



北京交通大学
BEIJING JIAOTONG UNIVERSITY

Beijing Jiaotong University

2021 Summer Session

CPM 101 Introduction to Programming

Course Outline

Course Code: CPM 101

Instructor: Mo Sha

Home Institution: State University of New York at Binghamton

Office Hours: TBA and by appointment

Email: msha@binghamton.edu

Credit: 4

Course Description:

Review of programming concepts, programming environments, debugging tools, large program management and design.

This course is designed to provide a solid foundation and background in basic programming techniques and concepts, as well as an overview of programming in the C language:

- review basic programming concepts and problem solving techniques
- programming in a Linux environment without the help of an IDE
- programming and problem solving in the C language
- overview of simple data structures
- implement algorithms efficiently and correctly
- system tools useful for debugging

Required Textbooks:



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Brian W. Kernighan and Dennis M. Ritchie. The C Programming Language. 2nd edition, Prentice Hall, 1988 [Free online].

Grading & Evaluation:

There will be one exam, 60 points. Exam tests basic programming concepts. Homework accounts 40 points. Homework tests the skill of programming and problem solving.

A+:4.3——95-100

A :4.0——87-94

A -:3.7——82-86

B+:3.3——78-81

B :3.0——75-77

B -:2.7——71-74

C+:2.3——68-70

C :2.0——65-67

C -:1.7——61-64

D :1.0——55-60

E :0.0——49-54

X :0.0——0

Course Schedule:

The course outline is tentative and may be modified accordingly depending on the pace of the class.

Week1: Basic C Programming Concepts, C Programming Environment, Variables and Conditionals, and Bitwise Operations.

Week2: Preprocessing, Functions, and Arrays.

Week3: User-defined Data Types, and Pointers.

Week4: Input and Output, and Applications.