

## Place and time

- \* Group: 1CE
- \* Day: Monday
- \* Time: 17.15-18.45; Rooms: A1-16,17

## Teacher

mgr Marcin Witkowski

Strona: <http://www.staff.amu.edu.pl/~mw/indexEN.html>

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Office hours: office B4-4

Mon 15.30 - 17.00

Tue 12.00 - 13.00

## Course outline

### C++

During classes we would use DevGW editor DevGW. Later on we will switch to Eclipse EclipseC++.

Topics:

- Object paradigms, classes in C++, Inheritance, constructors and destructors, abstract classes, virtual methods, polymorphism, static attributes and methods
- Copy constructors and operator overloading
- Class templates and function templates
- Components in programs, standard library
- Introduction to STL

### Java

We would use JDK in version 6 Java-jdk-download with an Eclipse editor Eclipse.

Topics:

- Compilation in java, virtual machine, dividing class into packages, packages
- Language syntax, foundations of implementations and documentations methods in Java
- Objects and references, comparing objects (method called equals())
- Interfaces, class extensions and interfaces implementation
- Exceptions, type conversion
- Graphics interfaces, applets in Java

## Credits

1. Multiple choice test concerning C++.(15 points).

2. Multiple choice test concerning Java.(15 points).
3. Project, one program written in two versions one in C++ and second time in Java. You can get 35 points for each program.

Final grade:

- $\geq 91$  very good (5),
- 81 - 90 good plus (4+),
- 71 - 80 good (4),
- 61 - 70 sufficient plus (3+),
- 51 - 60 sufficient (3),
- $\leq 50$  insufficient (2)

## Bibliography

1. Jerzy Grębosz "Symphony in C ++",
2. Bruce Eckel "Thinking in C++",
3. Scott Meyers "Effective C++",
4. Bruce Eckel "Thinking in Java",
5. any online course of java or c++ (and languages specifications C++ and Java).