

02247 Compiler Construction

Module 0: Course Introduction

Andrea Vandin

Outline

- ① Organization
- ② Questions
- ③ Feedback
- ④ Grading
- ⑤ Book
- ⑥ Tentative Lecture Plan

Organization

- Teacher:

- ★ **Andrea Vandin**,
anvan@dtu.dk,
Building 324, room 180,
Office hours: Tue 14:30-15:30, or on demand

- Teaching assistant:

- ★ **Emad Maroun**,
s123791@student.dtu.dk

- Structure:

- ★ 4 hours of 50 minutes each:

- ▶ 08:10 - 09:00 09:00 - 09:10 Break
- ▶ 09:10 - 10:00 10:00 - 10:10 Break
- ▶ 10:10 - 11:00 11:00 - 11:10 Break
- ▶ 11:10 - 12:00

- ★ We will dynamically swap between lectures and exercises depending on needs

- ★ Bring your laptop!

Questions

- Questions are always welcome!
 - ★ Ask in the lectures! – Also on topics from previous lectures!
 - ★ We have a Piazza page: <https://piazza.com/dtu.dk/spring2018/02247/home>

Feedback from you

Is important

By the end of today's class, please select two **feedback persons**:

- Volunteers
- Informally collect feedback from other students
 - ★ Too fast
 - ★ Too slow
 - ★ Unclear
 - ★ ...
- Meet 5 minutes with me at the end of each class to give me feedback

“During the course, have you been asked to evaluate the course and the teaching ...”

- Yes!

Feedback from you

Is important

By the end of today's class, please select two **feedback persons**:

- Volunteers
- Informally collect feedback from other students
 - ★ Too fast
 - ★ Too slow
 - ★ Unclear
 - ★ ...
- Meet 5 minutes with me at the end of each class to give me feedback

“During the course, have you been asked to evaluate the course and the teaching ...”

- Yes!

Grading

- **Project** in groups

- ★ 5/6 people per group
- ★ Several hand-ins, mostly to help you distribute the work over time

- **Report**

- ★ Describe what you implemented, what worked, what did not
- ★ For the sake of clarity, include only important parts of the source code
- ★ Source code will have to be uploaded separately
- ★ More information will be provided in the coming classes

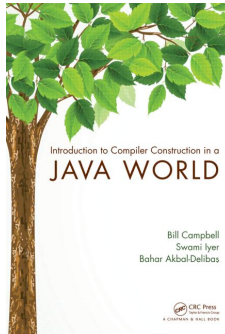
- **Oral exam** based on report

- ★ May 18, Standard 7-step scale.
- ★ Individual exam, about 20 minutes including grading
- ★ Will start from the report, and then explore the compiler topics covered in the course
- ★ External censor

Book

- This course is based on the book (available in the book store):

Bill Campbell, Swami Iyer, Bahar Akbal-Delibas,
Introduction to Compiler Construction in a Java World,
CRC Press 2012



<https://www.cs.umb.edu/j-/>
<https://www.cs.umb.edu/j-/ToC.pdf>
<https://www.cs.umb.edu/j-/Preface.pdf>
<https://www.cs.umb.edu/j-/Chapter-1.pdf>

Tentative Lecture Plan

#	Date	Topic	Chapter
1	Feb 1	Course Introduction & Compilers Overview	1
2	Feb 8	The <i>j--</i> Compiler & Demo of Final Project	1
3	Feb 15	Lexical Analysis	2
4	Feb 22	Lexical Analysis 2	2
5	Mar 1	Lab Day	
6	Mar 8	Parsing	3
7	Mar 15	Parsing 2	3
8	Mar 22	Type Checking	4
	Mar 29	Easter holiday	
9	Apr 5	Type Checking 2	4
10	Apr 12	Lab Day	
11	Apr 19	JVM Code Generation	5
12	Apr 26	MIPS Code Generation	6
13	May 3	Register Allocation	7
	?	Translating functional languages	
	May 10	Deadline for final assignment	
	May 18	Exam	