PUBLISHED COURSE ANALYSIS

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 Data	
Course Code:	DVGC27	Number of questionnaires answered:	12
Application Code:	40251	Number of first registrations[1]:	31
Semester:	HT-22		
Start Week:	202245		
End Week:	202302		
Pace of Study:	50%		
Form of Study:	Campus		

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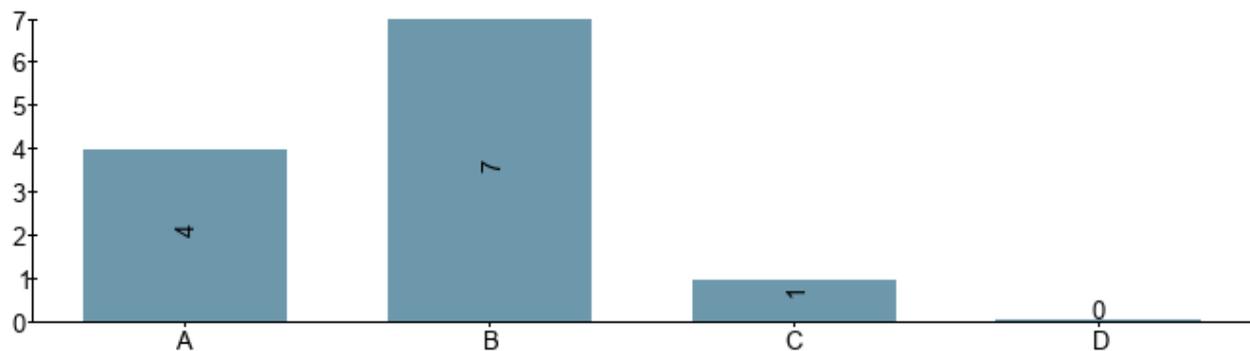
A) To a very large extent
B) To a large extent
C) To some extent
D) To a little extent or not at all

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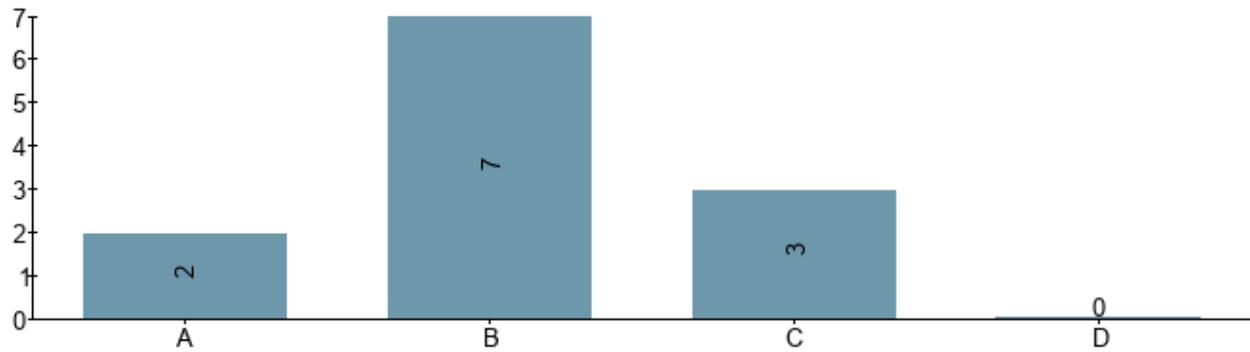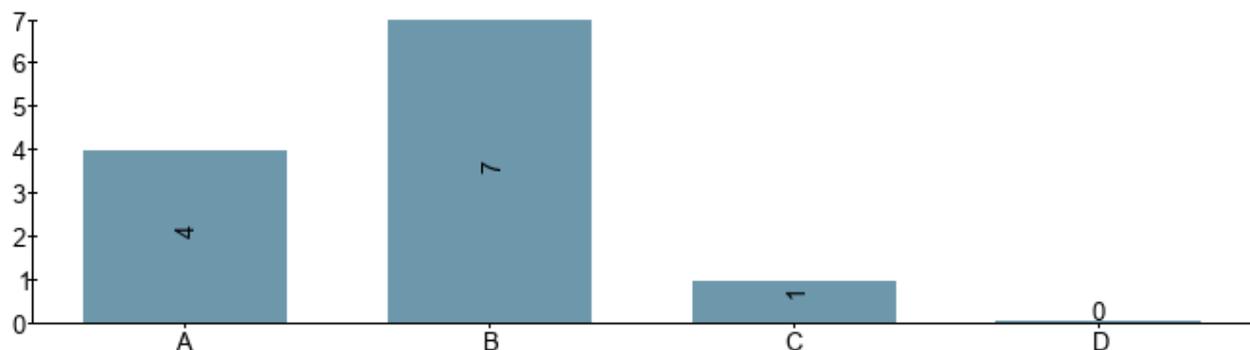

A) To a very large extent
B) To a large extent
C) To some extent
D) To a little extent or not at all

3. My workload (including scheduled activities and independent work) during the course has been
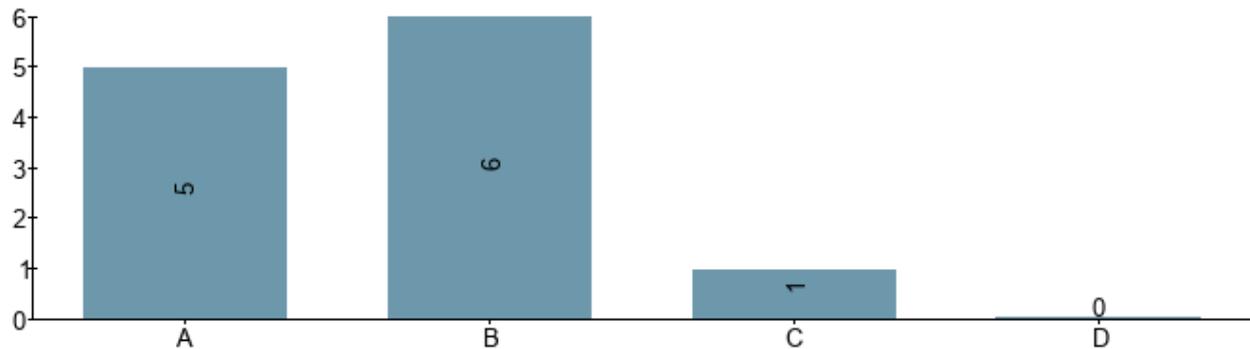
A) 40 hours per week or more (or 20 per week or more for courses given as half-time studies, 10 hours or more for cour
B) Between 30 and 39 hours per week (or between 15 and 19 hours for courses given as half-time studies, or between 8
C) Between 20 and 29 hours per week (or between 10 and 14 hours for 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 am generally very happy with the course and the feedback of the students was very positive this year.

In my Menti surveys, students were also very happy with the course but found it slightly to fast in the beginning while in the former years it was always rated as perfect. I was accelerating the content in the beginning to enable more complex assignments earlier and allow talking about and explaining new developments in ML/AI like chat GPT and AGI in general at the end. This was compensated with increased repetition in the course including additional Q&A sessions what was universal appreciated by the students.

The assignments, while being rated and commented on generally positively, had some constructive critique. I will further comment on that in next section.

Student comments:
- Its hard to know any other way to achieve what we achieved in this course in terms of knowledge since the subject has a steep learning curve and only having 1 course for it. I think it was great.
- It is a bit confusing until you understand all the parts and how they work together, you experience a "aha!" or "eureka" moment when you are a few lectures in and can see how everything is connected. In the end I think that the order we learned things in is very effective.
- One of the most ambitous teachers i ever had, so a very big props to that!
- The teacher was great and it was refreshing to not have the typical "school" feeling of the class but one that felt a lot closer to the real world and the industry.
- Great teacher who keeps the lectures interesting!
- Im not sure exactly what to change or not but wanted to give my appreciation for the effort that has been put in for this class. Great job!
- Generally a good mix of theory and practice. I liked that we got to see examples of real-world applications(of the theory) to put everything into context.
- The lectures were good and informative, the amount of content reasonable and the laborations were nice as well. I appriciated the reviews of the course terminology during the lectures (menti). It made it much more easier to sort the material and know what needed more focus before the exam. The content (lecture material) could have been more structured. It was difficult finding more detailed information about some of the topics. Overall this is one of my favourite courses.
- You can see the passion and dedicated hard work put into making the course the best it can be despite the large and ever changing subject. For us students it is inspiring and motivating to see.
- The structure of the course i think was really good. By constantly iterating over and over on the basics and new concepts is a great way of delivering the information.
- The lectures were great! It was easy to follow their structures and Matthias could explain the content in multiple ways which made it easier to really understand the concepts. It is a hard subject with a lot of information but I think Matthias managed it excellent.

Suggestions for changes to the next course date.

The biggest improvement should be possible with the assignments but only if more resources are available (hardware and people).

Related comments:
- I would recommend if possible to add some laboration assistance since this is one of the harder courses when it comes to grasping the content provided from lectures.
- Yeah I think this would be a top score if we knew better in advance about the presenting the questions part we did. It probably stems from me expecting it not to be as serious for the grade but more as a learning opportunity compared to what it was. I think it was mainly knowing that us answering questions individually compared to groupwise might have tripped some people up(me) in terms of preparation for it.

I will improve on communicating more clearly about the part where I ask questions regarding the assignments in the class. While some students felt uncomfortable to answer in front of an audience, it provided valuable repetition and incentive to learn all the content of the assignments and allows to identify students who relied on their class mates instead of doing the assignments.

I would still like to improve the situation regarding hardware/GPUs for the students to enable on-campus assignments and even more realistic/interesting tasks that unfortunately also require more resources. On-campus labs would enable real-time feedback and direct support for the students. I also hope that the more often the course repeats, it gets easier to find personal that can help with that endeavor.

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