

## **Programming with Java Boston University**

MET CS232, Fall 2025

Days: Tuesdays, 6:00-8:45 PM ET

Instructor: Jinsong Liang

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Office Hours: after class or appointment

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### **Course Description**

This course covers the elements of object-oriented programming and the Java Programming Language, including primitive data types, control structures, methods, classes, arrays and strings, inheritance and polymorphism, interfaces, exceptions, Java collections framework, basic data structures, and recursions.

### **Free Textbook**

Introduction to Programming Using Java, (Version 9.0, 2022), by David J. Eck, a free online textbook:  
<https://math.hws.edu/javanotes-swing>

### **Grading**

|                         |     |
|-------------------------|-----|
| Programming assignments | 55% |
| Mid-term Exam           | 20% |
| Final Exam              | 25% |

### **Program Evaluation Criteria**

Program correctness 80%  
Documentation 10%  
Readability 10%

### **Weekly Schedule:**

The following schedule is tentative and subject to change (including topics, assignments, and exams, subject to change).

| <b>Week</b> | <b>Topic</b>                                 | <b>Reading</b> |
|-------------|----------------------------------------------|----------------|
| 1           | Introduction to Computation and Programming  | Chapter 1      |
| 2           | Variables, I/O, Types, Strings               | Chapter 2      |
| 3           | Control Flow, Conditionals                   | Chapter 3, 4   |
| 4           | Expressions, Testing and Debugging           | Chapter 3, 4   |
| 5           | Loops                                        | Chapter 3, 4   |
| 6           | Methods, scope, Arrays, Mid-term Exam Review | Chapter 3, 4   |
| 7           | <b>Mid-term exam</b>                         |                |
| 8           | Overloading, Exceptions                      | Chapter 3, 4   |
| 9           | File I/O                                     | Chapter 5, 8   |
| 10          | Algorithm design exercises                   | Chapter 5, 8   |
| 11          | Class                                        | Chapter 5, 8   |
| 12          | Java class design: Linked list and stack     | Chapter 9, 10  |
| 13          | Java collections framework                   | Chapter 9, 10  |
| 14          | Recursions, Final Exam Review                | Chapter 9, 10  |
| 15          | <b>Final Exam</b>                            |                |

### **Important Notes**

- Reading the relevant material in the textbook is essential for gaining a thorough understanding of the topics covered in the course.
- Not all of the material in each chapter will be covered during lecture/discussion, but the material should be read in any case.
- Your programs must be done in Java. One point will be deducted from the grade for each class a programming assignment is late after a one-class grace period.

### **Academic Conduct Code**

Cheating and plagiarism will not be tolerated in any Metropolitan College course. They will result in no credit for the assignment or examination and may lead to disciplinary actions. Please take the time to review the Student Academic Conduct Code:

[http://www.bu.edu/met/metropolitan\\_college\\_people/student/resources/conduct/code.html](http://www.bu.edu/met/metropolitan_college_people/student/resources/conduct/code.html). This should not be understood as a discouragement for discussing the material or your particular approach to a problem with other students in the class. On the contrary – you should share your thoughts, questions and solutions. Naturally, if you choose to work in a group, you will be expected to come up with more than one and highly original solutions rather than the same mistakes.