

# CMPNIF0401: Intermediate Programming (Spring 2024)

Department of Computer Science, SCUPI

Course Reference Number: 312172040 (CMPINF0401)

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**When:** Spring 2024

**What & Where:**

Lectures: 1:50pm – 3:30pm on Wednesday, 10:15am – 11:55 am on Thursday @ SCUPI North 211 (South Campus, Jiangan Campus)

**Instructor:** Dr. Guangwu Qian

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Office hours: Monday, 10:00AM-11:30AM,  
4:30PM– 5:30PM

Tuesday, 2:00PM-6:00PM

Wednesday, 3:30PM–6:00PM

**Course Description:** Intermediate programming mainly explains the C language program development methods. This course is an important foundation for computer science major. It is a basic course for students to establish the thinking mode of program development and cultivate their practical ability by quickly learning a programming language. Through the study of intermediate programming course, students are required to be proficient in programming development using C language, familiar with the complete process of program development, including program design and code implementation, and capable of the general methods of program debugging, so as to lay a good foundation for the study of subsequent courses.

**Course Objectives:** The goals for this course are training students to think in a computer way and master a programming language, including the following objects:

- establish the thinking mode of program development.
- familiar with the complete process of program development, including program design and code implementation.
- proficient in programming development by using C language, including basic syntax, types and operations, the common statements and three control structures, and basic usage of common library functions.
- capable of the general methods of program debugging.
- achieve error debugging and modification.

**Learning Outcomes:** Through the study of intermediate programming course, students are required to be proficient in programming development using C language, familiar with the complete process of program development, including program design and code implementation, and capable of the general methods of program debugging, so as to lay a good foundation for the study of subsequent courses.

**Prerequisites:** Familiarity with Windows/Linux is assumed.

**Blackboard:** <https://pibb.scu.edu.cn>

All handouts, class notes and assignments will be published on Blackboard. You are expected to check this website frequently.

**Textbook:** *C Programming: A Modern Approach, Second Edition*. K. N. King, W. W. Norton (ISBN 9780393979503)

**Note on Email & Communication:** The instructor and TA will periodically post announcements to the Blackboard website. It is every student's responsibility to regularly monitor these announcements. The instructor and TA will periodically email enrolled students with announcements. Students must check their SCUPI email at least once per day to ensure these announcements are received. When contacting the course staff via email, messages must be addressed to (or CC) both the instructor and the TA. Email subject should be prefaced with the appropriate prefix (e.g., "[CMPINF0401]").

**Course Grading:**

Ordinary Grade (Attendance, Questions, Assignments)	30%
Midterm Exam / Mini Project	20%
Final Exam	50%

**Grading Policy:**

Attendance and participation in lecture may be used to decide borderline grades.

Unless explicitly noted otherwise, the work in this course is to be done independently. Discussions with other students on the assignments should be limited to understanding the statement of the problems. Cheating in any way, including giving your work to someone else will result in a low grade for the course and a report to the appropriate University authority.

**Submission & Late Policy:** All written assignments must be submitted electronically and **there is no late submission**. An assignment which is late will be accepted *only* under special circumstances with the instructor's permission prior to its deadline. In such a case, the instructor will determine any penalty in a fair manner.

**Make-up Policy:** Students are expected to take both midterm and final exams. Make-up exams will only be given in the event of a medical situation or an emergency, and only if this is documented and the instructor is notified *immediately if in advance is not possible*. Missing an exam will result in a failure for the exam.

**Students with Disabilities:** If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and TA as early as possible in the term.

**Religious Observance:** In order to accommodate the observance of religious holidays, students should inform the instructor of any such days as early as possible in the term by email.

**Audio/Video Recording:** To ensure the free & open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.

**Copyrighted Material:** All material provided through this web site is subject to copyright. This applies to class notes, slides, assignments, solutions, project descriptions, etc.

You are allowed (and expected!) to use all the provided material for personal use. However, you are strictly prohibited from sharing the material with others in general and from posting the material on the Web or other file sharing venues.

**Outline:** Tentative Syllabus

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|---------------------------|-------------------------|
| 1. Introducing C          | 11. Pointers            |
| 2. C Fundamentals         | 12. Pointers and Arrays |
| 3. Formatted Input/Output | 13. Strings             |

4. Expressions
5. Selection Statements
6. Loops
7. Basic Types
8. Arrays
9. Functions
10. Program Organization

14. The Preprocessor
15. Writing Large Programs
16. Structures, Unions, and Enumerations
17. Advanced Users of Pointers
18. Declarations
19. Low-level Programming
20. Input/Output

**References:**

《C 语言程序设计\_现代方法 第 2 版》 作者: (美) K. N. King 译者: 吕秀锋 黄倩. 人民邮电出版社 2010