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| **Module name** | **Introduction to Java Programming and the Concept of OOP** |
| Erasmus code | PL\_UMCS\_Phil\_29 |
| ISCED code |  |
| Language of instruction | English |
| Website |  |
| Prerequisites | None. Introductory course. |
| Educational outcomes verification methods | Coding exam |
| Description | Java is a general-purpose programming language with an astounding range of potential application. It can be used for creating both desktop and mobile application. It is completely platform-independent and allows to run a program on any computer with a JVM (Java Virtual Maschine), which eliminates time-consuming rewriting and retesting process. Moreover, Java is free of charge and has a wide range of associated IDE (Integrated Development Environment), such as NetBeans, Eclipse and IntelliJ, to name just the most popular.  List of topics:  1. Introduction to Java and JVM  2. Input/Output and basic operators  3. Control statements (conditionals and loops)  4. Logical operators  5. Methods and recursion  6. Arrays  7. Classes and objects  8. Introduction to Object-Oriented Programming (OPP)  9. Inheritance  10. Polymorphism and interfaces  11. Exception handling  12. Collections  13. Lambdas  14. Data Structure  15. Final exam |
| Practice | None |