PUBLISHED COURSE ANALYSIS

Publishing date: 2022-02-22

A course analysis has been carried out and published by the course convener.

The Karlstad University evaluation tool is owned by the Professional Development Unit and is managed by the systems group for educational administration.

Applied Machine Learning, 7.5 ECTS cr. (DVGC27)
Course convener: Matthias Beckerle

Basic LADOK data	
Course Code:	DVGC27
Application Code:	37614
Semester:	HT-21
Start Week:	202145
End Week:	202202
Pace of Study:	50%
Form of Study:	Campus

Course Data	
Number of questionnaires answered:	7
Number of first registrations[1]:	23

Changes suggested in the course analysis of the previous course date:
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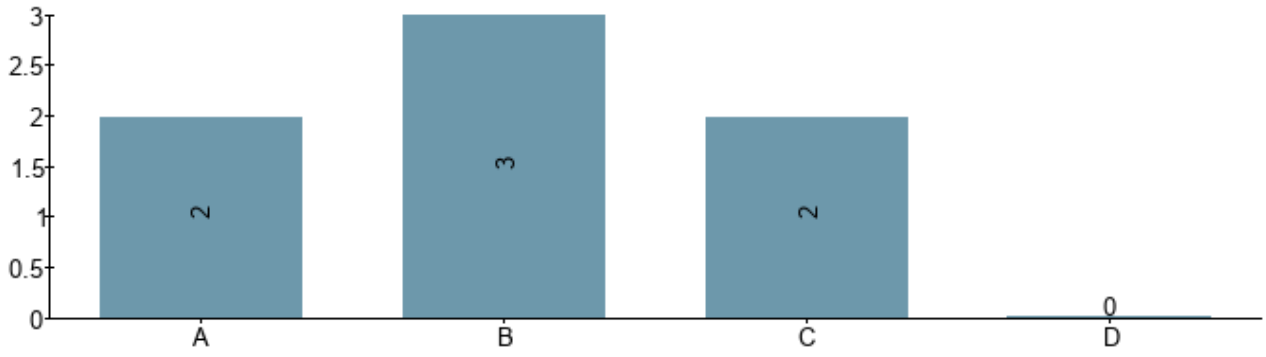
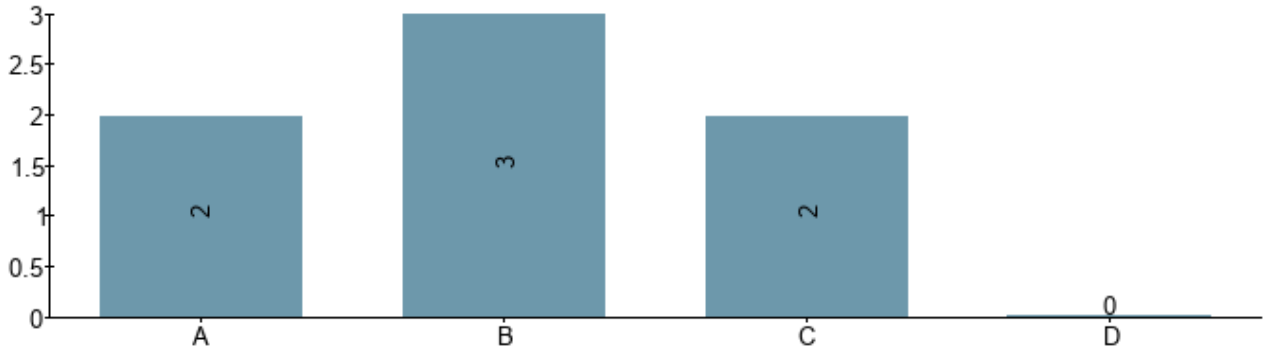
1. The contents and structure of the course has supported the achievement of the learning outcomes



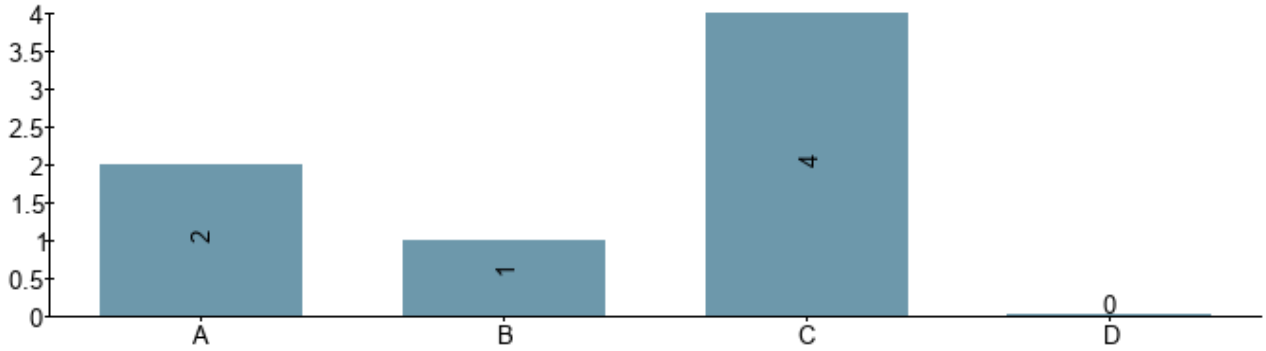
A) To a very large extent
B) To a large extent
C) To some extent
D) To a little extent or not at all

2.The assessments included in the course have given me the opportunity to demonstrate my achievement of the learning outcomes



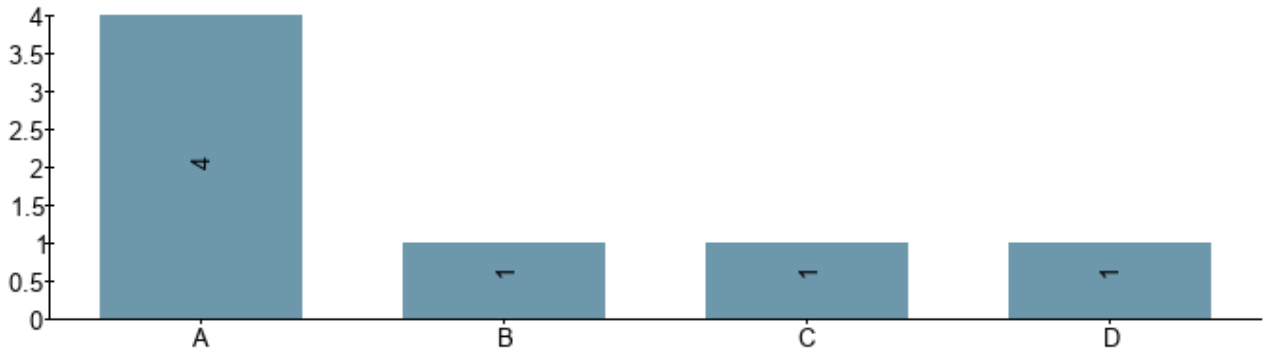
A) To a very large extent
B) To a large extent
C) To some extent
D) To a little extent or not at all

3. My workload (including scheduled activities and independent work) during the course has been



A) 40 hours per week or more (or 20 per week or more for courses given as half-time studies, 10 hours or more for cour
B) Between 30 and 39 hours per week (or between 15 and 19 hours for courses given as half-time studies, or between 8
C) Between 20 and 29 hours per week (or between 10 and 14 hours for courses given as half-time studies, or between 5
D) Less than 20 hours per week (or less than 10 hours per week for courses given as half-time studies, or less than 5 h

4. During the course, I have experienced the reception from teachers and other staff as professional



A) To a very large extent
B) To a large extent
C) To some extent
D) To a little extent or not at all

Analysis based on course evaluation, including comments fields. If information has been collected in other ways, it should also be analysed here. Any effect of joint courses should be commented

on.

I conduct each year my own analysis while the course is running. Since most students tend to not answer in this system, it feels that an analysis taken while the course is running is more meaningful. It also enables the students to actively influence their own learning experience what provides additional motivation.

I use Likert scale or continues scale questions. I asked about pre knowledge on different topics, perceived level of understanding regarding the different course topics, the amount of invested hours by the students, and the perceived pacing and amount of content in the course.

To provide two examples that I took mid-course:

How is the pacing of the lectures?
Much too slow: 0
a bit too slow: 1
about right: 11
a bit too fast: 4
much too fast: 1

Amount of content?
far too little: 0
could be a bit more: 2
about right: 12
a bit too much: 3
way too much: 1

If I find deficits or misunderstandings, I repeat parts of the content the next time or provide additional explanations to repeat basic knowledge for example math related.

In addition, I collect anonymous comments after most lectures and act on suggestions. One result was that I conducted all campus lectures hybrid (on campus and online) after the beginning and that I provided preview slides before each lecture.

Suggestions for changes to the next course date.

Overall, I am satisfied with how the course went. Multiple students wrote and told me personally that they enjoyed the course a lot. Even from last year, students told me that they are already using parts of the course practically and that it helped them a lot. Anonymous comments and emails after the lectures were very positive and encouraging.

Some technical problems regarding the assignments were due to a significant reduction in the capabilities of free Machine Learning resources that were utilized by the students this year, which led to some technical problems especially in the beginning. I am still advocating for an improved infrastructure that would allow students to have a more even playing field. Unfortunately, hardware was and is very expensive and it might stay like that for the next years what makes improvements in this part difficult.

After a colleague left KAU, I was also teaching the classical machine learning part this year, which needed a significant investment of my time to adjust course material and prepare lectures and assignments. I would like to further improve the material and the assignments to consider new developments in the ever-changing field of Deep - and classical Machine Learning.

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1. **Number of first registrations for a course:** First registration = the first time a student registers for a specific course.