

# DM553 – Complexity and Computability – 2016

## Lecture 5

### **Lecture, February 11**

We finished chapter 1 and section 2.1. We defined push-down automata from section 2.2 and looked at a first example.

### **Lecture, February 15**

We will cover the equivalence of context-free languages and the languages accepted by push-down automata from section 2.2 and non-context-free languages from section 2.3.

### **Lecture, February 29**

We will do examples using the pumping lemma for context-free languages. We will begin on Turing Machines from chapter 3, covering section 3.1 and beginning on 3.2.

### **Problems to be discussed in U14 on March 1**

1. Page 154: 2.2.
2. Page 155: 2.5c,d.
3. Page 158: 2.42.
4. Pages 156: 2.12, 2.16.