# **UCL** Faculté des sciences appliquées

## FSA

LINF2124 Projet de programmation: application technologique

[60h] 6 credits

This course is not taught in 2004-2005 This course is taught in the 1st semester

Teacher(s): Language: Level: Yves Deville, Pierre Dupont, Baudouin Le Charlier, Kim Mens (coord.) french 2nd cycle course

### Aims

\* To carry successfully through a computational project of reduced extent

- \* To use correctly and efficiently one or more programming languages suitable to a given type of applications
- \* To handle various tools that facilitate program design and development

#### Main themes

\* Realization (analysis, design, implementation, tests and documentation) of a technological application based on an object-oriented language (Java)

- \* Use of program modeling tools
- \* Use of tools helpful to develop programs : compiler, preprocessor, debugger, tools to handle files, test tools, ¿

#### **Content and teaching methods**

- \* Problem analysis
- \* Design of implementation (for example UML class diagrams)
- \* Java programming (+ libraries, for example SWING)
- \* Documentation (preconditions, postconditions, invariants, alternatives, algorithms)

\* Tests (for example, JUnit)

## Other information (prerequisite, evaluation (assessment methods), course materials recommended readings,

...)

\* Prerequisite

(1) LINF1150 Introduction à l'algorithmique et la programmation: 1ère partie B. LeCharlier

- (2) LINF1251 Introduction à l'algorithmique et à la programmation : 2ème partie P. VanRoy
- \* Reference
- (1) Martin Fowler, "UML Distilled ", 0-201-32563-2
- (2) David Flanagan, "Java in a Nutshell", 0-596-00283-1.
- \* Evaluation

Based of a project performed individually.

#### Other credits in programs

MATH21/G Première licence en sciences mathématiques (Général) (6 credits)