | 0 h 56 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Section 22: Arguments to main | 0 h 37 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Section 23: Getting things out of functions | 2 h 56 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Section 24: Function Overloading | 1 h 17 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Section 25: Lambda Functions | 0 h 54 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | Section 26: Functions : The misfits | 0 h 39 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | Section 27: Function call stack and debugging | 1 h 14 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 18 | Section 28: Function Templates | 4 h 2 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 19 | Section 29: C++20 Concepts | 1 h 14 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | Section 30: Classes | 2 h 47 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | Section 31: Classes, objects and const | 2 h 0 mins | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| Legend | |
| | Not Started |
| | Currently |
| | Completed |
| | Incompleted within time limits |

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| Assumption is that 1 to 1.5 hours per day will be consumed during this stretch. Pace can be inconsistent, the important thing is that the average pace must be enough to follow the plan. |
| Every Saturday, this timeline will be updated to see where the things currently are. |
| Pomodoro technique will be applied, each day study session is predicted as 2 to 3 Pomodoro sessions (1 to 1.5 hours). |