1 What is a Flipped Classroom?

This lecture is organized as a *Flipped Classroom* (aka *Flip Teaching*), i.e. the lecturer does not present the teaching material in front of the students in the lecture hall — as it would be the case with a traditional lecture. Instead, we offer learning material for self study, including instructional videos (mostly self-produced), slides, electronic quizzes, research papers, and other sources. We expect students to study this material at their own pace and prepare themselves for the weekly meetings (the so-called *LAB*). The LAB happens in the time the traditional lecture would take place. Yet, the formerly 4 hours per week (SWS) traditional lecture time is reduced to 2 SWS LAB time. The purpose of the LAB is to jointly apply the material and deepen your understanding. In the LAB we will clarify questions and start working on the weekly assignments. The professor, the tutor in chief, and several student tutor(s) will help you with that.

Example sequence of events for learning a given topic:

<table>
<thead>
<tr>
<th>When?</th>
<th>What?</th>
</tr>
</thead>
<tbody>
<tr>
<td>until week N, Wednesday 10:15</td>
<td><em>self-paced:</em> learn the material, solve the quizzes</td>
</tr>
<tr>
<td>week N, Wednesday 10:15</td>
<td><em>self-paced:</em> checkout results of the quizzes</td>
</tr>
<tr>
<td>week N, Thursday 10:15 – 12:00</td>
<td><em>LAB:</em> start solving weekly assignment sheet with professor’s and tutor’s help</td>
</tr>
<tr>
<td>week N+1, Thursday 10:00</td>
<td><em>self-paced:</em> submit your solution to the assignment sheet electronically</td>
</tr>
<tr>
<td>week N+1</td>
<td><em>tutorial:</em> discuss solutions of assignment sheet</td>
</tr>
</tbody>
</table>

2 Requirements for Passing:

<table>
<thead>
<tr>
<th>What:</th>
<th>When:</th>
<th>Weight:</th>
<th>To pass:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>Every week</td>
<td>none</td>
<td>on average ≥ 50%, at most 2 weeks with 0 points</td>
</tr>
<tr>
<td>Assignment sheets</td>
<td>Every week</td>
<td>none</td>
<td>on average ≥ 50%, at most 2 sheets with 0 points</td>
</tr>
<tr>
<td>Midterm</td>
<td>Week X</td>
<td>35%</td>
<td>≥ 50%</td>
</tr>
<tr>
<td>Final exam</td>
<td>Last week</td>
<td>35%</td>
<td>≥ 50%</td>
</tr>
<tr>
<td>Project</td>
<td>4 milestones</td>
<td>30%</td>
<td>≥ 50%</td>
</tr>
</tbody>
</table>

Exams:

(a) 120 minutes.
(b) The midterm covers material covered in the lecture until that point in time.
(c) The final exam covers the material treated after the midterm.
(d) Both can be repeated at the end of the exam period.
(e) You can take two two-sided physical A4-pages of your personal *handwritten* summary of the lecture content to all exams (no print-outs, no assignment sheets, no carbon copies).
3 Learning Resources and Tools:

Electronic Script:
The electronic script (available in Moodle) contains links to all learning material you need (including learning goals, videos, slides, encyclopedia, and research papers); only few additions to this script will be made throughout the semester (if at all).

Moodle:
1. Log in to Moodle https://islecture.cs.uni-saarland.de using your student account, and check out the calendar to not miss any deadline.
2. Solve the quizzes on time.
   a. Unlimited attempts before the deadline possible.
   b. Only the last attempt counts.
   c. No feedback on your results before the deadline.
   d. Wrong answers provide negative points (i.e. randomly checked answers do not yield points).
3. Hand-in your solutions to the assignment sheets.
   a. only via Moodle, PDF only, max. 2 MB, scans of hand-writing allowed, yet digital content preferred.
   b. At most 3 people may submit together, people coming from different tutorial groups allowed.

LAB:
1. Replaces the frontal lecture.
2. Apply the material you learned, deepen your understanding.
3. Work in groups of 2 to 3 students, start solving the weekly assignment sheets.
4. Get supervision from the professor and the tutors.

Tutorial:
1. Choose your preferred tutorial group in Moodle. First come-first served.
2. Discuss solutions to weekly assignment sheets in more detail.

Stack Overflow-Forum:
2. Check out this tour: http://stackoverflow.com/tour if you are unfamiliar with Q&A forums.
3. Contribute: post answers, add comments, vote up or down, accept the best answer!
4. Don’t discuss concrete solutions to Q&As or assignment sheets before their deadlines.

Project:
1. teams of 2-3 students implement a small main-memory database system in Java.
2. project consists of 4 Milestones; final hand-in (aka MS 4) includes a short presentation and code inspection.
3. We provide interfaces and automated tests (functional and performance) for each milestone. Your test results determine the grade for the project.
4. Yes, we provide GIT, build, test, and benchmarking server.

4 Fraud / Copy
Any form of fraud will result in grading source and sink with zero points. Any attempt to present work done by others as one’s own performance is rated as fraud and may result in the student losing the right to examination concerning this lecture.