Course Analysis – AG2126 (Period 3, 2019-2020)

Course analysis carried out by Andrew Karvonen (apkar@kth.se) on 2020-06-29

Course Data

Course title
Theory of Science and Research Methodology for Planning and Design

Course number
AG2126

Course credits and points distributed on exam forms
7.5 credits

When the course was conducted
2019-2020, Period 3

Course coordinator and other teachers
Andrew Karvonen (course responsible, teacher)
Åsa Callmer (coordinator, teacher)
Marcus Adolfson (teacher)
Greger Henriksson (teacher)
Amanda Winter (teacher)

Number of registered students
84

Course Design

Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.

This was my first year as course responsible and for the most part, I followed the course design and structure as developed by Jonathan Metzger in previous years. All of the teachers were new to the course except for Greger Henriksson who has taught on the course for several years and provided continuity and tips to the other teachers. The majority of the guest lecturers participated in previous years and were familiar with the intended learning outcomes. The course examination consisted of the following:

1. PRO1 – Individual project, 4.5 credits, grade scale: A, B, C, D, E, FX, F
2. SEM1 – Contributions to seminars and group project, 3.0 credits, grade scale: P, F

The course consisted of lectures, seminars, a group project, and an individual project. Scheduled learning activities consisted of the following:

Activity	Hours
Lectures	23
Seminars	4
Group project	11
Individual project	13
TOTAL	51

Student study time was estimated as follows:

Activity	Hours
Reading preparation for lectures and seminars	60
Group project work	30
Individual project work	60
TOTAL	150

THE STUDENT'S WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If there is a significant deviation from the expected, what can be the reason?

The estimated workload for the course corresponds to the 200 hours for a 7.5 credit course. On average, the students reported that they spent 13 hours per week over the 9 weeks. This equates to 117 hours in total which is significantly lower than the estimated 200 hours. It is unclear if the students under-reported their time devoted to the course or if the workload outside of the classroom needs to be increased.

THE STUDENTS' RESULTS

How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

The distribution of final grades was as follows:

Grade	Students
A	24 (29%)
B	34 (40%)
C	20 (24%)
D	6 (7%)
E	0 (0%)
F	0 (0%)

There are no course evaluations available for previous years to compare with this year's statistics. As a whole, student performance followed an expected distribution for a Master's course with slightly more Bs than As and Cs. However, the number of students who received a D was higher than expected and suggests that several students did not sufficiently engage with the course. It is possible that these students did not recognise the value of the course and/or prioritised other courses.

OVERALL IMPRESSION OF THE LEARNING ENVIRONMENT

What is your overall impression of the learning environment in the polar diagrams, for example in terms of the students' experience of meaningfulness, comprehensibility and manageability? If there are significant differences between different groups of students, what can be the reason?

The students had a fairly positive impression of the learning environment. They appreciated the clear structure of the course and found most of the lectures and seminars to be relevant and stimulating. The large number of students in the course (84) tended to create a more impersonal atmosphere, although this was balanced to some extent with the smaller discussion groups (21-22).

There were some challenges with the course schedule as a whole that could be resolved in future years with more effective planning.

ANALYSIS OF THE LEARNING ENVIRONMENT

Can you identify some stronger or weaker areas of the learning environment in the polar diagram - or in the response to each statement - respectively? Do they have an explanation?

The majority of student feedback about the course was positive. The following negative feedback was identified:

- Some students felt a lack of togetherness in the course. This was in part due to the large size of the course and also in combining students from different Master's programmes.
- Students said that they would appreciate more regular feedback on their work. They received verbal and written feedback in the seminar on Theory of Science (Week 6), group project supervision meetings (Week 7), individual project supervision meetings (Week 9), individual project presentations (Week 10), and on all submitted assignments. It is not clear where additional feedback could be provided.
- Several students suggested that it would be helpful to provide concrete examples and practice to make direct connections between theoretical ideas and planning/design activities.

ANSWERS TO OPEN QUESTIONS

What emerges in the students' answers to the open questions? Is there any good advice to future course participants that you want to pass on?

The students provided several constructive critiques of the course in the student evaluations as well as throughout the course:

- Some of the lectures were too basic or did not engage the students sufficiently. Of particular note is that some of the guest lectures included content that was recycled from undergraduate courses.
- The design students felt that the course was not relevant to their studies. This proved to be disruptive to the course as a whole.
- Several of the readings, particularly those on theory of science, were quite challenging for the students.
- The students requested more breaks during the sessions.
- The students commented that the environmental conditions in the lounge (the main room for teaching) were detrimental to their learning. Several teachers have noted that the audio and visual equipment is deficient for large class teaching and the windows make it difficult to see the screen.

PRIORITY COURSE DEVELOPMENT

What aspects of the course should primarily be developed? How could these aspects be developed in the short or long term?

Based on the student evaluations and feedback from the teachers, I will make the following changes for future offerings:

- I will review and update the required readings, specifically for the Theory of Science seminar. I will also assign specific readings for each lecture. Previously the students were provided with a list of suggested readings and were expected to decide on which ones were

most relevant to their interests. Instead, I will provide a list of required and optional readings.

- I will review and update the instructions for the group project and the individual assignment. This will help to avoid confusion and to ensure that the expectations for these projects are understood by all students.
- I will review the course schedule as a whole to ensure that there is sufficient time for all activities.
- At the beginning of the course, I will clearly state that this is a course of Theory of Science rather than Theory of Design. The word 'design' in the course title creates confusion and false expectations for the design students. I will also reinforce that a scientific approach to research is most relevant to particular research outputs and will have less relevance to design theses. Finally, I will reinforce that the course is focused on thinking about and conducting research on planning and design rather than on specific topics. I got a sense that some students were expecting to engage with built environment topics rather than the processes of researching them.
- I will request audio/visual upgrades to the lounge or request a different classroom for the lectures.

Course Evaluation Summary

Course	AG2126 Theory of Science & Research Methodology for Planning & Design
Academic Year	2019-2020 Period 3
Course Responsible	Andrew Karvonen
Teachers	Andrew Karvonen, Åsa Callmer, Markus Adolphson, Greger Henriksson, Amanda Winter
Date of Evaluation	24 February 2020
Registered students	84
Surveys completed	33
Completion Rate %	39

On average how many hours/week did you work with the course (including scheduled hours)?
Mean 13, SD 3.8, Response Rate 52%

Statements

Disagree	Mostly agree	Neither agree nor disagree	Mostly agree	Agree
1	2	3	4	5

		Mean	*SD*	*Response Rate (%)*
1	The intended learning outcomes helped me to understand what I was expected to achieve.	4.2	0.7	94
2	I worked with interesting issues.	3.9	0.8	100
3	I regularly spent time to reflect on what I learned.	3.5	1.1	100
4	I explored parts of the subject on my own.	4.2	0.7	100
5	My background knowledge was sufficient to follow the course.	4.4	0.8	100
6	I felt togetherness with others on the course.	3.7	1.2	100
7	I received regular feedback that helped me to see my progress.	3.5	1.2	97
8	The course was challenging in a stimulating way.	3.8	0.9	100
9	I had opportunities to choose what to do.	4.1	0.7	100
10	I understood what the teachers were talking about.	4.2	0.6	100
11	Understanding of key concepts had high priority.	4.1	1.0	79
12	I was able to practice and receive feedback without being graded.	4.1	1.0	97
13	The course activities helped me to achieve the intended learning outcomes efficiently.	4.0	0.6	100
14	I was able to learn by collaborating and discussing with others.	4.2	1.0	100
15	The atmosphere on the course was open and inclusive.	4.4	0.9	100
16	I was able to learn in a way that suited me.	4.1	0.8	100
17	I understood how the course was organized and what I was expected to do.	4.3	0.8	97
18	I was able to learn from concrete examples that I could relate to.	3.6	1.0	100
19	I was able to get support if I needed it.	4.3	0.6	97
20	The assessment on the course was fair and honest	4.1	0.9	82

21	I was able to learn by trying out my own ideas.	4.3	0.7	97%
22	I understood what I was expected to learn in order to obtain a certain grade.	4.0	1.2	96

Open Questions

Question 1: What was the best aspect of the course? (Response Rate 55%)

- The clear structure, especially by Andy, clear blocks and schedule. That the group work was pass/fail and the individual was graded.
- Understanding how research works and how knowledge is produced.
- The best aspect of the course was the manner that it pushes me to think in a philosophical aspect in substantial areas of my study area. It reminds me urban planning and design is not just focused on practical world.
- Lectures started at 10, so the morning rush on the subway and bike lanes could be avoided.
- I felt I learned a lot about research, I didn't have much background on it.
- Somehow there was a will to make the course interesting and engaging.
- I think it is a good practice to write thesis on our own after group working. It can help me learn a lot from the course.
- The lectures from different fields/disciplines was really interesting.
- Having many different lectures that showed different perspectives.
- The part where we could work by ourselves.
- Practicals through Happyville and research proposal.
- Group discussion and seminar, help me communicate ideas of each other free.
- Reading notes, group project.
- The lectures were good, interesting and useful. The Happyville project was actually quite boring, but I feel that it was a good exercise in creating research questions. That it was an individual project in the end. It was great not to have yet another group project. That the exercises in the beginning were not graded. That took away some stress and pressure.
- The stimulating group discussions were definitely a refreshing highlight fro me personally. Also, Andy's Powerpoints!
- I enjoyed lectures that were more practical (or connecting TSRM with practice).
- Writing the research proposal and digging into interesting aspects for oneself. Organisation of the course was excellent, well done!
- Each segment is clear and forms a consistent theme.

Question 2: What would you suggest to improve? (Response Rate 55%)

- Some of the lecturers. Should have been a bit more advanced/new knowledge. Mention early in the course that the students should start thinking of a project for the individual assignment.
- Generally, I would suggest that courses are not run paralleled. It would be better if we had one course at the time in order to fully focus our learning in one direction.
- It was not very clear what we must do for the group project examination seminar. It was not clear that al the groups must be in the room from the beginning. A schedule declared for the day but we did not follow it. So it caused problems for me. In some aspects the people that might not be familiar with the system should be considered more and the announcement must be more clear.
- Distribute the reading, choose more relevant readings. Some of the lectures were not relevant. Poor prepration for design thesis and design research.
- Include more lecturers for the design students, otherwise it gets really demotivating.
- Groups for Happyville could be smaller.
- That the lectures are related to the thesis opportunities we have as students. Some of them were too basic for the level (for example, Lecture 8).

- The readings in the beginning of the course are difficult to understand. I know the philosophic ideas/terms are helpful, but they can be explained in an easier way.
- Maybe raise the level. Most times it was repetition for me which demotivated me to do work and maybe provide more hands on tools.
- Literature more focused on urban planning and less philosophic. Shorter concepts not related to planning and more pragmatic approach to research methodologies.
- Remember the importance of breaks, we won't stay focused for an hour of just listening. And don't give us work over the break, we need to rest our heads, catch up, stretch and take some air.
- The big groups for the Happyville project (ended up splitting the assignment, not very well-worked as a whole, maybe better to do pairs/group of 3 for one proposal, but group work doesnät help individual improvement). Give red marks/written comments on the Happyville paper before the research proposal project as improvement feedback. Mix of literature/lectures (suggested readings on methods (how to do, especially for more innovative research methods, not just reflexive/theoretical).
- Some context such as writing. Maybe combine these with individual work is better.
- The literature seminar, the texts for the seminar were not so good, they didn't bring any clarity burt rather made everything even more messy, but perhaps that was the purpose. A lot of readings were presented at the start of the course, but there were no real incentives of actually reading them.
- Some of the lectures weren't relevant or helpful enough for the course.
- For design students the course was not so useful/practical. Individual research question is interesting to practice, but has no use for design students. Mandatory reading was a mess. A lot of work in one week for basic concepts. Could it be reworked for faster abstracts?
- It would be great to have access to literature and reading instructions before the course actually starts to have more time for the readings! Increease the level of lectures as debate, feedback, scientific writing should not be completely new to master's students.
- At the beginning of each lecture/workshop, it will be better if there comes to a short introduction of the relationship between this lecture and the whole course.

Question 3: What advice would you like to give to future participants? (Response Rate 36%)

- Start early to think of the subject for the individual assignment.
- Take advantage of the availability of teachers so as to get as much support as possible especially if you are struggling.
- Don't read the readings in detail. Don't go to all of the lectures, look up the person and if you're interested in what they do.
- Engage in the course, it's fun.
- It is important to try to get key concepts.
- Read the articles, it is interesting even though it does not seem so. But it will help you to explain why you see things like you do.
- Read the papers in advance, with enough time to reflect on their contents.
- Mind-map ideas and take inspirational notes.
- Start early with the readings for the seminar.
- Be sure to leran the basics of how to find references and relevant materials and also how to organise them. This would help save precious time during thesis.
- Start reading for the Theory of Science seminar as early as possible.
- Try to combine your own experience and knowledge with the course. Use your knowledge!

Question 4: Is there anything else you would like to add? (Response Rate 21%)

- For being a methods course, it was actually quite good (apart from some lecturers).

- There were things I already knew but wanted to learn in detail but were skipped since there wasn't a lot of time.
- It would be cool to add something about design for design thesis students.
- More urban planning and design research examples.
- We sometimes had organizational troubles where the lounge is suddently booked and we were not informed in advance. Also, tables that are randomly removed, reorganized. Really lacking curtains in this space.
- Offering a second option for the final assignment that respects the different thesis/projects for the design students next year (they do not do a traditional research-based thesis).
- When we had the supervision, if we have the chance to choose the teachers from different fields, it will be better.