

Course Report: Introduction to Multivariate Statistics

Semester: Spring 2021

Prepared by Professor James Sallis on 2021.05.20

Registered students: 11

Answering frequency: 7/11 (64%)

Date: 2021-04-02

SUMMARY

The course was run online via ZOOM. This, of course, had both advantages and disadvantages. Following versions of the course will integrate these changes based on the feedback and my experience:

1. Upload slides and other materials earlier. They were uploaded prior to lectures, however, I will increase this by a week.
2. This year there were more technical issues than usual. Next time I will pre-test the analyses prior to each class.
3. I have created videos for some of the techniques. I will create videos for all the techniques as well as videos for how to get SPSS and LISREL running. This will save in-class time.
4. Create small group exercises on each technique and then have short reflective discussions about how the technique could be used within each student's PhD thesis.

Results of the course evaluation

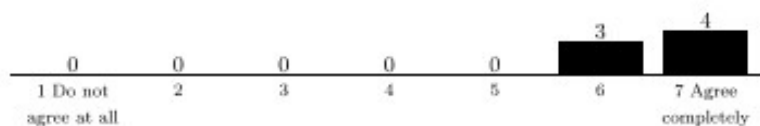


SAMMANSTÄLLNING AV COURSE EVALUATION FOR INTRODUCTION TO MULTIVARIATE STATISTICS (FHS0024)

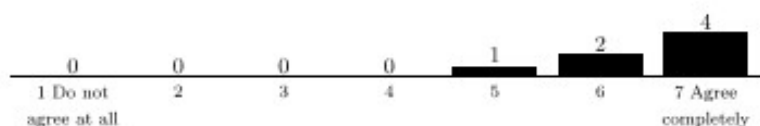
Sammanställt	2021-04-02
Antal svar	7
Tillgänglig	2021-03-19 – 2021-04-02
Kontaktperson	Golondrian Janke (golondrian.janke@fek.uu.se), verksam vid Företagsekonomiska institutionen
Kurs	Introduction to Multivariate Statistics (FHS0024)
Program	Övrigt, termin vt21
Kursen pågår	2021-03-04 – 2021-03-19

COURSE EVALUATION 2021

1. I am pleased with the course as a whole



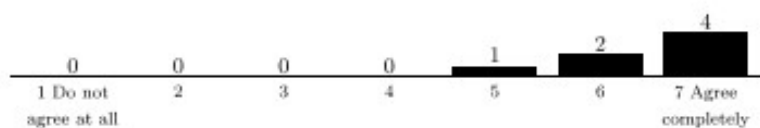
2. The course has contributed positively to my development as a researcher



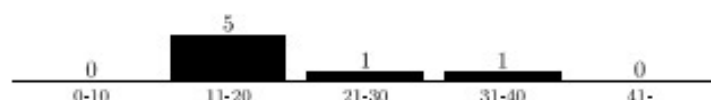
3. The course has contributed positively to the development of my PhD thesis



4. In my opinion the course has succeeded with the goals of the course



5. On average, I have spent the following number of hours per week on the course



6. How do you judge your own participation?



7. Why did you apply to this course?

- Heard a lot of good things about James and his course, and I needed a quant course for my PhD education (I do qualitative). But I really enjoyed the course freshened up my spss skills and found t-tests, SEM and cluster analysis really inspiring.
- To develop my skills in quantitative method
- 1. It was mandatory 2. To refresh my knowledge in statistical methods.
- I was recommended by my supervisors to get enrolled in this course with a goal of having a good foundation in multivariate statistics. It is a prerequisite for my thesis.
- Two reasons: 1. I need to develop my understanding of quantitative analysis so that I can understand, evaluate and value such research 2. (the not so engaged reason): A course in quantitative analysis is required in the curriculum...
- To understand quantitative analysis techniques and their assumptions. To improve my ability to perform, interpret and review quantitative analysis.
- I needed the basics of quant methods

8. What were the positive features of the course?

- The hands on pragmatic vibe to it. Rules of thumb are really helpful, and although we got the reasoning and the idea behind things, we explored how things are done in reality. The insights from publication processes and James' overall academic experiences added a lot to get the context as well. Thanks James :)
- I also liked the zoom meetings a lot. It felt I was super focused, didn't need to travel so it never felt like a burden and the discussions and questions were great.
- Practice and visualisation
- The teacher was great. To have additional video tutorials is a great feature.
- Since it was offered via Zoom, it gave me a feeling of one-to-one discussion with the teacher. It was really helpful for me to follow the SPSS program running on my own laptop screen. Following professor's instruction I could practice myself simultaneously. Moreover, online course option has saved my travel time and let me focus on my research time in those weeks at the same time. I have found this online feature of this course very convenient. I never felt that I was missing physical network building option. Because for me, network building process is completely individual's performance driven. And it is possible on online platform. Last but not least, the course teacher showed his extreme effort on this course to make this difficult course easily understandable in a very pragmatic way. He is very resourceful and helpful for the students from any institution.

- I particularly appreciated the overview approach that allowed the students to get a basic understanding of several methods but also that we were able to actually try them during the course in a very pragmatic way. I also appreciated the digital set-up and thought it worked very well. For me, given the reasons for taking the course I have given above, this set-up makes the course very efficient and still valuable.
- The applied focus, that we got to run the analyses in parallel with you. The recorded videos complemented the lectures. It worked rather well to do the course via Zoom and saved some money and lots of travel time. Perhaps next year you could schedule the first week face-to-face and the other two via Zoom.
- The teacher is engaging. It provides a good understanding of how to use SPSS and partly LISREL. It is practice oriented and complements the SUBS quant course by Rickard.

9. Which features were not so good?

- I would appreciate if we got a bit more time to work with our own data during the lectures/seminars or have more time to test things we go through in the course.
- Digital format is a bit challenging but this is what we have to deal with right now.
- I always got very tired and had a hard time to listen by the end of the day.
- In a few occasions, the given examples/data did not work. Therefore, professor had to move on with another chapter and resolved the previous problem in the next session. Sometimes it was a bit annoying to keep pace with it, but I can completely understand the complexity of this statistics course. So, it is ignoble as long as I understood the whole thing.
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- Lecture slides were published just before each lecture. While I really appreciate that you worked hard on updating the slides before the lectures, it would have facilitated my preparations to have a draft version of the lecture slides available in advance.)
- When going through the programs (SPSS but even more LISREL) I would slow down a bit to give everyone time to run the examples and have a clearer understanding of how the programs work.

10. Which changes would you like to suggest?

- To get some more time to test things. The pace is quite hectic and I get it since there are a lot of things we need to go through. But maybe consider a bit more time for testing :)
- More days with more practical exercises.
- I think it is good as it is.
- I have two suggestions to make this course more integrated in our thesis writing process:
 1. Group discussion on the application of any technique or the most frequently used one during PhD dissertation writing, so students could reflect on it considering own thesis.
 2. A follow-up session/workshop for 3rd yr students or onward where students will have their own research data in hand to discuss on it and solve any problem they are facing by the help of an expert.
- Time permitting, maybe add a 'try and ask' session by the end of each session where the students on their own can try what we have just done in the session (in SPSS, LISREL). Going through it as was done during the course was excellent but adding a session allowing for a bit of reflection and trial right after the joint session might be useful. I think this would also bring questions to the surface that may not surface unless time for reflection is given.



- To minimize time spent on installing, downloading and waiting during lectures: Record videos on installing SPSS and LISREL and downloading the data files needed, and ask the students to try to fix that in advance with support from the videos.
- It's good that we haven't had a huge workload, but maybe small assignments (three maybe, once for each week) may help getting even more "accustomed" to the programs and develop a slightly deeper understanding of what to do and how to present it. Zoom is surely a perfect tool to run this course, with the possibility to share screen and run together with the Professor the different analyses. When possible, it would be nice to be able to offer something a bit more hybrid (e.g., running the same also in class, with those who want participating IRL with their pcs, to preserve the human interaction aspect). I would also slow down a bit when using LISREL, which is much more complex than SPSS and requires more time to understand how to run different functions.