

香港中文大學(深圳)

The Chinese University of Hong Kong, Shenzhen

数据科学学院

School of Data Science

# Introduction to Java Programming

**CSC 2003**

**Spring 2023**

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# Position of CSC2003

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- This is an **introduction course**
  - Basic concepts of Java
- ***Large overlap with CSC1003***
  - Students who have taken CSC1003 cannot take this course
  - Around 80% overlap + 20% extra (inheritance/encapsulation...)
- Relationships to other courses
  - CSC3100 Data Structures
- Only a tiny step to a Java developer
  - <https://javaguide.cn/> (in Chinese)

# Basic Information

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- **Instructor:**
  - Dr. Chenhao Ma ([machenhao@cuhk.edu.cn](mailto:machenhao@cuhk.edu.cn), 319b Daoyuan Building)
  - Office hour: **9:30-10:30am Monday**
- **Teaching assistant:**
  - Miss Yue Zhang ([yuezhang5@link.cuhk.edu.cn](mailto:yuezhang5@link.cuhk.edu.cn))
  - Mr. Yi Yang ([yyiyang3@link.cuhk.edu.cn](mailto:yyiyang3@link.cuhk.edu.cn))
- **USTFs (undergraduate student teaching fellows)**
  - Mr. Zixin Wei ([122090569@link.cuhk.edu.cn](mailto:122090569@link.cuhk.edu.cn))
  - Mr. Ruilizhen Hu ([122090168@link.cuhk.edu.cn](mailto:122090168@link.cuhk.edu.cn))
  - Mr. Mengkang Li ([122090264@link.cuhk.edu.cn](mailto:122090264@link.cuhk.edu.cn))
- **Office hours of the TAs will be announced later.**

# Basic Information

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- *Lecture*
  - Mon/Wed **10:30–11:50am**
  - Teaching B Bldg 103
- *Tutorial*
  - Programming practice
  - TAs and USTFs lead the tutorials (**starting from Week 2**)
  - Teaching B Bldg 103 (the same venue as the lecture room)
  - Monday 18:00-18:50

# Assessment

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- ***4 programming assignments (40%)***
  - The first one is given in around week #3
  - Roughly one assignment every three after the first one
  - Late submission: **up to 2 days with 20% penalty**
  - **Start early~**
- ***Midterm (20%)***
  - Closed test in week #7 or #8
  - Probably 1.5-hour
- ***Final exam (40%)***
  - Closed test, no dictionary, no cheatsheet paper

## Basic Info

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- ***Course materials and discussions:***
- [BlackBoard]
  
- ***Working language: English***
- After-class discussion can be in English/Chinese

## Sidenote: programming skills

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- ACM-ICPC
  - ACM: Association for Computing Machinery
  - ICPC: International Collegiate Programming Contest
- Online Judge (OJ) systems
  - CUHKSZ OJ
    - <http://oj.cuhk.edu.cn/> (*access in campus, will be used for assignment grading*)
  - SJTU OJ
    - <https://acm.sjtu.edu.cn/OnlineJudge/>
  - PKU OJ
    - <http://poj.org/>





### CUHK-SZ programming team

- Coaches: Yixiang Fang, Chenhao Ma
- Student coaches: Yuyang Xia, Qiuyang Mang, Yige Jiang

### The first CUHK-SZ programming contest

- Details: <https://mp.weixin.qq.com/s/EbRwux0HupSyN8FfJfY6Bg>
- Time: April 2, 2023
- Duration (hours): 4
- Questions: 12
- Participates: 235
- Awards: 45
- Bonus (RMB): 50+K
- Sponsor: Bopu
- *Stay tuned for the next in this year.*





## Couse Learning Outcomes

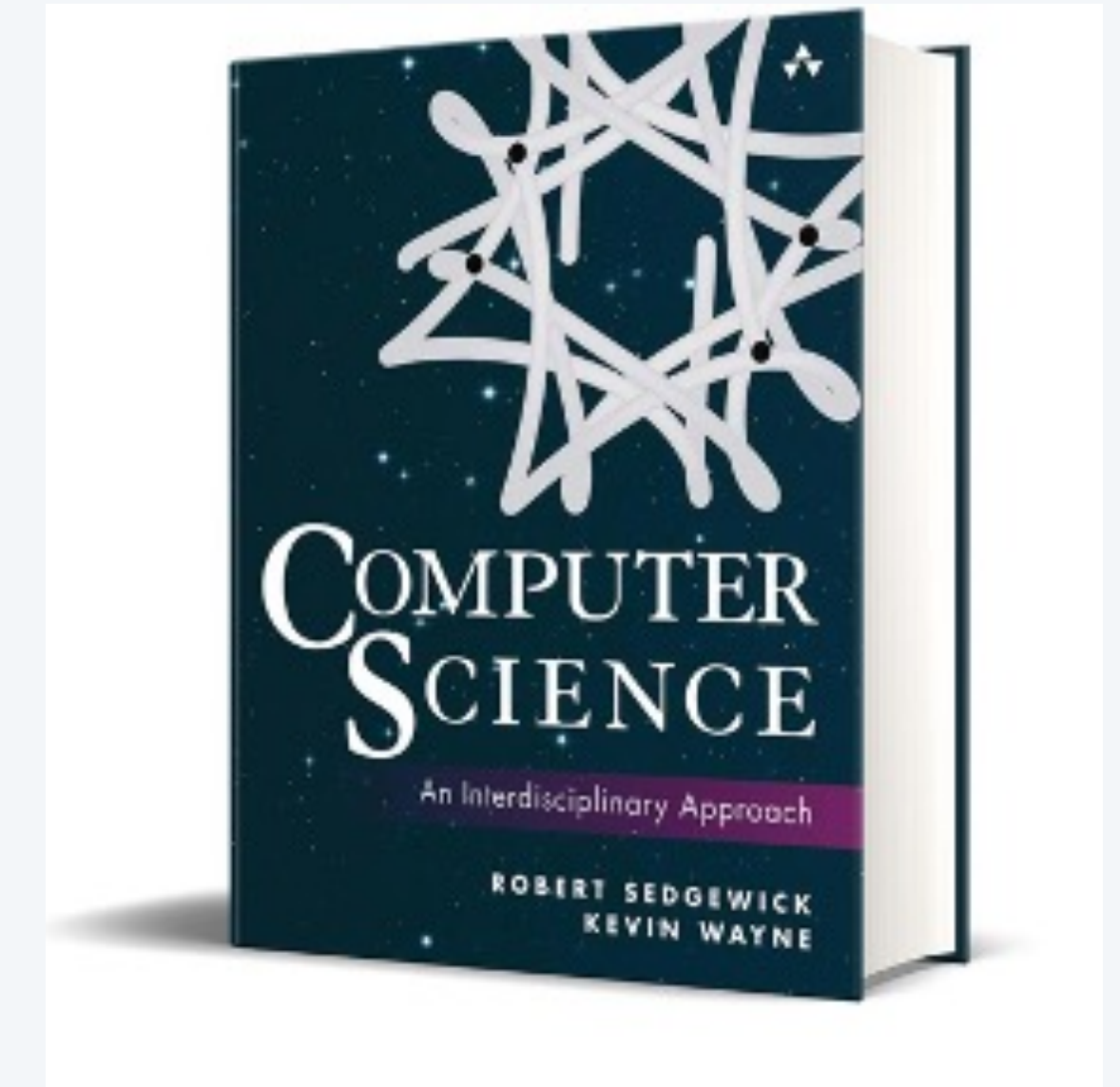
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- Comprehend, edit, compile, execute and correct Java programs (K&S)
- Use Java language elements such as variables, expressions, data types, statements, and methods comprehensively to create a complete Java program (K&S)
- Analyze, design, and implement a solution to solve a problem by programming (S&V)
- Grasp the key concepts of computer science for further studies in the area (K&V)

# Reading materials

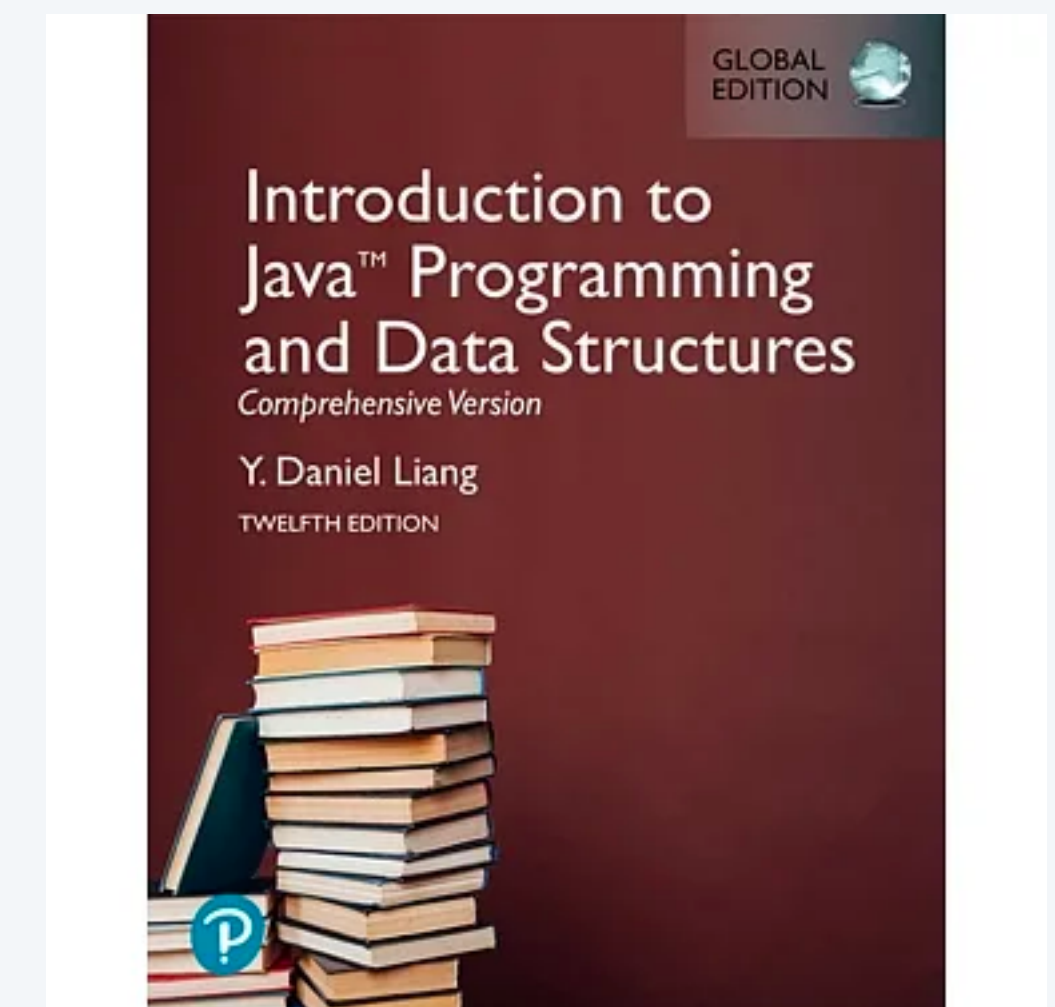
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*Computer Science: An Interdisciplinary Approach*, by Robert Sedgewick and Kevin Wayne, Addison-Wesley Professional, 2016.



*Introduction to Java Programming and Data Structures, Comprehensive Version [Global Edition]*, by Y. Liang, Pearson, 2021.

- Older versions are also useful (because the textbook does not change much)



# Tentative teaching plan

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Week	Content/ topic/ activity
1	Introduction
2	Basic Programming Concepts
3	Conditionals & Loops
4	Arrays
5	Input and Output
6	Functions and Libraries
7	Recursion
8	<b>Midterm Test</b>
9	Performance
10	Abstract Data Types
11	Creating Data Types
12	Inheritance and Polymorphism
13	Exception Handling
14	JavaFX basics (optional)

# Feedback

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***Feedback is important and highly appreciated!***

- Talk to the course instructor and TAs
- Send us emails
- ...



Thanks again for  
choosing CSC2003