Organisation of course
Jaak Vilo
2013 Spring

Short CV
Jaak Vilo
1986-1991 U Tartu (diploma)
1991-1999 U Helsinki (sequence pattern discovery, PhD)
1999-2002 EMBL-EBI, UK (bioinformatics)
2002- EGeen -> Quretec (Biobank and Data Mgmt)
U Tartu, professor (Bioinformatics) 2007
– EXCS – Center of Excellence
– STACC – Software Technologies and Applications
Competence Center (Tarkvara TAK)
– research projects

Goals
• To learn the main concepts and techniques of
  the algorithm design and analysis – the
  practical skills and theoretical basis
• To be able to choose, design, analyze and
  compare algorithms and data structures
• To learn to learn, use knowledge, solve, read,
  write, and present

Contact hours
• Lectures: Jaak Vilo
  – Wed. 10-12 (404)
  – Thu. 12-14 (404)
  – In total about 22-25 lectures (not 32)
• Weekly practical sessions (homework):
  – Wed 12-14 Ilja Kuzovkin (404)
  – Thu 16-18 Oleg Šelajev (404)

Contacts:
• Jaak Vilo – prof. of bioinformatics vilo@ut.ee
• Ilja Kuzovkin - ilja.kuzovkin@gmail.com
• Oleg Šelajev - shelajev@gmail.com
• ati.algorithmics@lists.ut.ee
• http://courses.cs.ut.ee/2013/algorithmics/
• JV: room 327
  – Come by (knock on door) or when door open
• Upon agreement
Course and Grade

- Lectures
- Homework **30** + **bonus points**
- Project work **20**
- Essay **10**
- Exam **40**

Total **100p**

Homework

- **Most essential part** of the course
- **First 20 – no points.** Thereafter:
  - **1 task = 1 point**
- **50 HW tasks completed -> 50-20 = 30 points**
- **12-14 weeks of homeworks (12w*5=60)**
- **Obligatory to get a minimum of 50% done**
  - 30 tasks - 20 = 10 points (out of 30 max)
- **Presentations orally** during the practicals

Essay

- Will be based on some article
- To be decided during the course
- Reading and writing skills
- A format of the scientific article (abstract, citations, etc)

Project

- A practical algorithm implementation plus analysis and comparisons of efficiency
- Presentation in form of a project report in scientific style (poster, report, ...)

Exam

- Will be based on questions similar to the homework assignments
- Knowledge of the basic principles of algorithms
- Creative use of the algorithms

6EAP vs expected hours

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
<th>6EAP</th>
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<tbody>
<tr>
<td>Lectures</td>
<td>24</td>
<td>1.5</td>
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<tr>
<td>Practice sessions</td>
<td>12</td>
<td>1.5</td>
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<td>Homeworks</td>
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<td>0.75</td>
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<tr>
<td>Essay</td>
<td></td>
<td>12.5</td>
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<td>Exam preparation</td>
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EAP | 6 | 26 | 156
• Deadlines – strict

• Plagiarism – not tolerated

Contact
• Lectures, practicals – active hours
  

• Email (vilo @ ut.ee)

Questionnaire
• To assess the basic starting point and expectations before the course start

• Please fill in the form to the best of your ability as is during the next 15-20 minutes.