Computer Science (COMP) 308

Java for Programmers (Revision 5)

Status:	Replaced with new revision, see the **course listing** for the current revision
Delivery mode:	**Individualized study online**
Credits:	3
Area of study:	Science
Prerequisites:	**COMP 268** or permission of the course coordinator.
Precluded:	None
Challenge:	COMP 308 has a challenge for credit option.
Faculty:	**Faculty of Science and Technology**
Notes:	Students who are concerned about not meeting the prerequisites for this course are encouraged to contact the **course coordinator** before registering

Overview

COMP 308 provides a solid grounding in object-oriented programming in Java for students who have a background in procedural programming and advanced features of OOP for students with introductory courses in OOP. This course may be used as an elective for students in the BSc (CIS), BA(IS) and BSc (CIS-PD).

Outline

- Unit 0: Introducing the Java Platform
- Unit 1: Getting Started with the Java Programming Language
- Unit 2: Object Oriented Programming with Java
- Unit 3: Program Control
- Unit 4: Object Orientation and Reusability
- Unit 5: Collections, Arrays, Exceptions and Strings
- Unit 6: Types, Generics and Containers
- Unit 7: Java IO and Networking
- Unit 8: GUI Development
- Unit 9: Concurrency
- Unit 10: Annotations and Java Documentation

Learning outcomes

Upon successful completion of this course, you should be able to

- exemplify creation, manipulation, and control of Java objects.
- exemplify the concepts of data abstraction, inheritance, and polymorphism.
- exemplify Java runtime mechanism in Java applications.
- implement interfaces and abstract classes.
- implement error handling with exceptions.
- exemplify inner classes.

- implement Java concurrent programming with threading models.
- exemplify the concept of annotation and its role in testing Java code.
- implement Java Bean and Swing GUI.
- exemplify Java I/O and network programming.

Evaluation

To **receive credit** for COMP 308, you must achieve a course composite grade of at least **D (50 percent)**, a grade of at least 50 percent on the final examination and an overall average of 50 percent on assignments. The weighting of the composite grade is as follows:

Activity	Weight
Quiz 1	3%
Assignment 1	5%
Assignment 2	10%
Assignment 3	12%
Assignment 4	20%
Final exam	50%
Total	**100%**

The **final examination** for this course must be requested in advance and written under the supervision of an AU-approved exam invigilator. Invigilators include either ProctorU or an approved in-person invigilation centre that can accommodate online exams. Students are responsible for payment of any invigilation fees. Information on exam request deadlines, invigilators, and other exam-related questions, can be found at the **Exams and grades** section of the Calendar.

To learn more about assignments and examinations, please refer to Athabasca University's **online Calendar** .

Materials

Digital course materials

Links to the following course materials will be made available in the course:

Eckel, B. (2006). *Thinking in Java* (4th ed.). Prentice Hall.

Special Course Features

COMP 308 is offered by computer mediated communications mode, and can be completed at the student's workplace or home. It is a core course in the BA Information Systems and the BSc Computer Information Systems. This course is recommended for all senior-level Computer Science students.

Challenge for credit

Overview

The challenge for credit process allows you to demonstrate that you have acquired a command of the general subject matter, knowledge, intellectual and/or other skills that would normally be found in a university-level course.

Full information about **challenge for credit** can be found in the Undergraduate Calendar.

Evaluation

To **receive credit** for the COMP 308 challenge registration, you must achieve a grade of at least **D (50 percent)** on the project and at least 50 percent on the take-home and oral assessment.

The weighting of the final grade is as follows:

Activity	Weight
Project	50%

Activity	Weight
Take-home and oral assessment	50%
Total	**100%**

Challenge for credit course registration form

Important links

- Academic advising
- Program planning
- Request assistance
- Support services at AU

Athabasca University reserves the right to amend course outlines occasionally and without notice. Courses offered by other delivery methods may vary from their individualized study counterparts.

Opened in Revision 5, December 12, 2013

Updated May 9, 2025

View **previous revision**