UNIVERSITÄT
BERN

Vizerektorat Lehre, iLUB, Hochschulstrasse 6, 3012 Bern

Persönlich/Vertraulich
Prof. Dr. Oscar Marius Nierstrasz
Institut für Informatik und angewandte Mathematik
Neubrückstr. 10
3012 Bern

Vizerektorat Lehre

**Lehrveranstaltungsevaluation**

Report of evaluation: FS18 Programmiersprachen (2720)

Dear Prof. Dr. Nierstrasz

Please find here the results of the evaluation of your course Programmiersprachen. Following the scanning of the questionnaires, this report was automatically generated and mailed to you.

The questionnaire used was PN-P1.V1. In the report, you first see the mean values of the following dimensions:

Planning and Presentation (Skalenbreite: 4)
Manners with Students (Skalenbreite: 4)
Interest and Relevance (Skalenbreite: 4)
Complexity and Scope (Skalenbreite: 5)
Overall Assessment (Skalenbreite: 6)

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 equals the lowest grade given by the students, grade 4 or more the highest grade (unless a question is reversed). 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.

We hope that this report helps you to analyse your course. Please briefly discuss the results with your students before the end of the semester.

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.

Kind regards
Daniela Wuillemin
Vice-rectorate of quality

Daniela Wuillemin
Supportstelle für ICT-gestützte Lehre und Forschung (iLUB)
Hochschulstrasse 6, 3012 Bern

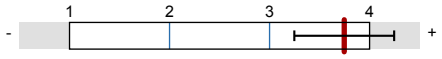
Tel. +41 31 631 51 07
lehrevaluation@ilub.unibe.ch
www.lehrveranstaltungsevaluation.unibe.ch

# Prof. Dr. Oscar Marius Nierstrasz

Programmiersprachen (2720)
No. of responses = 33

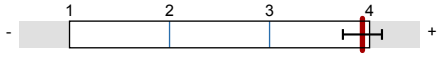
## Overall indicators

**Planning and Presentation** (Skalenbreite: 4) (α = 0.88)



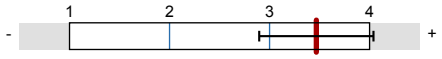

av.=3.75
dev.=0.5

**Manners with Students** (Skalenbreite: 4) (α = 0.58)



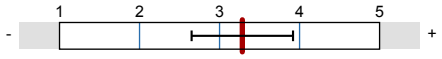

av.=3.93
dev.=0.2

**Interest and Relevance** (Skalenbreite: 4) (α = 0.71)



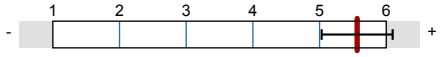

av.=3.47
dev.=0.57

**Complexity and Scope** (Skalenbreite: 5) (α = 0.6)




av.=3.28
dev.=0.63

**Overall Assessment** (Skalenbreite: 6) (α = 0.64)

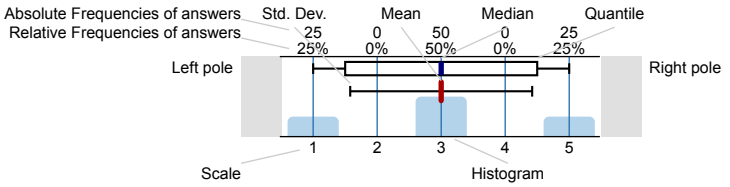



av.=5.56
dev.=0.53

## Survey Results

### Legend

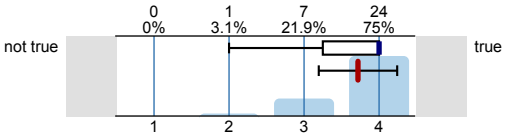
Question text




n=No. of responses
av.=Mean
md=Median
dev.=Std. Dev.
ab.=Abstention

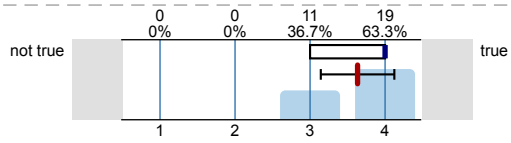
## Planning and Presentation

1 The course follows a coherent structure.



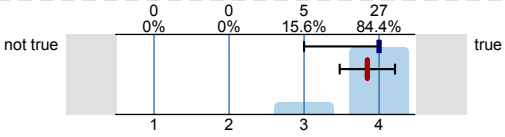

n=32
av.=3.72
md=4
dev.=0.52
ab.=1

2 The wider context of the subject matter is sufficiently elucidated.



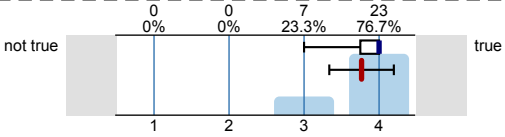

n=30
av.=3.63
md=4
dev.=0.49
ab.=2

3 The lecturer expresses him-/herself clearly and comprehensibly.



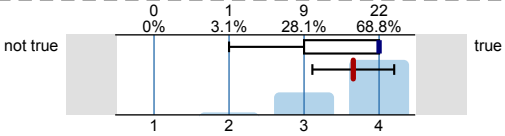

n=32
av.=3.84
md=4
dev.=0.37
ab.=1

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



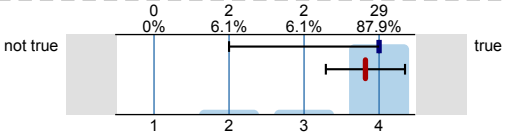

n=30
av.=3.77
md=4
dev.=0.43
ab.=1

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



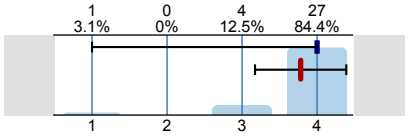

n=32
av.=3.66
md=4
dev.=0.55

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




n=33
av.=3.82
md=4
dev.=0.53

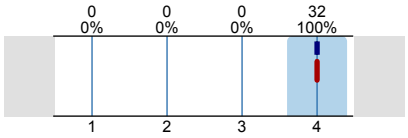
7 The course materials (slides, course manuals, hand-outs, etc.) are overall of sufficient quality.




n=32
av.=3.78
md=4
dev.=0.61

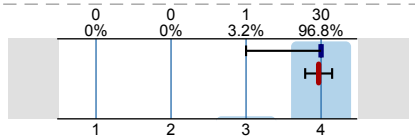
## Manners with Students

8 The lecturer takes students seriously.



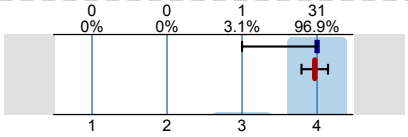

n=32
av.=4
md=4
dev.=0
ab.=1

9 The lecturer is friendly and respectful towards students.



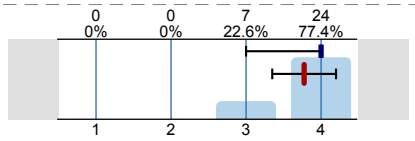

n=31
av.=3.97
md=4
dev.=0.18
ab.=1

10 The lecturer addresses questions and suggestions from students adequately.




n=32
av.=3.97
md=4
dev.=0.18
ab.=1

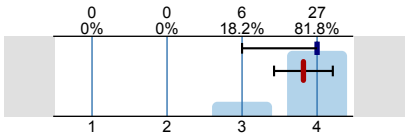
11 The lecturer seems to care about his/her students' progress.




n=31
av.=3.77
md=4
dev.=0.43
ab.=1

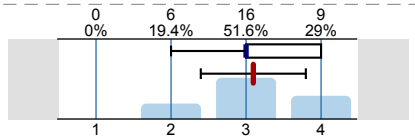
## Interest and Relevance

12 The lecturer succeeds in making the course interesting.



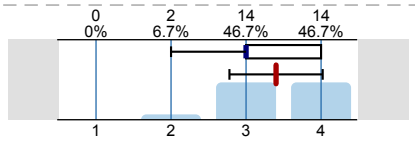

n=33
av.=3.82
md=4
dev.=0.39

13 The course is probably very useful for my future professional life.



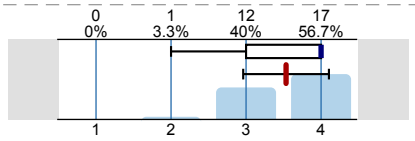

n=31
av.=3.1
md=3
dev.=0.7

14 The applicability and relevance of the subject matter is sufficiently clarified by the lecturer.




n=30
av.=3.4
md=3
dev.=0.62
ab.=1

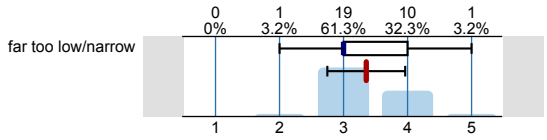
15 The lecturer fosters my interest in the subject.




n=30
av.=3.53
md=4
dev.=0.57
ab.=1

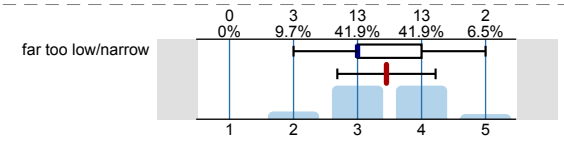
## Complexity and Scope

16 The degree of complexity of the course is:



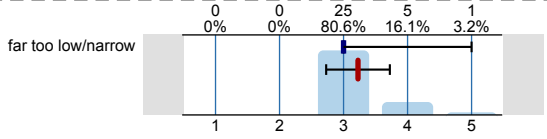

n=31
av.=3.35
md=3
dev.=0.61

17 The scope of the course is:



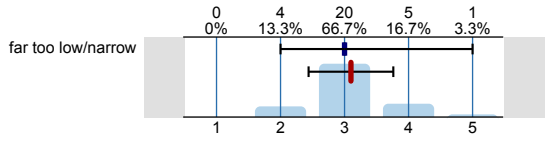

n=31
av.=3.45
md=3
dev.=0.77

18 The pace of the course is:




n=31
av.=3.23
md=3
dev.=0.5

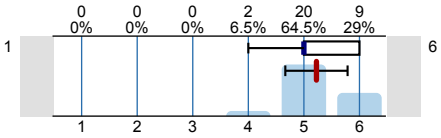
19 The amount of knowledge presupposed by the course is:




n=30
av.=3.1
md=3
dev.=0.66

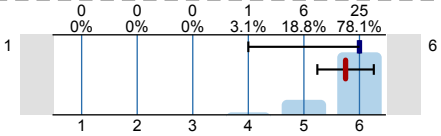
## Overall Assessment

20 How would you grade the course as a whole?



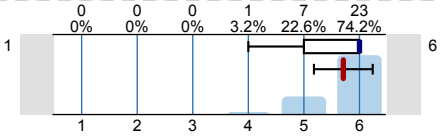

n=31
av.=5.23
md=5
dev.=0.56

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



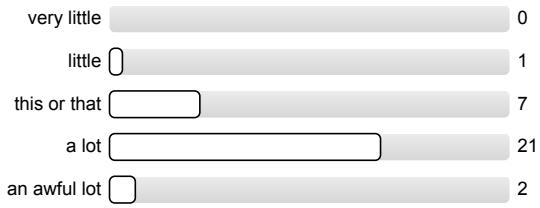

n=32
av.=5.75
md=6
dev.=0.51

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




n=31
av.=5.71
md=6
dev.=0.53

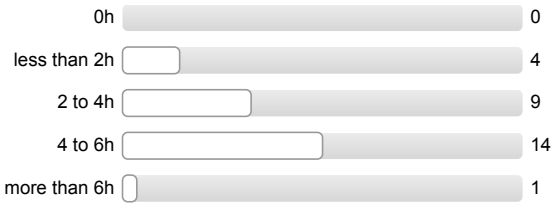
23 The course has taught me




n=31
av.=3.77
dev.=0.62

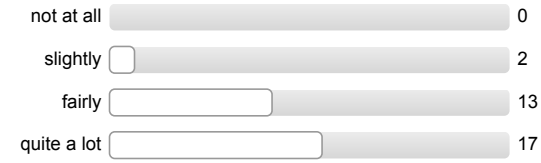
## Socio-demographic Data and Background Variables

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



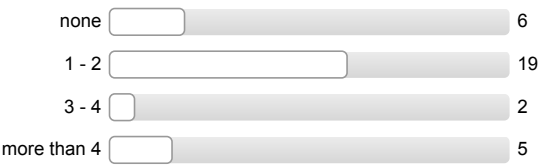

n=28

25 Was the topic of interest to you?




n=32

26 How many lectures did you miss?




n=32

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

n=9

| | |
|---|---|
| lack of interest | 0 |
| course overlap | 0 |
| illness etc. | 2 |
| course manual/required reading suffices for exam preparation | 4 |
| other reasons | 3 |

28 Allocation of the course in your study programme:?

n=29

| | |
|---|---|
| mono subject/Major/Hauptfach | 28 |
| Minor/Nebenfach | 1 |
| complemetary or specialization course | 0 |

29 Your current number of semesters?

n=32

| | |
|---|---|
| 1 | 3 |
| 2 | 11 |
| 3 | 6 |
| 4 | 2 |
| 5 | 0 |
| 6 | 6 |
| 7 | 0 |
| 8 | 3 |
| 9 | 1 |
| 10 | 0 |
| higher than 10 | 0 |

30 Sex

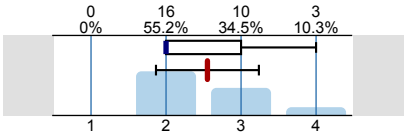
n=23

| | |
|---|---|
| female | 5 |
| male | 17 |
| n/a | 1 |

## Assessment of Individual Lectures

8.1 Introduction

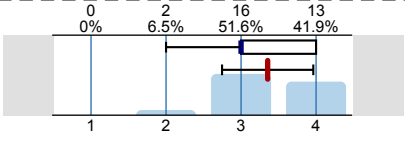
strongly disagree — strongly agree




n=29
av.=2.55
md=2
dev.=0.69

8.2 Stack-based Programming

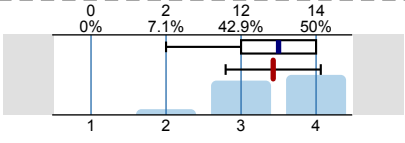
strongly disagree — strongly agree




n=31
av.=3.35
md=3
dev.=0.61

8.3 Functional Programming

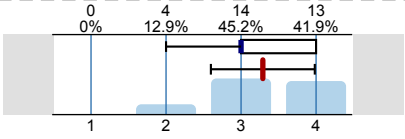
strongly disagree — strongly agree




n=28
av.=3.43
md=3.5
dev.=0.63

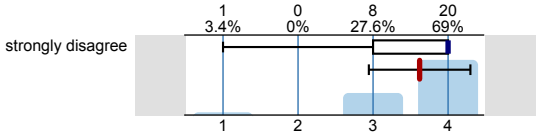
8.4 Types and Polymorphism

strongly disagree — strongly agree




n=31
av.=3.29
md=3
dev.=0.69

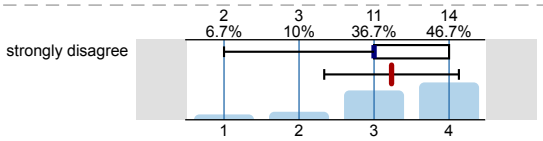
8.5 Lambda Calculus




strongly disagree — strongly agree

n=29
av.=3.62
md=4
dev.=0.68

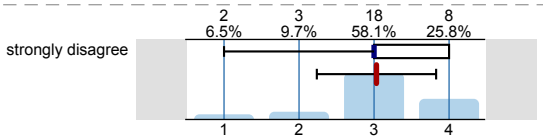
8.6 Fixed Points




strongly disagree — strongly agree

n=30
av.=3.23
md=3
dev.=0.9

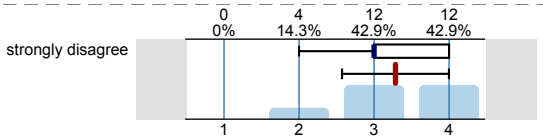
8.7 Programming Language Semantics




strongly disagree — strongly agree

n=31
av.=3.03
md=3
dev.=0.8

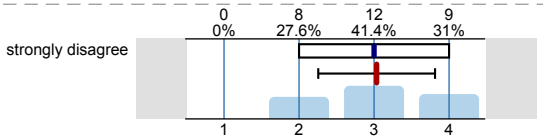
8.8 Objects and Prototypes




strongly disagree — strongly agree

n=28
av.=3.29
md=3
dev.=0.71

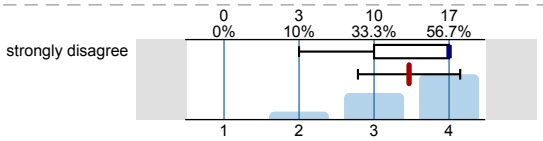
8.9 Objects and Types




strongly disagree — strongly agree

n=29
av.=3.03
md=3
dev.=0.78

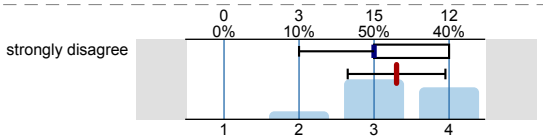
8.10 Logic Programming




strongly disagree — strongly agree

n=30
av.=3.47
md=4
dev.=0.68

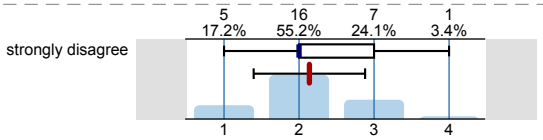
8.11 Applications of Logic Programming




strongly disagree — strongly agree

n=30
av.=3.3
md=3
dev.=0.65

8.12 Visual Programming




strongly disagree — strongly agree

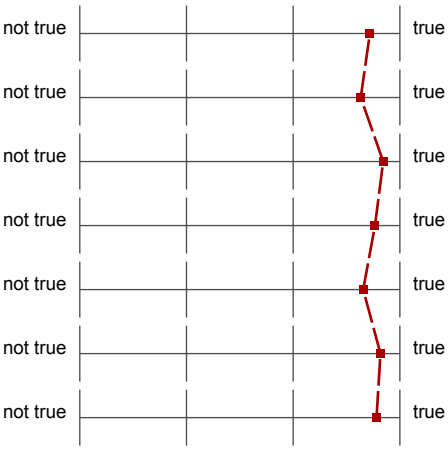
n=29
av.=2.14
md=2
dev.=0.74

# Profile

Subunit: Phil.-nat. Fakultät
Name of the instructor: Prof. Dr. Oscar Marius Nierstrasz
Name of the course: (Name of the survey) Programmiersprachen

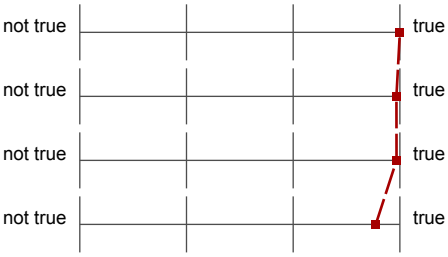
Values used in the profile line: Mean

## Planning and Presentation



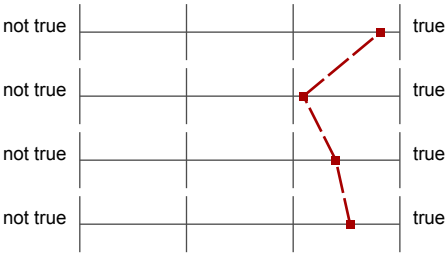
| | | | | | | |
|---|---|---|---|---|---|---|
| 1 The course follows a coherent structure. | not true | true | n=32 | av.=3.72 | md=4.00 | dev.=0.52 |
| 2 The wider context of the subject matter is sufficiently elucidated. | not true | true | n=30 | av.=3.63 | md=4.00 | dev.=0.49 |
| 3 The lecturer expresses him-/herself clearly and comprehensibly. | not true | true | n=32 | av.=3.84 | md=4.00 | dev.=0.37 |
| 4 The course provides an adequate overview of the subject matter treated. | not true | true | n=30 | av.=3.77 | md=4.00 | dev.=0.43 |
| 5 The design of the course contributes to an understanding of the subject matter. | not true | true | n=32 | av.=3.66 | md=4.00 | dev.=0.55 |
| 6 There is overall enough material provided to assist the learning process (slides, course material, hand-outs, etc.). | not true | true | n=33 | av.=3.82 | md=4.00 | dev.=0.53 |
| 7 The course materials (slides, course manuals, hand-outs, etc.) are overall of sufficient quality. | not true | true | n=32 | av.=3.78 | md=4.00 | dev.=0.61 |

## Manners with Students



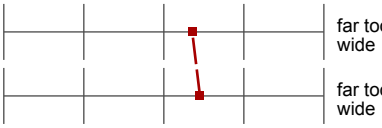
| | | | | | | |
|---|---|---|---|---|---|---|
| 8 The lecturer takes students seriously. | not true | true | n=32 | av.=4.00 | md=4.00 | dev.=0.00 |
| 9 The lecturer is friendly and respectful towards students. | not true | true | n=31 | av.=3.97 | md=4.00 | dev.=0.18 |
| 10 The lecturer addresses questions and suggestions from students adequately. | not true | true | n=32 | av.=3.97 | md=4.00 | dev.=0.18 |
| 11 The lecturer seems to care about his/her students' progress. | not true | true | n=31 | av.=3.77 | md=4.00 | dev.=0.43 |

## Interest and Relevance



| | | | | | | |
|---|---|---|---|---|---|---|
| 12 The lecturer succeeds in making the course interesting. | not true | true | n=33 | av.=3.82 | md=4.00 | dev.=0.39 |
| 13 The course is probably very useful for my future professional life. | not true | true | n=31 | av.=3.10 | md=3.00 | dev.=0.70 |
| 14 The applicability and relevance of the subject matter is sufficiently clarified by the lecturer. | not true | true | n=30 | av.=3.40 | md=3.00 | dev.=0.62 |
| 15 The lecturer fosters my interest in the subject. | not true | true | n=30 | av.=3.53 | md=4.00 | dev.=0.57 |

## Complexity and Scope



| | | | | | | |
|---|---|---|---|---|---|---|
| 16 The degree of complexity of the course is: | far too low/ narrow | far too high/ wide | n=31 | av.=3.35 | md=3.00 | dev.=0.61 |
| 17 The scope of the course is: | far too low/ narrow | far too high/ wide | n=31 | av.=3.45 | md=3.00 | dev.=0.77 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 18 The pace of the course is: | far too low/ narrow | far too high/ wide | n=31 | av.=3.23 | md=3.00 | dev.=0.50 |
| 19 The amount of knowledge presupposed by the course is: | far too low/ narrow | far too high/ wide | n=30 | av.=3.10 | md=3.00 | dev.=0.66 |

## Overall Assessment

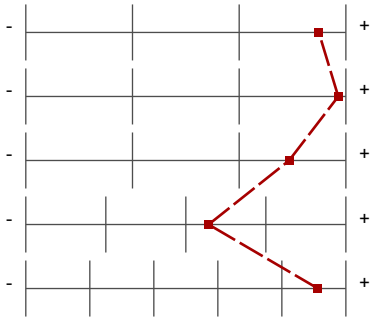
| | | | | | | |
|---|---|---|---|---|---|---|
| 20 How would you grade the course as a whole? | 1 | 6 | n=31 | av.=5.23 | md=5.00 | dev.=0.56 |
| 21 How would you grade the lecturer with regard to subject expertise? | 1 | 6 | n=32 | av.=5.75 | md=6.00 | dev.=0.51 |
| 22 How would you grade the lecturer with regard to teaching methods? | 1 | 6 | n=31 | av.=5.71 | md=6.00 | dev.=0.53 |

## Assessment of Individual Lectures

| | | | | | | |
|---|---|---|---|---|---|---|
| 8.1 Introduction | strongly disagree | strongly agree | n=29 | av.=2.55 | md=2.00 | dev.=0.69 |
| 8.2 Stack-based Programming | strongly disagree | strongly agree | n=31 | av.=3.35 | md=3.00 | dev.=0.61 |
| 8.3 Functional Programming | strongly disagree | strongly agree | n=28 | av.=3.43 | md=3.50 | dev.=0.63 |
| 8.4 Types and Polymorphism | strongly disagree | strongly agree | n=31 | av.=3.29 | md=3.00 | dev.=0.69 |
| 8.5 Lambda Calculus | strongly disagree | strongly agree | n=29 | av.=3.62 | md=4.00 | dev.=0.68 |
| 8.6 Fixed Points | strongly disagree | strongly agree | n=30 | av.=3.23 | md=3.00 | dev.=0.90 |
| 8.7 Programming Language Semantics | strongly disagree | strongly agree | n=31 | av.=3.03 | md=3.00 | dev.=0.80 |
| 8.8 Objects and Prototypes | strongly disagree | strongly agree | n=28 | av.=3.29 | md=3.00 | dev.=0.71 |
| 8.9 Objects and Types | strongly disagree | strongly agree | n=29 | av.=3.03 | md=3.00 | dev.=0.78 |
| 8.10 Logic Programming | strongly disagree | strongly agree | n=30 | av.=3.47 | md=4.00 | dev.=0.68 |
| 8.11 Applications of Logic Programming | strongly disagree | strongly agree | n=30 | av.=3.30 | md=3.00 | dev.=0.65 |
| 8.12 Visual Programming | strongly disagree | strongly agree | n=29 | av.=2.14 | md=2.00 | dev.=0.74 |

# Profile Line for Indicators

Subunit: Phil.-nat. Fakultät
Name of the instructor: Prof. Dr. Oscar Marius Nierstrasz
Name of the course: (Name of the survey) Programmiersprachen



**Planning and Presentation** (Skalenbreite: 4) (α = 0.88) av.=3.75 dev.=0.50

**Manners with Students** (Skalenbreite: 4) (α = 0.58) av.=3.93 dev.=0.20

**Interest and Relevance** (Skalenbreite: 4) (α = 0.71) av.=3.47 dev.=0.57

**Complexity and Scope** (Skalenbreite: 5) (α = 0.6) av.=3.28 dev.=0.63

**Overall Assessment** (Skalenbreite: 6) (α = 0.64) av.=5.56 dev.=0.53

# Comments Report

## Open Questions

What did you like about the course?

I have learnt many things and my interest towards programming has also increased.

Great resources and easy to find with website.

The general overview of programming language in not that deep details is very useful to understand general PL concepts.

good assignments, interesting topics

catch a glimpse of many languages I might otherwise not have touched

- many examples
- good slides
- clear explanations

Good overview over different paradigms

Diversity

The dive into the theory behind pl's and λ calculus.

good exercises esp. programming assignments

Very interesting. The topic itself didn't fascinate me at the beginning but by now, I'm really happy to have learned so much interesting stuff!

Broad range of topics.
Focus on FP and lambda calculus. Piazza.

learning about topics which looks old and outdated sometimes, but provides a basic which i never had ! & think was necessary

Broad overview
Prolog is nice

- exercises ~~to~~ refer to lecture
- support in piazza (for questions related to theory and practice)
- podcast to relisten things if they were not clear during lecture
closed-book exam (you learn more and ~~the questions are~~ better know what questions you can expect)

## Examples

It is nice to see how programming languages evolved.

Good materials. Great lectures. Challenging Assignments

What did you not like about the course?

Somtimes. It happened, that only reading the course material, it was difficult to understand the topic.

The repetition from my experience from other school/class

Exercises were sometimes unclear, and hard to solve in a .txt file (e.g. Lambda calculus)

- questions in exercises not always clear
- pace of correction low
- only points as feedback - detailed feedback only on request

} exercise-related stuff

Javascript ;)

unclear exercises (sometimes)

Prolog : just not my cup of coffee.

ext. to much / deep theory

The Exercises were sometimes not absolute by clear.

Some exercises were "lactlaster", especially after the FK, stuff. and LC
Learning effect was not very good. E.g. Just create Objects in JS?

the postcript part was so vague for me. + and chapter 9 was also full of ambiguity but my fault for not to ask more! (maybe)

The slider about subtyping not understandable enough, especially the type operator. Exam date (too early)

- the slides of the lecture "objects and types" where confusing. I am not sure if I have ~~to~~ understood the concept of subtyping right. what does it mean in general? what for OO-languages? what concretly is ~~test~~ subtyping in Java? How is covariance / contravariant and record extension related to subtyping?

Last lecture I find not so important (VP)

It is good to get our hands in different programming languages, but it is hard to remember their syntax correctly.

Suggestions for improvements?

Would be nice to see more recent languages like D or F#. Some ~~tags~~ stuff in prolog could be elaborated (e.g. capital letters required for args) but ~~more~~ also other features of the lang

look at Reactive Programming or/and D.S.L (intern / extern) with a language like scala or another one ...

- drop the lecture about visual programming } lecture related
- use two lectures on subtyping
- give (short) feedback on exercises (a sentence or two)

~~The course~~

Exercises should be handed out earlier and students should have possibility to discuss them in exercise-hours prior to deadline ✓ That would be very important to me

less topics ~~the~~ ~~but not more for but spend more time for the~~

~~clear~~. Make the exercises clearer.
Put them online at least one week before hand-in. I due ~~to~~ sickness I sometimes ~~had~~ had to do ~~them~~ in the middle of the night, while I felt ok!

Sometimes wider content is only mentioned orally or in notes - slides. I would ~~like~~ like to have it in real slides so that it is clear what we will talk about

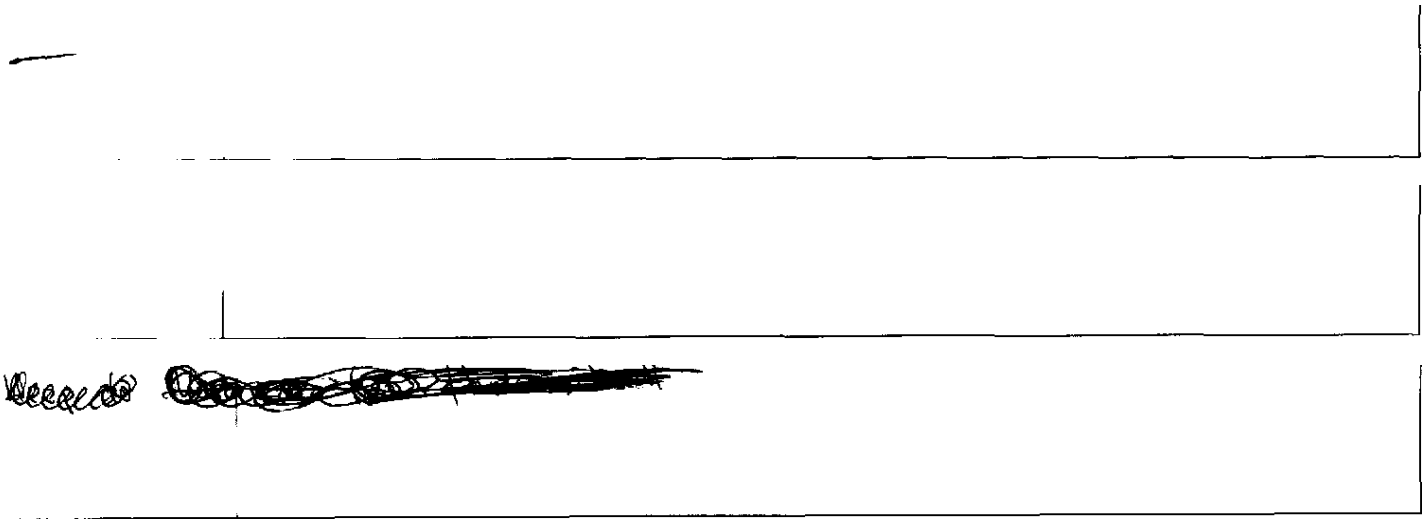
More creative exercises.
Direct Feedback in git repo (just a txt file)

deviding chapter 9 to two parts. specially the second half of the slides needs more explanation (or can be removed.

written explanations/examples for abstract constructs like the type generator

↓
Maybe you could structure the slide in a different manner, add ~~more~~ give more examples and a clear conclusion.

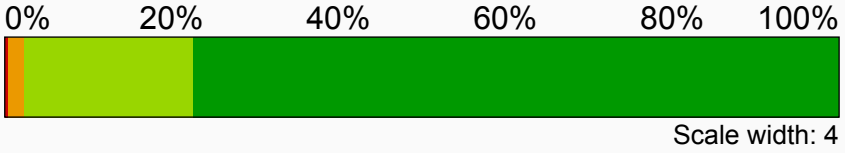
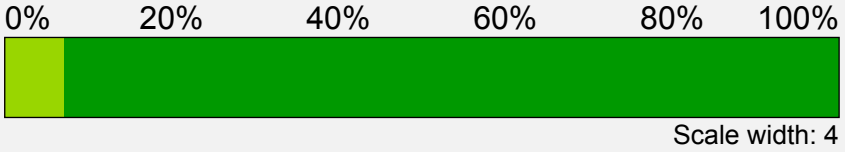
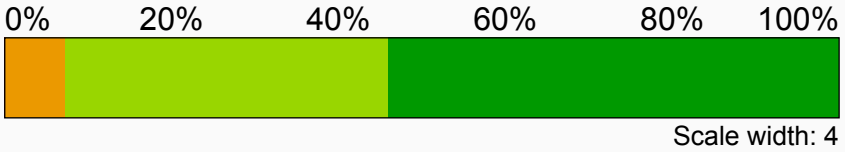
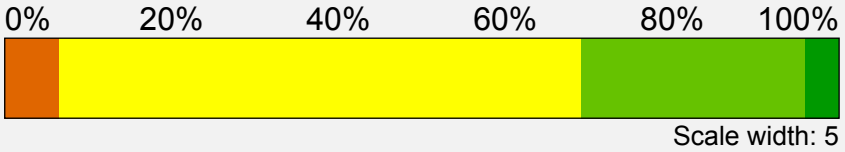
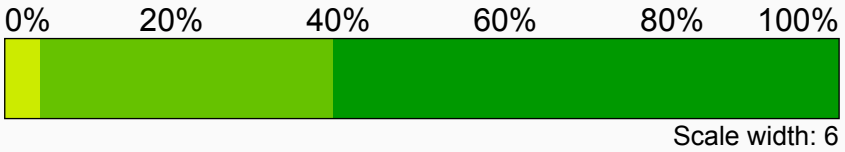
Giving Feedback of assignments as Pascal done on CP course HS17.



# Programmiersprachen

Responses = 33 questionnaires

Prof. Dr. Oscar Marius Nierstrasz

| | - + | Ø | dev. |
|---|---|---|---|
| **Planning and Presentation** (Skalenbreite: 4) |  | 3.75 | 0.5 |
| **Manners with Students** (Skalenbreite: 4) |  | 3.93 | 0.2 |
| **Interest and Relevance** (Skalenbreite: 4) |  | 3.47 | 0.57 |
| **Complexity and Scope** (Skalenbreite: 5) |  | 3.28 | 0.63 |
| **Overall Assessment** (Skalenbreite: 6) |  | 5.56 | 0.53 |

dev.=Std. Dev.