## Data Mining and Machine Learning Methods in Bioinformatics – Dr. Holger Fröhlich

Lecture Survey – Fachschaft Informatik

4. September 2015

Abgegebene Fragebögen: 14

#### 1 Lecture Evaluation

#### 1.1 Please rate the lecture's concept.

#### 1.1.1 How often did you attend the lecture?

Always – Never	43%	36%	14%	7%	0%
Antworten: 14 Durchschnitt: 1.9		-			
Standardabweichung: 0.9	1	2	3	4	5
1.1.2 Did the lecture appear to be clearly struct	ured to yo	u?			
Yes – No	57%	29%	14%	0%	0%
Antworten: 14 Durchschnitt: 1.6		-			
Standardabweichung: 0.7	1	2	3	4	5
1.1.3 Have topics been illustrated by sensible ex	amples?				
Always – Never	43%	36%	21%	0%	0%
Antworten: 14 Durchschnitt: 1.8					
Standardabweichung: 0.8	1	2	3	4	5
1.1.4 Were the slides/lecture notes helpful?					
Very helpful – Not helpful	50%	21%	21%	7%	0%
Antworten: 14 Durchschnitt: 1.9					
Standardabweichung: 1.0	1	2	3	4	5
1.1.5 Have there been topics that should have b	oeen explai	ned more	extensive	ly?	
Many – None	7~%	14%	43%	29%	7%

U U					
Antworten: 14					
Durchschnitt: 3.1					
Standardabweichung: 1.0	1	2	3	4	5

#### 2 Lecturer Evaluation

#### 2.1 Please rate Dr. Holger Fröhlich.

#### 2.1.1 How much of the content do you understand during the lecture?

Everything – Nothing	7%	50%	29%	14%	0%
Antworten: 14 Durchschnitt: 2.5					
Standardabweichung: 0.8	1	2	3	4	5

### 2.1.2 The speed of proceeding was...

Too fast – Too slow	14%	29%	50%	7%	0%
Antworten: 14 Durchschnitt: 2.5					
Standardabweichung: 0.8	1	2	3	4	5
2.1.3 Did the lecturer answer your questions pro	foundly?				
Always – Never	57%	29%	14%	0%	0%
Antworten: 14 Durchschnitt: 1.6					
Standardabweichung: 0.7	1	2	 3	1 4	5
2.1.4 Was the lecturer available for questions ou	tside of th	ne lecture?	,		
Always – Never	75%	8%	8%	8%	0%
Antworten: 12 Durchschnitt: 1.5					
Standardabweichung: 1.0	1	2	3	4	5
2.1.5 Could you understand the lecturer acoustic	cally?				
Very well – Not at all	71%	14%	14%	0%	0%
Antworten: 14 Durchschnitt: 1.4	-				
Standardabweichung: 0.7	1	2	3	4	5
3 Exercise Evaluation					
3.1 Please rate the quality of the exercises	that acco	ompanied	the lect	ure.	
3.1.1 How often did you attend the exercise clas	s?				

Always – Never	79%	21%	0%	0%	0%
Antworten: 14 Durchschnitt: 1.2					
Durchschnitt: 1.2 Standardabweichung: 0.4	1	2	3	4	5
3.1.2 Did the contents of the exercises match the	ne current	contents o	of the lect	ure?	
Lecture far ahead – Lecture far behind	0%	15%	77%	8%	0%

Lecture far anead – Lecture far benind	0 %	15 %	11 70	8 %	0 %
Antworten: 13 Durchschnitt: 2.9					
Standardabweichung: 0.5	1	2	3	4	5

#### 3.1.3 Have the exercise sheets been available on time?

Always – Never Antworten: 14	93 %	7%	0%	0%	0%
Durchschnitt: 1.1 Standardabweichung: 0.3	1	2	3	4	5
3.1.4 Judge the size of your exercise group!					
Too big – Too small	7~%	14%	79%	0%	0%
Antworten: 14 Durchschnitt: 2.7					
Standardabweichung: 0.6	1	2	3	4	5
3.1.5 Usually I thought the exercises were					
Too difficult – Very easy	7~%	29%	64%	0%	0%
Antworten: 14 Durchschnitt: 2.6					
Standardabweichung: 0.6	1	2	3	4	5
3.1.6 The difficulty of the exercises varied					
Greatly – Not at all	8%	31%	46%	8%	8%
Antworten: 13 Durchschnitt: 2.8					
Standardabweichung: 1.0	1	2	3	4	5

#### 4 Module Evaluation

#### 4.1 Please rate the module as a whole.

4.1.1 Did the course teach you helpful knowledge and abilities that will be useful in later work life?

Much - Nothing	29%	57%	7%	7%	0%
Antworten: 14 Durchschnitt: 1.9					
Standardabweichung: 0.8	1	2	3	4	5

## 4.1.2 In relation to the number of credit points awarded, is the amount of work to be done justified?

Too high – Too low	0%	29%	43%	14%	14%
Antworten: 14 Durchschnitt: 3.1					
Standardabweichung: 1.0	1	$\frac{1}{2}$	3	4	1 5

4.1.3 Do the obligatory course achievements support successful completion of the module?									
Yes – No	31%	23%	23%	23%	0%				
Antworten: 13 Durchschnitt: 2.4									
Standardabweichung: 1.1	1	2	3	4	5				
4.1.4 Do you think the obligatory course achieve	ements are	adequate	?						
Yes – No	50%	14%	21%	14%	0%				
Antworten: 14 Durchschnitt: 2.0		[							
Standardabweichung: 1.1	1	2	3	4	5				
4.1.5 Did your interest in this module's field of s	study chan	ge?							
Strongly inc. – Strongly dec.	36%	36%	29%	0%	0%				
Antworten: 14									
Standardabweichung: 0.8	1	2	3	4	5				
4.1.6 Would you recommend taking this module	to your b	est friend	?						
Yes – No	43%	7%	29%	14%	7%				
Antworten: 14		Г							
Standardabweichung: 1.3	1	2	3	4	5				

## 4.2 How much time did you spend on this module every week, including lecture, exercises, exercise tasks. . . ?



#### **5** Exercise Class Evaluation

#### 5.1 Please rate the exercise class you visited.

#### 5.1.1 Has the tutor been available for questions outside of the tutorial?



#### 5.1.2 Could you understand your tutor's corrections and gradings?

Always – Never	79%	14%	7%	0%	0%
Antworten: 14 Durchschnitt: 1.3					
Standardabweichung: 0.6	1	2	3	4	5

#### 5.1.3 Did the tutor manage to handle all the relevant content in the exercise class?

Always – Never	79%	21%	0%	0%	0%
Antworten: 14 Durchschnitt: 1.2					
Standardabweichung: 0.4	1	2	3	4	5

#### 5.1.4 Would you recommend visiting this exercise class?

Yes – No	79%	14%	0%	0%	7%
Antworten: 14 Durchschnitt: 1.4					
Standardabweichung: 1.0	1	2	3	4	5

#### 6 Comprehensive Rating

6.1 Please give an overall rating of the course on a scale from excellent (1) to very poor (6).



%	
%	
%	
%	
%	
%	

#### 7 Free Text Comments

#### 7.1 Which aspects of the course did you like?

Overall really good Specially the tutorials Great job both!

The content was very mathematical. I liked that.

topics

Nice overview of ML techniques in BioInf learning hands-on data analysis

Predictive Modelling Support Vector Machine Covered Machine learning and different statistical techniques that are used in modern day bioinformatics research - very informative

Slides and exercises

Concepts and methods are explained very well in the slides.

Lectures and Exercises helped in clearing every Aspect.

#### 7.2 What could be improved?

May be specific topics like ANOVA can have more examples.

more detailed things on each topic not big picture

For CS students more biology would be helpfull The exercises contain lots of R programming tasks, but it was said that the exam won't

More "why is this equation useful?" and motivations etc please

It felt like we were learning equations for the sake of learning equations; though in the end, those weren't even what were important enough for the exam.

Same with the exercises. If the exam is completely different from the exercises, they seem more like busy work than being helpful.

The speed can be reduced to some extent.

More exercises pertaining to the application side of machine learning & statistics, would be helpful.

Sometimes the lecture was too fast.

More detailed examples (Applications) should be added in the lecture.

Everything is the best.

#### 7.3 You can leave remarks and further feedback here.

The most time consuming part of the exercises were to get R to do what you want. You had to read a lot of, often quite bad, documentation for very different libraries.

It seemed to me every week that when we began with a review of last week, it was clear that even among the people that could answer even some of the questions, their understanding was shakey at best; yet every time we then continued to plow ahead at full speed.

Often it almost felt like the slides may have been somewhat specifically rigged so as to force us to come to the lecture, but then if you missed something because you were writing something or whatever, that information was basically lost to you forever.

Also one of the slides says "rot" instead of "red", by the way.

Also also I feel like the course title is a bit misleading since 90 % of the class was stats, and a bit of part II.

## Mandatory course achievements

50% of the possible points for the exercises are required in order to get the admission to write the exam at the end of the semester. The points are acquired by solving homework exercises in small groups and presenting the solutions within tutorial classes.

## Lecturers' Questionnaire

This part contains data provided by the lecturers.

### 1 Lecture metadata

Number of students in the lecture at the beginning of the semester	$15^{*}$
Number of students in the lecture at the end of the semester	15
Number of students participating in the exercise classes at the beginning of the semester	15
Number of students participating in the exercise classes at the end of the semester	15
Number of students that have registered for the exam	14**

\* 13 LSI, 2 MA INF \*\* 12 LSI, 2 MA INF

### 2 Exercise classes

Number of exercise classes	10
Average number of students per exercise class at the end of the semester	15

The students have been assigned to an exercise class in the following way: By putting their name into list on paper.

### 3 Helpful stuff

There has been **no** test exam.

Sample solutions for exercise tasks have been distributed.

### 4 Free text comments

#### 4.1 In your opinion, what aspects of the module worked well this semester?

- people appeared interested and achieved good results in exercises
- Most people attended the lecture regularly.

#### 4.2 What would you change if you were to offer this module again and why?

# 4.3 In case there have been obligatory course achievements: Please judge on their effectivity regarding the learning success of the students.

- All students achieved the required number of points from exercises.
- People attend exercise classes regularly.

#### 4.4 Further remarks

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