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🛐 "Please remember me and my family in your prayers." 🌸

📖 Bachelor of Science in Computer Science

🎓 University of the People

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Here you will find the syllabi and primary textbooks for all UoPeople courses. The Disclaimer for Use of the Repository can be found [here](#).

Computer Science

CS 1102 Programming 1

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CS 1102: Programming 1

Prerequisites: None. If you do not have a background in Computer Science, CS 1101: Programming Fundamentals is highly recommended.

Course Description:

- The Programming 1 course offers a comprehensive and hands-on introduction to the Java programming language, aimed at equipping students with a strong foundation in Java programming. Students will learn the essential concepts, syntax, and structure of Java, as well as the principles of object-oriented programming (OOP) using Java as the primary language. Through coding exercises and projects, students will gain practical experience in writing, compiling, and executing Java programs. By the end of the course, students will have a solid understanding of Java programming and the ability to apply their knowledge to solve real-world problems.

Required Textbook(s) and Material(s):

- UoPeople courses use open educational resources (OER) and other materials specifically donated to the University with free permissions for educational use. Therefore, students are not required to purchase any textbooks or sign up for any websites that have a cost associated with them. The main required textbooks for this course are listed below and can be readily accessed using the provided links. There may be additional required/recommended readings, supplemental materials, or other resources and websites necessary for lessons; these will be provided for you in the course's General Information and Forums area, and throughout the term via the weekly course Unit areas and the Learning Guides.

Eck, D. J. (2022). *Introduction to programming using java version 9, JavaFX edition*. Licensed under CC 4.0. Use the [Introduction to Programming Using Java](#) for pdf version of the file.

Software Requirements/Installation:

For you to work on the various programming assignments in this course you will need JAVA and Eclipse to be installed on your computer.

- You can download and install Java application on your computer using the download page from the [Oracle website](#). Use the latest version.
- You can download and install Eclipse application on your computer using the download page from the [Eclipse website](#). Use the latest version.

Operating System: Windows, MacOS

Note that the information on how to install the software has been included in Unit 1, under the heading 'Installing Java'.

Learning Objective and Outcomes:

By the end of this course, students will be able to:

1. Explain the key concepts of the Java language.

2. Implement essential concepts and features of the Java programming language, including object-oriented concepts.
3. Design, build, execute, and debug Java applications.

Course Schedule and Topics:

This course will cover the following topics in eight learning sessions, with one Unit per week. The Final Exam will take place during Week/Unit 9 (UoPeople time).

Week 1: Unit 1- Introduction to Java Programming

Week 2: Unit 2- Control Structures

Week 3: Unit 3- Static Methods and Member Variables

Week 4: Unit 4- Arrays and ArrayLists

Week 5: Unit 5- Objects and Classes

Week 6: Unit 6- OOPS Paradigms

Week 7: Unit 7- Graphical User Interfaces (GUI) with Event Handling

Week 8: Unit 8- Collection API and JAVA 8 Features

Week 9: Unit 9- Course Review and Final Exam

Learning Guide:

The following is an outline of how this course will be conducted, with suggested best practices for students.

Unit 1: Introduction to Java Programming

- Read through the Learning Guide and the Reading Assignment
- Complete the Discussion Assignment by posting in the Discussion Forum
- Respond to three of your fellow classmates' posts in the Discussion Forum
- Read 'Installing Java' and install the needed application
- Complete and submit the Programming Assignment
- Take and submit the Self-Quiz

Unit 2: Control Structures

- Read through the Learning Guide and the Reading Assignment
- Complete the Discussion Assignment by posting in the Discussion Forum
- Respond to three of your fellow classmates' posts in the Discussion Forum
- Complete and submit the Programming Assignment
- Take and submit the Self-Quiz

Unit 3: Static Methods and Member Variables

- Read through the Learning Guide and the Reading Assignment
- Complete the Peer Feedback Assignment by posting in the Discussion Forum
- Respond to three of your fellow classmates' posts in the Discussion Forum
- Complete and submit the Programming Assignment
- Take and submit the Self-Quiz
- Take and submit the Graded-Quiz

Unit 4: Arrays and ArrayLists

- Read through the Learning Guide and the Reading Assignment
- Complete the Discussion Assignment by posting in the Discussion Forum
- Respond to three of your fellow classmates' posts in the Discussion Forum
- Complete and submit the Programming Assignment
- Take and submit the Self-Quiz

Unit 5: Objects and Classes

- Read through the Learning Guide and the Reading Assignment
- Complete the Discussion Assignment by posting in the Discussion Forum
- Respond to three of your fellow classmates' posts in the Discussion Forum
- Complete and submit the Programming Assignment
- Take and submit the Self-Quiz

Unit 6: OOPS Paradigms

- Read through the Learning Guide and the Reading Assignment
- Complete the Discussion Assignment by posting in the Discussion Forum
- Respond to three of your fellow classmates' posts in the Discussion Forum
- Complete and submit the Programming Assignment
- Take and submit the Self-Quiz
- Take and submit the Graded Quiz

Unit 7: Graphical User Interfaces (GUIs) with Event Handling

- Read through the Learning Guide and the Reading Assignment
- Complete the Discussion Assignment by posting in the Discussion Forum
- Respond to three of your fellow classmates' posts in the Discussion Forum
- Complete and submit the Programming Assignment
- Take and submit the Self-Quiz

Unit 8: Collection API and Java 8 Features

- Read through the Learning Guide and the Reading Assignment
- Complete the Discussion Assignment by posting in the Discussion Forum
- Respond to three of your fellow classmates' posts in the Discussion Forum
- Complete and submit the Programming Assignment
- Take and submit the Self-Quiz
- Read the Unit 9 Learning Guide carefully for instructions on the Final Exam

Unit 9: Course Review and Final Exam

- Review the course and take the Review Quiz; it will not be included in the final grade
- Prepare for, take, and submit the Final Exam
- The Final Exam will take place during Week/Unit 9 (UoPeople time); exact dates, times, and other details will be provided accordingly by your instructor

Course Requirements:

Discussion Assignments & Response Posts/Ratings

Some units in this course require that you complete a Discussion Assignment. You are required to develop and post a substantive response to the Discussion Assignment in the Discussion Forum. A substantive response is one that fully answers the question that has been posted by the instructor. In addition, you must extend the discussion by responding to at least three (3) of your peers' postings in the Discussion Forum. In Unit 1 through Unit 4, your discussion posts will be assessed by your instructor. In Unit 5, you will assess three of your peers' discussion posts. Instructions for proper posting and rating (out of a 10-point scale) are provided inside the Discussion Forum for each week. Discussion Forums are only active for each current and relevant learning week, so it is not possible to contribute to the forum once the learning week has come to an end. Failure to participate in the Discussion Assignment by posting in the Discussion Forum and responding to peers as required may result in failure of the course.

Programming Assignment

Programming Assignment is graded by your instructor. The grading rubric is listed under the assignment instructions. The grading rubric is a document that outlines the criteria that your instructor will use to grade your work.

Class Introductions

This section is your opportunity to introduce yourself to your classmates and create a vibrant learning community. By sharing your background, interests, and goals, you can create meaningful connections and discover commonalities with your peers.

Quizzes

This course will contain three types of quizzes – the Self-Quiz, the Graded Quiz, and the Review Quiz. These quizzes may contain multiple choice, true/false, or short answer questions. The results of the Self-Quiz will not count towards your final grade. However, it is highly recommended that you complete the Self-Quiz to ensure that you have adequately understood the course materials. Along with the Reading Assignments, the results of the Self-Quiz should be used as part of an iterative learning process, to thoroughly cover and test your understanding of course material. You should use the results of your Self-Quiz as a guide to go back and review relevant sections of the Reading Assignments. Likewise, the Review Quiz will not count towards your final grade, but should also be used to assist you in a comprehensive review and full understanding of all course material, in preparation for your Final Exam. Lastly, the results of the Graded Quiz will count towards your final grade.

Final Exam

The Final Exam will take place during the Thursday and Sunday of Week/Unit 9, following the completion of eight units of work. The format of the Final Exam is similar to that of the quizzes, and may contain a combination of different question types. You will have one attempt to take the exam, and it will be graded electronically. Specific instructions on how to prepare for and take the Final Exam will be provided during Week 8 (located inside the Unit 9 Learning Guide). Final Exams must be taken without the use of course learning materials (both those inside and outside the course). If particular materials are allowed for use during the exam, these will be noted in the exam's instructions.

Course Forum

The Course Forum is the place to raise issues and questions relating to the course. It is regularly monitored by the instructors and is a good place to meet fellow students taking the same course. While it is not required to participate in the Course Forum, it is highly recommended.

Course Policies:

Grading Components and Weights

Each graded component of the course will contribute some percentage to the final grading scale, as indicated here:

Grade Components

Course Requirements	Number of Items	Percentage
Discussion Forum Units 1-4	4	15%
Discussion Forum Units 5-8	4	10%
Programming Assignments	8	40%
Graded Quizzes	2	20%
Final Exam	1	15%
Total		**100%**

Grading Scale
This course will follow the standard 100-point grading scale defined by the University of the People, as indicated here:

Letter Grade	Grade Scale	Grade Points
A+	98-100	4.00

A	93-97	4.00
A-	90-92	3.67
B+	88-89	3.33
B	83-87	3.00
B-	80-82	2.67
C+	78-79	2.33
C	73-77	2.00
C-	70-72	1.67
D+	68-69	1.33
D	63-67	1.00
D-	60-62	0.67
F	Under 60	0.00

Grade Appeal

If you believe that the final grade you received for a course is erroneous, unjust, or unfair, please contact your course instructor. This must be done within seven days of the posted final grade. For more information on this topic, please review the Grade Appeal Procedure in the University Catalog.

Participation

Non-participation is characterized by a lack of any assignment submissions, inadequate contributions to the Discussion Forums, and/or lack of peer feedback to Discussion/Written Assignments. Also, please note the following important points about course participation:

- Assignments must be submitted on or before the specified deadline. A course timeline is provided in the course schedule, and the instructor will specify deadlines for each assignment.
- Occasionally there may be a legitimate reason for submitting an assignment late. Most of the time, late assignments will not be accepted and there will be no make-up assignments.
- All students are obligated to inform their instructor in advance of any known absences which may result in their non-participation.

Academic Honesty and Integrity

If and when you submit any work that requires research and writing, it is essential to cite and reference all source material. Failure to properly acknowledge your sources is known as "plagiarism" – which is effectively passing off an individual's words or ideas as your own. University of the People adheres to a strict policy of academic honesty and integrity. Failure to comply with these guidelines may result in sanctions by the University, including dismissal from the University or course failure. For more information on this topic, please review the Academic Integrity Policy in the University Catalog.
Any materials cited in this course should be referenced using the style guidelines established by the American Psychological Association (APA). The APA format is widely used in colleges and universities across the world and is one of several styles and citation formats required for publication in professional and academic journals. Refer to the UoPeople APA Tutorials in the LRC for help with APA citations. For help with using library, kindly refer to UoPeople Library.

Code of Conduct

University of the People expects that students conduct themselves in a respectful, collaborative, and honest manner at all times. Harassment, threatening behavior, or deliberate embarrassment of others will not be permitted.

Any conduct that interferes with the quality of the educational experience is not allowed and may result in disciplinary action, such as course failure, probation, suspension, or dismissal. For more information on this topic, please review the Code of Conduct Policy in the University Catalog.