



Syllabus for Programming 2

Credits: 3 CS 1103

Instructor Contact Information:

You can also always send your instructor a private message through the Moodle Messaging system. Once logged into your course, click your instructor's Moodle profile page to be provided the ways in which to communicate with your instructor. Your instructor's email will also be listed in their profile.

Course Description

CS 1103 Programming 2 is a comprehensive progression from the foundational principles established in Introduction to Programming 1 (CS 1102). This course delves deeper into the Java programming language, encompassing a range of advanced concepts that extend beyond the fundamental knowledge acquired in the initial programming course. A substantial portion of the curriculum is dedicated to exploring advanced programming components, including Multithreading, Network programming, Applets, Generic programming, and Advanced GUI programming. These advanced building blocks empower students to tackle complex software development tasks, implement multithreaded applications, communicate through network protocols, create interactive applets, employ generic data structures, and design sophisticated graphical user interfaces.

Throughout this course, students will refine their skills in crafting intricate, robust, and efficient software solutions. Emphasizing the importance of professional development, students will work with industry-standard tools, such as the Eclipse Integrated Development Environment (IDE). Eclipse offers a seamless and professional environment for software development, facilitating code writing, debugging, and testing with efficiency and precision. This course is designed to equip students with the knowledge and expertise needed to excel in the realm of Java programming, providing a strong foundation for tackling complex software development projects and addressing real-world programming challenges.

Learning Objectives

Program Learning Outcomes (PLOs):

- PLO1: Students will be able to Provides a framework in applying strategies for the effective design of computing systems.
- PLO2: Students will be able to explain apply appropriate methods in the planning, development, and management of design projects.
- PLO3: Students will be able to covers the knowledge and skills needed to analyze problems from multiple perspectives and seek resolution through multiple methods and tools.
- PLO4: Students will be able to apply mathematics methods effectively to analyze and resolve problems.
- PLO5: Students will be able to communicate effectively using well organized arguments and credible supporting evidence.
- PLO6: Students will be able to enhance a command of critical thinking with respect to computer ethics, privacy, and security.





Course Learning Outcomes (CLOs):

CLO1: Explain the programming techniques using Java.

CLO2: Explain the advanced Object-Oriented concepts.

CLO3: Use tools such as the Eclipse and the Eclipse debugger.

Co/Prerequisites

CS 1102

Course Materials

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.

Technology Requirements

Students are required to have access to a computer with a reliable Internet connection in order to complete all requirements for a course. Students must also have the ability to save documents and files. Typically, University of the People learning materials are provided to students in either Adobe PDF or Microsoft Office compatible formats. Therefore, students need to be able to open and save documents in these formats as well.

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'.

Campus Tech Support Email for English programs: support@uopeople.edu





Regular and Substantive Interaction

As your instructor, they will interact and engage with each of you on a regular basis throughout the term to support your learning. They will provide direct instruction related to the course's learning objectives, respond to your questions, grade and/or provide feedback on your submitted coursework, post regular announcements, and engage in the course discussion areas regarding academic course content when appropriate.

Course Expectations and Learning Activities

Discussions

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 two (2) of your peers' postings in the Discussion Forum. Your discussion posts will be assessed by your instructor. 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 Assignments

The programming assignments are 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.

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. Specific instructions on the format and content of the Graded Quiz will be provided by your instructor.

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 exam will be provided during Week/Unit 8.

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.





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.

Participation Expectations

- Be involved and active in your courses.
- Be highly motivated and disciplined.
- Check the course homepage, calendar and assignment page, the course syllabus, your UoPeople email, and the Moodle course discussion forums several times a week.
- Post the required comments and responses to the discussion forum for your course.
- Keep up with your assignments and online quizzes/exams (as applicable) and manage your time well. These quizzes test your knowledge and comprehension of the new content.
- Participate actively in class discussions.
- Be polite and respectful.
- Use good grammar and correct spelling.
- Be honest and original. Plagiarism will not be tolerated in any online course.

Non-participation is characterized by 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.

Feedback and Suggestions

We value your input and would encourage you to complete the end of course survey to provide us with course feedback and suggestions, and report issues

Evaluation and Grading Scale

Grading Weights:

Category	% Of Grade		Grade Items (Learning Activities)	Associated Learning Objectives/Outcomes
Discussion Forums	25%	1. 2. 3. 4. 5.	Discussion Forum – Unit 1 Discussion Forum – Unit 4 Discussion Forum – Unit 5 Discussion Forum – Unit 6 Discussion Forum – Unit 7	CL01CL01CL01CL02CL01, CL02
Programmin g	45%	1. 2.		• CLO1 • CLO1, CLO2





Category	% Of Grade	Grade Items (Learning Activities)	Associated Learning Objectives/Outcomes
Assignments	3. 4. 5. 6.	Programming Assignment – Unit 6 Programming Assignment – Unit 7	 CLO1, CLO2 CLO1, CLO2 CLO1 CLO1, CLO2, CLO3
Graded Quizzes	10% 1.	0.0.00.00.00.00	CLO1, CLO2CLO1, CLO2
Final Exam	20% 1.	Final Exam – Unit 9	• CLO1, CLO2, CLO3
TOTAL	100%		

Grading Scale:

Letter Grade	% Grade	Grade Points
A+	98%-100%	4.00
Α	93-97%	4.00
A-	90%-92%	3.67
B+	88%-89%	3.33
В	83%-87%	3.00
B-	80%-82%	2.67
C+	78%-79%	2.33
С	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	<60	0.00
W	N/A	N/A

Students may also be granted Withdrawal (W), if they withdraw from the course, or an Incomplete (I) should their circumstances permit. A student who feels they were graded unfairly, or who seeks to dispute a grade, may initiate a grade appeal process. Refer to <u>University Policies</u> for more information on withdrawals and appeals.



Course Schedule

UNIT 1: Exception Handling and String Handling

- Watch/Read the reading assignments due by Saturday or Sunday.
- Discussion first response due by Sunday.
- Discussion replies due by Wednesday.
- Programming Assignment due by Wednesday.
- Self-Quiz submission.

UNIT 2: Packages in Java

- Watch/Read the reading assignments due by Saturday or Sunday.
- Programming Assignment due by Wednesday.
- Self-Quiz submission.

UNIT 3: Multithreading

- Watch/Read the reading assignments due by Saturday or Sunday.
- Programming Assignment due by Wednesday.
- Self-Quiz submission.
- Graded Quiz submission due by Wednesday.

UNIT 4: I/o and Applets

- Watch/Read the reading assignments due by Saturday or Sunday.
- Discussion first response due by Sunday.
- Discussion replies due by Wednesday.
- Self-Quiz submission.

UNIT 5: Introduction to Java Database Connectivity

- Watch/Read the reading assignments due by Saturday or Sunday.
- Discussion first response due by Sunday.
- Discussion replies due by Wednesday.
- Self-Quiz submission.

UNIT 6: Generic Programming

- Watch/Read the reading assignments due by Saturday or Sunday.
- Discussion first response due by Sunday.
- Discussion replies due by Wednesday.
- Programming Assignment due by Wednesday.
- Self-Quiz submission.
- Graded Quiz submission due by Wednesday.





UNIT 7: Files and Networking

- Watch/Read the reading assignments due by Saturday or Sunday.
- Discussion first response due by Sunday.
- Discussion replies due by Wednesday.
- Programming Assignment due by Wednesday.
- Self-Quiz submission.

UNIT 8: Advanced GUI Programming

- Watch/Read the reading assignments due by Saturday or Sunday.
- Programming Assignment due by Wednesday.
- Self-Quiz submission.

UNIT 9: Final Exam

Final Exam due by Sunday.

University Policies & Processes

Late Work/Make-up Policy

Please review the Late Work policy in the University Catalog.

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 <u>General Code of Conduct</u> in the University Catalog.

Procedures for Resolving Academic Grievances/Appeals

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 fourteen days of the last day of the term. For more information on this topic, please review the <u>Grievance Policy</u> and <u>Grade Appeals</u> Procedure in the University Catalog.

Withdrawal and Drop Date Policy

Please review the Course Drops and Withdrawals policy of the University Catalog.

Academic Integrity and Plagiarism

Please review the Code of Academic Integrity in the University catalog.

Intellectual Property

UoPeople respects the intellectual property rights of others who seek to create, preserve, and disseminate knowledge through teaching, collective learning, and continued research at the University at





large. For more information on this topic, please review the <u>Intellectual Property</u> policy in the University catalog.

Reasonable Accommodations

Contact your Program Advisor to open a request for support.

Student Support Services & Resources

English Programs

Academic Advising: advising@uopeople.edu
Financial Aid: financial.aid@uopeople.edu
Library Resources: library@uopeople.edu
Payment Processing: payments@uopeople.edu
Student Services: student.services@uopeople.edu

Technical Support: support@uopeople.edu