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Administrativa

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Welcome to COMP 526 – Applied Algorithms

- ▶ Lecturer: Sebastian Wild
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Tutorials: George Skretas
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- ▶ Module website: www.wild-inter.net/teaching/comp526
→ your first address for any infos on COMP 526



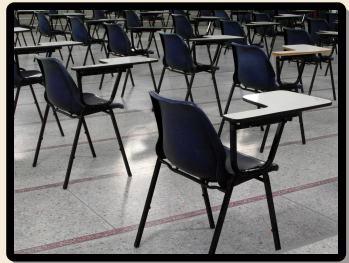
- ▶ Piazza: collaborative Q&A (more on this later)
also used for announcements
→ please register via link on website (<https://piazza.com/liv.ac.uk/spring2020/comp526>)
- ▶ Clickers: student response system for formative feedback
please bring your smartphone, laptop, etc. to class
- ▶ Final marks: 75% final exam + 25% assessments

But before we start ...



Prior knowledge survey

- ▶ not graded
- ▶ anonymous
- ▶ formative assessment
 - ▶ helps me to tailor teaching to needs
 - ▶ helps you to know where you and others stand
- ▶ Questions cover various topics, some or tough



I don't expect you can answer everything!

We don't need everything for COMP526!

Overview of the module

Goals:

- ▶ build / enhance your toolbox of algorithmic methods and techniques
 - ↪ focus on practical methods
- ▶ enable you to reason about and communicate algorithmic solutions
 - ↪ level of abstraction, proofs, mathematical analysis
- ▶ enable you to apply, combine and extend methods

Units:

0. Administrativa & Proof Techniques
1. Machines & Models
2. Fundamental Data Structures
3. Efficient Sorting
4. String Matching

5. Parallel String Matching
6. Text indexing
7. Compression
8. Codes
9. Group Testing & Streaming Algorithms

Components of COMP 526

Clicker questions

immediate feedback
simple questions

Lectures

new material
discussions
big picture

Tutorials

practice problem solving
deep questions, details

Piazza

collaborative Q&A knowledge base

Exam question pool

consolidate knowledge

Video presentation

disseminate knowledge

Programming tasks 1 & 2

find & realize creative solutions

Assessments

$$\text{final grade} = \frac{3}{4} \cdot \text{exam grade} + \frac{1}{4} \cdot \text{ongoing assessment grade}$$

The ongoing assessments consist of

- 50% 1. Video presentation
- 50% 2. Programming task 1 (more on that later in the term)
- 50% 3. Programming task 2 (more on that later in the term)
- 50% 4. Participation in clicker questions
- 80% 5. **Collective bonus points** for online participation
 - ▶ good questions and answers on Piazza
 - ▶ helpful sample exam questions

What are clickers? Why use it?

- ▶ I use “clickers” as short term for any *student response system*
We will use PINGO, a free web-based system.
- ▶ Goal: Collect immediate, formative feedback
 - ▶ Stay focused and engaged! (“active learning”)
 - ▶ Quick feedback (for you individually) if you are on track.
 - ▶ Quick feedback (for me) if (most of) you are on track.



~> grade for *participation*, not for correct answers!

Let's try it!



pingo.upb.de/622222

Clicker Question



Have you ever used clickers (or similar systems before)?

A Yes

B No

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