Report of evaluation: HS18 Software Modeling and Analysis (422739)

Dear Mr./Mrs. Prof. Dr. Nierstrasz

Please find here the results of the evaluation of your course "Software Modeling and Analysis". 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:

- Conveying the course content
- Course materials to assist Learning
- Commitment of the lecturer
- Complexity and Scope
- Assessment of Individual Lectures

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 occurrence 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
Vice-rectorate of teaching
Overall indicators

1. Conveying the course content (α = 0.8)
   - av.=4.62
   - dev.=0.55

2. Course materials to assist Learning (α = 0.5)
   - av.=4.46
   - dev.=0.63

3. Commitment of the lecturer (α = 0.85)
   - av.=4.90
   - dev.=0.32

4. Complexity and Scope (α = 0.78)
   - av.=3.13
   - dev.=0.45

8. Assessment of Individual Lectures (α = 0.39)
   - av.=3.90
   - dev.=0.80

Survey Results

Legend

<table>
<thead>
<tr>
<th>Question text</th>
<th>Absolute Frequencies of answers</th>
<th>Relative Frequencies of answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conveying the course content</td>
<td></td>
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<tr>
<td>1.1) The course follows a coherent structure.</td>
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<tr>
<td>1.5) The design of the course contributes to an understanding of the subject matter.</td>
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</tbody>
</table>
2. Course materials to assist Learning

2.1) There is overall enough material provided to assist the learning process (slides, course materials, hand-outs, etc.).

2.2) The course materials (slides, course manuals, hand-outs, etc.) are overall of sufficient quality.

3. Commitment of the lecturer

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 progress.

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:

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)?

6.2) Was the topic of interest to you?

6.3) How many lectures did you miss?

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

6.5) Allocation of the course in your study programme:
6.6) Your current number of semesters since starting your studies:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Number</th>
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<tr>
<td>1</td>
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<td>2</td>
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<td>3</td>
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</tbody>
</table>

n=25

6.7) Sex:

- Female: 6
- Male: 17
- Prefer not to say: 0

n=23

8. Assessment of Individual Lectures

8.1) Introduction to Software Modeling and Analysis

- Average: 4.13
- Median: 4
- Standard Deviation: 0.8

8.2) Smalltalk: A Reflective Language and System

- Average: 4.33
- Median: 4
- Standard Deviation: 0.76

8.3) Understanding Classes and Metaclasses

- Average: 4.59
- Median: 5
- Standard Deviation: 0.67

8.4) Reflection and Metaprogramming

- Average: 4.52
- Median: 5
- Standard Deviation: 0.73

8.5) Moldable Software Exploration (Tudor Girba)

- Average: 3.3
- Median: 3
- Standard Deviation: 0.86

8.6) Software Metrics and Problem Detection; Moose (Andrei Chiş)

- Average: 3.77
- Median: 4
- Standard Deviation: 0.81

8.7) Socio-technical Aspects in Software Systems (Alberto Bacchelli)

- Average: 3.59
- Median: 4
- Standard Deviation: 0.85
8.8) Static Program Analysis / Soot

8.9) Software Visualization (Leonel Merino)

8.10) Bug prediction (Haidar Osman)

8.11) Software Data Analytics (Nevena Lazarević)

8.12) Code/test smells (Fabio Palomba)

8.13) Data Engineering (Pietari Kettunen)
1. Conveying the course content

1.1) The course follows a coherent structure. 
   not true  true
   n=22  av.=4.45  md=5.00  dev.=0.67

1.2) The wider context of the subject matter is sufficiently elucidated. 
   not true  true
   n=25  av.=4.56  md=5.00  dev.=0.51

1.3) The lecturer expresses him-/herself clearly and comprehensibly. 
   not true  true
   n=24  av.=4.71  md=5.00  dev.=0.55

1.4) The course provides an adequate overview of the subject matter treated. 
   not true  true
   n=24  av.=4.67  md=5.00  dev.=0.48

1.5) The design of the course contributes to an understanding of the subject matter. 
   not true  true
   n=24  av.=4.71  md=5.00  dev.=0.55

2. Course materials to assist Learning

2.1) There is overall enough material provided to assist the learning process (slides, coursematerial, hand-outs, etc.). 
   not true  true
   n=25  av.=4.60  md=5.00  dev.=0.58

2.2) The course materials (slides, course manuals, hand-outs, etc.) are overall of sufficient quality. 
   not true  true
   n=25  av.=4.32  md=4.00  dev.=0.69

3. Commitment of the lecturer

3.1) The lecturer takes students seriously. 
   not true  true
   n=24  av.=4.83  md=5.00  dev.=0.48

3.2) The lecturer is friendly and respectful towards students. 
   not true  true
   n=24  av.=4.96  md=5.00  dev.=0.20

3.3) The lecturer addresses questions and suggestions from students adequately. 
   not true  true
   n=25  av.=4.92  md=5.00  dev.=0.28

3.4) The lecturer seems to care about his/her students' learning progress. 
   not true  true
   n=25  av.=4.88  md=5.00  dev.=0.33

4. Complexity and Scope

4.1) The degree of difficulty of the course is: 
   too low/narrow  too high / wide
   n=25  av.=3.20  md=3.00  dev.=0.58

4.2) The amount of content of the course is: 
   too low/narrow  too high / wide
   n=24  av.=3.29  md=3.00  dev.=0.62

4.3) The pace of the course is: 
   too low/narrow  too high / wide
   n=25  av.=3.08  md=3.00  dev.=0.40

4.4) The amount of knowledge presupposed by the course is: 
   too low/narrow  too high / wide
   n=24  av.=2.96  md=3.00  dev.=0.20
5. Overall Assessment

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

1 = poor  |  2 = poor to fair  |  3 = fair  |  4 = good  |  5 = excellent

n=24  
av.=5.21  
md=5.00  
dev.=0.41

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

1 = poor  |  2 = poor to fair  |  3 = fair  |  4 = good  |  5 = excellent

n=24  
av.=5.88  
md=6.00  
dev.=0.34

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

1 = poor  |  2 = poor to fair  |  3 = fair  |  4 = good  |  5 = excellent

n=24  
av.=5.71  
md=6.00  
dev.=0.55

5.4) The course has taught me:

very little  |  somewhat  |  average  |  good  |  an awful lot

n=24  
av.=4.08  
md=4.00  
dev.=0.41

8. Assessment of Individual Lectures

8.1) Introduction to Software Modeling and Analysis

n=24  
av.=4.13  
md=4.00  
dev.=0.80

8.2) Smalltalk: A Reflective Language and System

n=24  
av.=4.33  
md=4.00  
dev.=0.76

8.3) Understanding Classes and Metaclasses

n=22  
av.=4.59  
md=5.00  
dev.=0.67

8.4) Reflection and Metaprogramming

n=23  
av.=4.52  
md=5.00  
dev.=0.73

8.5) Moldable Software Exploration (Tudor Girba)

n=20  
av.=3.30  
md=3.00  
dev.=0.86

8.6) Software Metrics and Problem Detection; Moose (Andrei Chiş)

n=22  
av.=3.77  
md=4.00  
dev.=0.81

8.7) Socio-technical Aspects in Software Systems (Alberto Bacchelli)

n=22  
av.=3.59  
md=4.00  
dev.=0.85

8.8) Static Program Analysis / Soot

n=21  
av.=3.57  
md=4.00  
dev.=0.75

8.9) Software Visualization (Leonel Merino)

n=23  
av.=4.00  
md=4.00  
dev.=0.80

8.10) Bug prediction (Haidar Osman)

n=21  
av.=4.19  
md=4.00  
dev.=0.75

8.11) Software Data Analytics (Nevena Lazarević)

n=22  
av.=3.77  
md=4.00  
dev.=0.81

8.12) Code/test smells (Fabio Palomba)

n=21  
av.=3.62  
md=4.00  
dev.=0.92

8.13) Data Engineering (Pietari Kettunen)

n=21  
av.=3.05  
md=3.00  
dev.=0.92
### Profile Line for Indicators

**Subunit:** Phil.-nat. Fakultät  
**Name of the instructor:** Prof. Dr. Oscar Nierstrasz  
**Name of the course:** Software Modeling and Analysis

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rating</th>
<th>Average (av.)</th>
<th>Deviation (dev.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conveying the course content</td>
<td></td>
<td>4.62</td>
<td>0.55</td>
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<td></td>
<td>4.46</td>
<td>0.63</td>
</tr>
<tr>
<td>Commitment of the lecturer</td>
<td></td>
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<tr>
<td>Complexity and Scope</td>
<td></td>
<td>3.13</td>
<td>0.45</td>
</tr>
<tr>
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<td></td>
<td>3.90</td>
<td>0.80</td>
</tr>
</tbody>
</table>
7. Comments

What did you like about the course?

- I have learnt many new things.
  - New topic in this master. Could learn and benefit a lot of it.
  - Mixed expertise with guest lecturers. Interesting insights.
  - Pascal's feedback is the greatest I've got during my studies.
  - Good learning material (except for some guest lectures) and motivated/enthusiastic teaching assistant.
  - Had a lot of guest lecturers. This provided a more special view of the field.
  - Good combination: Theory, Practice, and Programming.

The slides of Prof. Wiestratz are really good, also the lecture itself. The TA did a very good job, there are good feedbacks for us and he always answered the questions quickly.

- I liked the first four lectures due to the topic (inner working of Java), metaprogramming.

A wide area is explored and give us a good overview on the subject with quite a lot of details.

Any questions were always sufficiently answered. Lectures were good, assistants were good.

It shows a different view on coding.
The communication with lecturer and teaching assistants was excellent. Guest lectures is a very nice way to learn from field professionals. Exercises are of high quality. Great feedback.

The course content

Practical session in a decent level

Even though it was too much, I like the content. Assistant, Pascal, is very friendly and helpful.

Guest lectures, great assistants, engagement from the teaching staff.

Guest Lectures

- Assignments were great
- What you should know part at the end of each slide does
- Exploration, slides
- Great assistant work!

Exercises very well tutored! Thanks!

Slides & hidden slides very expressive.

Clear setup, good pace

Nice assistant, funny, assistive, etc. I like the idea of the guest lectures. The exercises were on topic.

Contents, topics, guest lectures, practical parts, assistant!

7.2) What did you not like about the course?

Sometimes I felt little complicated.
The amount of content is very wide, interesting courses but hard to learn everything without open books.

Missed a project (e.g. analysing a OSS application map (e.g. in a Lab))

Lots of guest lectures made the quality of the course inconsistent.

Some slides from the guest lecture are horrible (layout and content)

A few lectures had overlapping topics.

The first half of the course was much better than the second half; (both lectures and assignments)

That the exam is at the end of the semester.

Lot of content, many topics.
Suggestions for improvements?

- Some guest lectures were sometimes a bit too focused on researchers' work, e.g., the test smell lecture.

- Guest lectures sometimes seemed "isolated" without any context.

Small Talk...

Doing analysis of a OSS project during the whole semester

No "What are the differences between ..."-questions for things that are very different.
we survey BEFORE exam;-)

More insight into different metaprogamming capabilities seem focus

invite only the best guest lecturers

less guest lectures

Maybe some contents can be discarded.
Would be nice to have these what you should know also at all your lectures

Use Ruby, Python, or others
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<thead>
<tr>
<th>Question</th>
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<th>dev.</th>
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<tbody>
<tr>
<td>1. Conveying the course content</td>
<td>0%</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
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<td>2. Course materials to assist Learning</td>
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dev.=Std. Dev.