Report of evaluation: HS17 Concurrency: State Models and Design Patterns (413707)

Dear Prof. Dr. Nierstrasz

Please find here the results of the evaluation of your course "Concurrency: State Models and Design Patterns". Following the scanning of the questionnaires, this report was automatically generated and mailed to you.

The questionnaire used was appropriate to the course type Vorlesung. In the report, you first see the mean values of the most important dimensions.

In the second part of the report, you see the answers to all the questions. The number of answers, the mean value and the values differing from it are also given.

Grade 1 on the left hand side equals the lowest grade given by the students, grade 5 or more on the right hand side the highest grade. In 'complexity and scope' grade 3 corresponds to 'exactly right' and is therefore the best grade. In the overall assessment of the course, grade 6 means the best result.

The free comments at the end of the questionnaire are only read by the lecturer him/herself and won't be evaluated statistically. Please don't pay much attention to negative statements of single persons. You are to look closely in case of frequent occurence of similar comments.

Please briefly discuss the results with your students before the end of the semester. You will find a presentation template on the last pages of the report. By giving serious consideration to the feedback of the students, you can contribute to higher future response rate.

In case you wish to learn more about how to improve your teaching, you might want to discuss the results with the staff of the 'Hochschuldidaktik' (mail address: hd@zuw.unibe.ch). Please bring a copy of the report with you, since the staff of Hochschuldidaktik do not have access to evaluation results.

You might find guidelines, regulations, and information about the process under www.lehrveranstaltungsevaluation.unibe.ch (documents in German).

Should you need more information, you may also contact us by e-mail.

Yours sincerely
D. Wuillemin

Evaluation office
Support Center for ICT-supported teaching (iLUB)
### Overall indicators

<table>
<thead>
<tr>
<th>Description</th>
<th>Scale</th>
<th>No. of responses</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conveying the course content (scale width = 5) ((\alpha = 0.75))</td>
<td></td>
<td>21</td>
<td>4.79</td>
<td>0.41</td>
</tr>
<tr>
<td>Course materials to assist Learning (scale width = 5) ((\alpha = 0.89))</td>
<td></td>
<td>21</td>
<td>4.68</td>
<td>0.57</td>
</tr>
<tr>
<td>Manners with Students (scale width = 5) ((\alpha = 0.54))</td>
<td></td>
<td>21</td>
<td>4.91</td>
<td>0.27</td>
</tr>
<tr>
<td>Complexity and Scope (exactly right = 3) ((\alpha = 0.62))</td>
<td></td>
<td>21</td>
<td>3.15</td>
<td>0.41</td>
</tr>
<tr>
<td>Overall Assessment (scale width = 6)</td>
<td></td>
<td>21</td>
<td>5.5</td>
<td>0.51</td>
</tr>
</tbody>
</table>

### Survey Results

#### Legend

- **Absolute Frequencies of answers**
- **Relative Frequencies of answers**
- **Std. Dev.**
- **Mean**
- **Median**
- **Quantile**
- **n=No. of responses**
- **av.=Mean**
- **dev.=Std. Dev.**
- **ab.=Abstention**

#### 1. Conveying the course content

1.1) The course follows a coherent structure.

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=20</td>
<td>av.=4.8</td>
</tr>
</tbody>
</table>

1.2) The wider context of the subject matter is sufficiently elucidated.

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=19</td>
<td>av.=4.79</td>
</tr>
</tbody>
</table>

1.3) The lecturer expresses him-/herself clearly and comprehensibly.

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=20</td>
<td>av.=4.9</td>
</tr>
</tbody>
</table>

1.4) The course provides an adequate overview of the subject matter treated.

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=18</td>
<td>av.=4.78</td>
</tr>
</tbody>
</table>

1.5) The design of the course contributes to an understanding of the subject matter.

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=20</td>
<td>av.=4.7</td>
</tr>
</tbody>
</table>

#### 2. Course materials to assist Learning

2.1) There is overall enough material provided to assist the learning process (slides, course material, handouts, etc.).

<table>
<thead>
<tr>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=20</td>
<td>av.=4.75</td>
</tr>
</tbody>
</table>
2.2) The course materials (slides, course manuals, hand-outs, etc.) are overall of sufficient quality.

3. Manners with Students

3.1) The lecturer takes students seriously.

3.2) The lecturer is friendly and respectful towards students.

3.3) The lecturer addresses questions and suggestions from students adequately.

3.4) The lecturer seems to care about his/her students' learning success.

4. Complexity and Scope

4.1) The degree of difficulty of the course is:

4.2) The amount of content of the course is:

4.3) The pace of the course is:

4.4) The amount of knowledge presupposed by the course is:

5. Overall Assessment

5.1) How would you grade the course as a whole?

5.2) How would you grade the lecturer with regard to subject expertise?

5.3) How would you grade the lecturer with regard to teaching methods?
5.4) The course has taught me:

- n=20
- av.=4.35
- md=4
- dev.=0.67

6. Socio-demographic Data and Background Variables

6.1) How many hours per week did you invest in preparation and revision for the course (on average)?

<table>
<thead>
<tr>
<th>Hours per Week</th>
<th>n=18</th>
</tr>
</thead>
<tbody>
<tr>
<td>0h</td>
<td>0</td>
</tr>
<tr>
<td>less than 2h</td>
<td>1</td>
</tr>
<tr>
<td>2 to 4h</td>
<td>10</td>
</tr>
<tr>
<td>4 to 6h</td>
<td>5</td>
</tr>
<tr>
<td>more than 6h</td>
<td>2</td>
</tr>
</tbody>
</table>

6.2) Was the topic of interest to you?

<table>
<thead>
<tr>
<th>Interest Level</th>
<th>n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td>not at all</td>
<td>0</td>
</tr>
<tr>
<td>slightly</td>
<td>1</td>
</tr>
<tr>
<td>fairly</td>
<td>9</td>
</tr>
<tr>
<td>quite a lot</td>
<td>9</td>
</tr>
</tbody>
</table>

6.3) How many lectures did you miss?

<table>
<thead>
<tr>
<th>Number of Lectures Missed</th>
<th>n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td>none</td>
<td>8</td>
</tr>
<tr>
<td>1 - 2</td>
<td>6</td>
</tr>
<tr>
<td>3 - 4</td>
<td>3</td>
</tr>
<tr>
<td>more than 4</td>
<td>2</td>
</tr>
</tbody>
</table>

6.4) If you missed more than 2 lectures, please give one reason:

<table>
<thead>
<tr>
<th>Reason</th>
<th>n=6</th>
</tr>
</thead>
<tbody>
<tr>
<td>lack of interest</td>
<td>0</td>
</tr>
<tr>
<td>course overlap</td>
<td>2</td>
</tr>
<tr>
<td>course manual / required reading suffices for exam preparation</td>
<td>1</td>
</tr>
<tr>
<td>illness etc.</td>
<td>0</td>
</tr>
<tr>
<td>other reasons</td>
<td>3</td>
</tr>
</tbody>
</table>

6.5) Allocation of the course in your study programme:

<table>
<thead>
<tr>
<th>Course Type</th>
<th>n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td>mono subject/ Major/Hauptfach</td>
<td>17</td>
</tr>
<tr>
<td>minor subject/ Nebenfach</td>
<td>1</td>
</tr>
<tr>
<td>other</td>
<td>1</td>
</tr>
</tbody>
</table>
Your current number of semesters since starting your studies:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
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<tr>
<td>4</td>
<td>1</td>
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<tr>
<td>5</td>
<td>1</td>
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<td>6</td>
<td>2</td>
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<tr>
<td>7</td>
<td>1</td>
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<tr>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Higher than 10</td>
<td>0</td>
</tr>
</tbody>
</table>

Sex:

- Female: 5
- Male: 14
- No answer: 0

8. Assessment of Individual Lectures

8.1) Introduction

8.2) Java and Concurrency

8.3) Safety and Synchronization

8.4) Safety Patterns + Transactional Memory

8.5) Liveness and Guarded Methods

8.6) Lab session

8.7) Liveness and Asynchrony
8.6) **Condition Objects**

- **n=16**
- **av.=4.25**
- **md=5**
- **dev.=1.06**

8.9) **Fairness and Optimism**

- **n=17**
- **av.=4.41**
- **md=5**
- **dev.=0.87**

8.10) **Lab session**

- **n=15**
- **av.=4.27**
- **md=5**
- **dev.=0.96**

8.11) **Petri Nets**

- **n=15**
- **av.=4.53**
- **md=5**
- **dev.=0.64**

8.12) **Architectural Styles for Concurrency**

- **n=16**
- **av.=4.25**
- **md=5**
- **dev.=1.0**

8.13) **Actors and Scala (guest lecture)**

- **n=17**
- **av.=3.71**
- **md=4**
- **dev.=1.21**
Profile

<table>
<thead>
<tr>
<th>Subunit:</th>
<th>Phil.-nat. Fakultät</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the instructor:</td>
<td>Prof. Dr. Oscar Marius Nierstrasz</td>
</tr>
<tr>
<td>Name of the course:</td>
<td>Concurrency: State Models and Design Patterns</td>
</tr>
</tbody>
</table>

Values used in the profile line: Mean

### 1. Conveying the course content

1.1) The course follows a coherent structure.
   - True
   - False
   - n=20
   - Mean: 4.80
   - Median: 5.00
   - Deviation: 0.41

1.2) The wider context of the subject matter is sufficiently elucidated.
   - False
   - True
   - n=19
   - Mean: 4.79
   - Median: 5.00
   - Deviation: 0.42

1.3) The lecturer expresses him-/herself clearly and comprehensibly.
   - False
   - True
   - n=20
   - Mean: 4.90
   - Median: 5.00
   - Deviation: 0.31

1.4) The course provides an adequate overview of the subject matter treated.
   - False
   - True
   - n=18
   - Mean: 4.78
   - Median: 5.00
   - Deviation: 0.43

1.5) The design of the course contributes to an understanding of the subject matter.
   - False
   - True
   - n=20
   - Mean: 4.70
   - Median: 5.00
   - Deviation: 0.47

### 2. Course materials to assist Learning

2.1) There is overall enough material provided to assist the learning process (slides, course material, hand-outs, etc.).
   - False
   - True
   - n=20
   - Mean: 4.75
   - Median: 5.00
   - Deviation: 0.55

2.2) The course materials (slides, course manuals, hand-outs, etc.) are overall of sufficient quality.
   - False
   - True
   - n=20
   - Mean: 4.60
   - Median: 5.00
   - Deviation: 0.60

### 3. Manners with Students

3.1) The lecturer takes students seriously.
   - True
   - False
   - n=19
   - Mean: 5.00
   - Median: 5.00
   - Deviation: 0.00

3.2) The lecturer is friendly and respectful towards students.
   - False
   - True
   - n=19
   - Mean: 4.95
   - Median: 5.00
   - Deviation: 0.23

3.3) The lecturer addresses questions and suggestions from students adequately.
   - False
   - True
   - n=20
   - Mean: 4.90
   - Median: 5.00
   - Deviation: 0.31

3.4) The lecturer seems to care about his/her students’ learning success.
   - False
   - True
   - n=18
   - Mean: 4.78
   - Median: 5.00
   - Deviation: 0.55

### 4. Complexity and Scope

4.1) The degree of difficulty of the course is:
   - Difficult
   - Normal
   - Easy
   - n=21
   - Mean: 3.29
   - Median: 3.00
   - Deviation: 0.64

4.2) The amount of content of the course is:
   - Difficult
   - Normal
   - Easy
   - n=19
   - Mean: 3.37
   - Median: 3.00
   - Deviation: 0.60

4.3) The pace of the course is:
   - Too fast
   - Normal
   - Too slow
   - n=20
   - Mean: 3.00
   - Median: 3.00
   - Deviation: 0.00

4.4) The amount of knowledge presupposed by the course is:
   - Too much
   - Normal
   - Too little
   - n=21
   - Mean: 2.95
   - Median: 3.00
   - Deviation: 0.38
5. Overall Assessment

5.1) How would you grade the course as a whole?

5.2) How would you grade the lecturer with regard to subject expertise?

5.3) How would you grade the lecturer with regard to teaching methods?

5.4) The course has taught me:

very little  an awful lot

8. Assessment of Individual Lectures

8.1) Introduction

8.2) Java and Concurrency

8.3) Safety and Synchronization

8.4) Safety Patterns + Transactional Memory

8.5) Liveness and Guarded Methods

8.6) Lab session

8.7) Liveness and Asynchrony

8.8) Condition Objects

8.9) Fairness and Optimism

8.10) Lab session

8.11) Petri Nets

8.12) Architectural Styles for Concurrency

8.13) Actors and Scala (guest lecture)
Profile Line for Indicators

Subunit: Phil.-nat. Fakultät
Name of the instructor: Prof. Dr. Oscar Marius Nierstrasz
Name of the course: Concurrency: State Models and Design Patterns

Conveying the course content (scale width = 5) (α = 0.75)
- - - - - + av.=4.79 dev.=0.41

Course materials to assist Learning (scale width = 5) (α = 0.89)
- - - + + av.=4.68 dev.=0.57

Manners with Students (scale width = 5) (α = 0.54)
- - - - + av.=4.91 dev.=0.27

Complexity and Scope (exactly right = 3) (α = 0.62)
- - - - + av.=3.15 dev.=0.41

Overall Assessment (scale width = 6)
- - - - - av.=5.50 dev.=0.51
7. Comments

What did you like about the course?

Lab sessions (a lot)
Java examples
Pascal Gradient's dedication

Home assignments are good structured and cover all the materials

Lab sessions

Pace, TA Feedback, Subject matter in general

Parelleled

Really good structure and material. Excellent work of teaching assistant helping to get into some complicated material. Clear and interesting lectures.

Content, Labs & Feedbacks of homeworks.

The feedback for the exercises were amazing.
Lab sessions were cool.

I really liked lab sessions where we can also had time to practice what we actually learned.

+ Good exercise (mix of theory and practice)
+ Patient and good teachers
+ Practical examples and lab sessions
Support material, labs

Essentials concepts covered

Clear presentation, good structure. Interactive style really helped a lot with understanding. Thank you!

Structure, organization and quite a lot of examples provided.

What did you not like about the course?

There was a lot of FSP in the beginning

Exam date conflicts with other deadlines

Theoretical questions got boring.

None.

Nothing.

- Guest lecture (mobile 5G) (in the work-world would have been more interesting)

FSPs are difficult to understand
Suggestions for improvements?

Local sessions and coding home tasks are really interesting and illustrating. However, they cover a small piece of theory little course. For me would be great to try out more patterns / challenges in these tasks.

More lab like exercises.

Thanks, now laborer!

Large scale algorithms? But please, no scala.

More time or less complex exercises for second lab session.
# Concurrency: State Models and Design Patterns

Responses = 21 questionnaires

<table>
<thead>
<tr>
<th></th>
<th>-</th>
<th>+</th>
<th>Ø</th>
<th>dev.</th>
</tr>
</thead>
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<td></td>
<td></td>
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<td>0.51</td>
</tr>
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</table>

dev.=Std. Dev.