

# Object-Oriented Analysis and Modeling

## **Course Overview**

*Radovan Cervenka*

# Objectives

- To make students familiar with practices of analysts in software-intensive projects.
- To provide a comprehensive explanation of UML.
- To demonstrate common modeling patterns.
- To train the usage of UML by solving (almost) real-world problems.

# Program

- Introduction.
- Generic modeling mechanisms.
- Modeling requirements and use cases.
- Modeling classes.
- Modeling composite structures.
- Modeling interactions.
- Modeling state machines.
- Modeling activities.
- Modeling components.
- Modeling deployment.
- Auxiliary constructs.
- Extensibility mechanisms and UML profiles.

## References

- *Unified Modeling Language: Superstructure specification*. Version 2.4.1, formal/2011-08-06, OMG, August 2011.
  - M. Fowler: *UML Distilled: A Brief Guide to the Standard Object Modeling Language*. 3rd Edition, Addison-Wesley, September 2003.
  - G. Booch, J. Rumbaugh, and I. Jacobson: *Unified Modeling Language User Guide*. 2nd ed., Addison-Wesley, May 2005.
  - M. J. Chonoles and J. A. Schardt: *UML 2 for Dummies*. Wiley, July 2003.
  - D. Pilone and N. Pitman: *UML 2.0 in a Nutshell*. 2nd ed., O'Reilly, June 2005.
  - T. A. Pender: *UML Weekend Crash Course*. Wiley, April 2002.
  - P. Kimmel: *UML Demystified*. McGraw-Hill Osborne Media, October 2005.
  - D. Pilone: *UML 2.0 Pocket Reference*. O'Reilly, March 2006.
- 
- <http://www.dcs.fmph.uniba.sk/~cervenka/ooam>