# DM820 Advanced Topics in Programming Languages

Peter Schneider-Kamp

petersk@imada.sdu.dk

http://imada.sdu.dk/~petersk/DM820/

### **Course Organization**

Prerequisites Programming Languages (DM509)

Form Elective Course

Credits 5 ECTS

Evaluation a) student presentation (passed/fail)

b) project (grades, external censor)

Textbook none (articles, tutorials, notes)

Lecturer Peter Schneider-Kamp

# **Topics**

#### past topics:

- Aspect-Oriented Programming
- Web Service Programming
- Introspection and Metaprogramming
- Higher-Level Database Programming
- Program Verification by Contract
- Efficiency Comparisons of Collection Classes
- Distributed Programming Languages
- Parallel Programming in Functional Languages
- Inductive Program Verification
- Design Patterns for Graphical User Interfaces

• . . .

## **Topics**

- possible future topics:
  - Scripting Language Embedding
  - Domain Specific Programming Languages
  - Web Ontology Languages
  - Semantic Web Query Languages
  - Parallelizing Compilers
  - Functional Logic Programming Languages
  - Automated Complexity Analysis
  - Eclipse Plugin for New Language
  - REALLY Obscure Programming Languages;)
  - •
- nearly anything goes!



Enjoy your Pizza!