



# 0806C303

## Programming in C++

**Instructor:** Hynek Boril

**Time:** Monday through Friday (June 15, 2020 - July 17, 2020)

**Office Hours:** 2 hours (according to the teaching schedule)

**Contact Hours:** 60 (50 minutes each)

**Credits:** 4

**Location:** Huiquan Building

**Office:** Huiquan Building 518

### Course Description

Covers core programming skills including procedural programming in C++, algorithms, modularity, and abstraction. Out-of-class assignments give the student a chance to tie the concepts together and learn basic programming style, documentation, and development skills necessary for working in a team environment.

### Required Textbook(s)

*Programming in C++*, by Nell Dale and Chip Weems, 5th Edition, 2010.

### Prerequisites

0806C220 Introduction to Programming.

### Course Goals

- Develop algorithms to solve "computer-solvable" problems. Test algorithms.
- Translate algorithms to C++ programs.
- Debug, run and test C++ "procedural" programs.
- Understand the software development process by using requirements to design, implement and test C++ programs.

## Course Hours

The course has 25 sessions in total. Each class session is 120 minutes in length. The class meets from Monday to Friday.

## Course Schedule

Please note that the schedule is meant to give an overview of the major concepts in this course. The actual weeks and days on which the topics will be covered are subject to change at the discretion of the course instructor.

### Week 1:

*Mon* Overview  
*Tue* Syntax & Semantics of C++ programs  
*Wed* Arithmetic, functions, and output  
*Thur* Input and software design process  
*Fri* Labs

### Week 2:

*Mon* Conditions and control flow  
*Tue* Loops  
*W/T* Functions  
*Fri* Labs

### Week 3:

*Mon* Variable scope and lifetime  
*Tue* Arrays, for loops  
*Wed* **Midterm exam**  
*Thur* Classes; Multidimensional arrays  
*Fri* Labs

### Week 4:

*Mon* Lists and strings  
*Tue* Simple data types  
*W/T* File streams, switch  
*Fri* Labs

**Week 5:**

*M-W* Object oriented program design

*Thu* **Final Exam**

*Fri* Final review

## **Course Requirements**

### ***About Computing Facilities***

JNU Summer Session will provide a computer lab for use to all the enrolled students. See the JNU technical staff for more information. The course will contain lab sessions as well as practice coding assignments during lectures. Exact schedule will be announced on the first day of classes.

### ***About Assignment Submission***

Every homework/lab assignment must be submitted before class on the day it is due. Late work will be penalized one grade notch (e.g., B- to C+) for each day it is late. The weekend counts as one day. Only late work can be submitted electronically to the instructor's official email address.

### ***How to Dispute a Grade for an Assignment or Exam?***

If you wish to dispute the grade given to a project/ homework assignment, you must do so by coming to the office hours and disputing the grade in person within a day after the assignment is graded and returned.

If you wish to dispute the grade assigned to a paper or a question on an exam, you must do so IN WRITING within a day after the exam or paper has been returned. You must include a specific rationale for why your answer is correct, or why the paper deserves a higher grade. "I think I deserve a better grade" does NOT constitute a rationale.

## **Grading Policy**

Final letter grades are determined from your final cumulative score that is computed using the following breakdown:

Gradable Contents

- 30% Programming Assignments:
  - Four (4) programming assignments, each worth 6–10% of your final grade.
- 10% Labs
  - Ten (10) lab assignments, each worth 1% of your final grade.
- 10% Homework
  - Ten (10) homework assignments, each worth 1% of your final grade.
- 50% Exams

- Two (2) exams, one midterm and one final, each is worth 25% of your final grade

Letter grades are assigned at the end of the semester. We do not curve individual assignments or exams. At the end of the semester after all of the scores are recorded, the thresholds are set given the difficulty of the course work during the semester. Thresholds are raised if the course work was easier or lowered if it was harder. By adjusting and setting thresholds at the end of the semester we can account for varying difficulty among semesters to ensure grading consistency.

## Grading Scale

The instructor will use the grading system as applied by JNU:

Definition	Letter Grade	Score
Excellent	A	90~100
Good	B	80~89
Satisfactory	C	70~79
Poor	D	60~69
Failed	E	Below 60

## Attendance

Attendance is mandatory in the class. It would be recorded each class and forms part of students' participation record. Students should inform the instructor at the earliest opportunity if they need to ask for a leave. All absences may have negative effect on students' final grades. Any students with more than three unexcused absences will automatically fail the course.

## Academic Integrity

As members of the Jinan University academic community, students are expected to be honest in all their academic coursework and activities. Academic dishonesty, includes (but is not limited to) cheating on assignments or examinations; plagiarizing, i.e., misrepresenting as one's own work any work done by another; submitting the same paper, or a substantially similar paper, to meet the requirements of more than one course without the approval and consent of the instructors concerned; or sabotaging other students' work within these general definitions. Instructors, however, determine what constitutes academic misconduct in the courses they teach. Students found guilty of academic misconduct in any portion of the academic work face penalties that range from the lowering of their course grade to awarding a grade of E for the entire course.