

ATLAS
EduCo Semester Documentation
Semester 1, 2016, Class of 2019

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Introduction

This EduCo Semester Documentation consists of the evaluations of the courses, the project, and the mentors of students, throughout Semester 1, for the Class of 2019. Information was collected through the [EduCo 2019 Semester Survey](#), which is based on the “[EduCo criteria](#)”. This survey consisted of a set of statements for each topic. The students were asked to rate them on a scale from 1 to 5; with 1 being the most negative attribution (never, very poor) and 5 the most positive attribution (always, very good). There was a total of 37 respondents (out of a possible 49), and the averages and standard deviation of these results were used in this evaluation. After the set of statements with the 1 to 5 scale, students had the opportunity to give open feedback, which is evaluated in the *Discussion* section of each evaluation.

All the evaluations have a similar structure; they start with a short summary of what occurred in the course/project/semester, followed by the EduCo 2019 Semester Survey results for the set of statements, and a discussion based on these results as well as the open feedback and other feedback from students throughout the semester. In this discussion, strengths and weaknesses are highlighted. Then solutions to problems are suggested, and the last section describes the agreements that were made with the teacher/coordinator during a meeting.

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Engineering: Mathematics & Physics

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Semester, Year: Semester 1, 2016/17, Class of 2019

Teacher(s): Ruud van Damme and Jasper Homminga

Summary of the course

The course consisted of both mathematics and physics topics. The mathematics topics covered *Ordinary Differential Equations (ODE's)*, *Linear Algebra*, and *Modelling*, while in physics the topics *Movement*, *Newtonian Mechanics*, *Momentum* and *Energy* were studied. For this, we used information made available in lectures, discussion sessions, handouts on Blackboard, and the book *Young & Freedman, University Physics 14th edition*. At the start of the semester Tuesdays were reserved for students to sign up in groups of 3 or 4 for challenges. Thursdays involved Ruud and Jasper having discussion sessions with around 8 students at a time to introduce the course material, while the rest of the class would work through the Skilldrills questions with the help of student assistants. Fridays had two hours reserved for self study using the Skilldrills again, and with students assistants walking around to assist.

After some discontent with the course's structure, one of week 8's lectures became a feedback session, after which there was a change in the execution of the engineering course (the first day to experience this new layout was November 22 2016). Now Thursday mornings were used for group and individual challenges, and every student was advised to do a minimum of one group challenge and one individual challenge (provided by email once monthly) every month. Discussion sessions were replaced by group lectures on Tuesdays to introduce new topics. Every topic was introduced with a lecture followed by optional group discussions with examples. The optional group discussions became time slots for the engineering deepenings/electives after a few weeks (*ODE's* for Mathematics and *Stresses and Strains* for Physics). Fridays were still used for self study with student assistants. The first individual challenge was presented in October, and November presented the second individual challenge about *Newtonian Laws* and *Energy*. In December there was the third individual challenge about *Momentum*, *ODE's*, and *Modelling*. For the third individual challenge, we were given four days instead of four hours to finish it. The last lecture in December was a wrap-up lecture with a summary of the complete semester. A detailed description of the learning goals and an overview of the chapters of the book that were discussed can be found in the [syllabus of this semester](#).

EduCo semester survey: Physics

n=37, scale: 1-5

EduCo criterion	Mean	SD
1. When possible, this course conveys both theoretical and applied knowledge	3.4	1.1
2. This course features both group and individual work	4.3	0.7
3. During the course, students are provided with a sufficient level of guidance	3.3	1.2
4. For this course, there is a variety of evidence possibilities	3.0	1.1
5. This course facilitates personalisation	3.2	1.0

6. This course relates to the semester project and the other courses	2.8	1.2
7. This course allows for an even distribution of the workload over time	3.8	1.1
8. The communication about learning goals, schedule, deadlines and possibilities for evidence is clear.	3.2	1.0
9. Feedback given by the teacher(s) is complete, useful and fast	2.7	1.1
10. The teacher can be reached for feedback from the students and the students' feedback is considered	3.8	1.0
11. The (weekly) structure of the course Engineering was good	3.3	1.1

EduCo semester survey: Mathematics

n=37, scale: 1-5

EduCo criterion	mean	SD
1. When possible, this course conveys both theoretical and applied knowledge	3.4	1.0
2. This course features both group and individual work	4.0	0.6
3. During the course, students are provided with a sufficient level of guidance	3.3	1.2
4. For this course, there is a variety of evidence possibilities	3.1	1.1
5. This course facilitates personalisation	3.1	0.9
6. This course relates to the semester project and the other courses	2.8	1.1
7. This course allows for an even distribution of the workload over time	3.7	1.0
8. The communication about learning goals, schedule, deadlines and possibilities for evidence is clear.	3.1	0.8
9. Feedback given by the teacher(s) is complete, useful and fast	3.0	1.1
10. The teacher can be reached for feedback from the students and the students' feedback is considered	3.8	0.9

Discussion

At the beginning of the semester there were discussion sessions that students really liked. After three weeks, the discussion sessions stopped, causing confusion among students and a lot of them had trouble following the schedule. On October 25 2016, students and teachers had a feedback session together, which resulted in a new structure. Most students liked this, but they missed the group discussions.

This was the first year where mathematics and physics were combined into one class of *Engineering*. Even though the lectures made clear that there was a connection between the two, students were struggling to tackle the exercises. The focus seemed to be more on mathematics, which made it hard for students to fulfill their learning goals for physics. Although there is a strong connection between

the two, it would be better for students if there was a clear balance between mathematics and physics in the engineering domain.

The challenges were useful for both practicing theory and gathering evidence, but at the start of the year were quite chaotic due to the large number of students signing up each week. This was solved successfully by the introduction of individual challenges in October. There was a nice balance between group and individual assignments and a good distribution of the workload. However, students were not aware of any evidence possibilities outside of the practical challenges and the feedback was not always quick to arrive.

Suggestions to improve the course

More clarity:

- Each topic to have an introductory lecture
- Bring back the discussion sessions with groups of 8-10 students, including examples
- Distinguish Engineering in the calendar between: lectures, challenges, and self-study with teaching assistants
- Provide office hours in the calendar
- Clear and balanced distinguishment between mathematics and physics
- More micro-lectures (videos) to support the students in their learning

Evidence:

- More clarity about evidence possibilities besides challenges
- Feedback given in time, preferably within two weeks

Agreements

Jasper collected our feedback and will discuss it with Ruud when he is back from sick leave. However in the start of Semester 2 we have already seen the implementation of office hours in the calendar, and a greater variety of evidence of possibilities (with the *-exercises).

Social Science: Psychology

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Semester, Year: Semester 1, 2016/17, Class of 2019

Teacher(s): Ingrid Nota and Elze Ufkes

Summary of the course

In this course, a foundation in social sciences, and more specifically psychology, was laid. The intention was to give students a broad understanding of the social science psychology and how the many fields interact. This was done through means of class lectures, a research project, and the newly instated *Proof of Concept*.

The class lectures were student-organized lectures (in groups of 4), which covered one or two chapters of *Social Psychology and Human Nature*. Every student was expected to read the chapters in advance, so that during the lecture a wrap up of the chapters was given, followed by students having an in-depth discussion led by the students in charge that week. In the research project, students (in groups of 5) “replicated” (with slight to major modifications) a published psychology research experiment. This paper was then reviewed by the editorial board which was lead by students and under the supervision of Elze and Ingrid. They gathered peer reviews from other students and used them to support their verdict. This editorial board eventually published the papers in the Atlas Journal of Social Psychology. The last method is the Proof of Concept; this is a newly instated exercise, which at its essence is a research paper written in 4 hours. The teachers provide us with a very wide range of topics and give us the freedom to play around with those topics and make them our own. The emphasis was laid on getting used to academic writing and looking for sources rather than finishing an established paper. We had to do a minimum of four of these assignments during the semester. The learning goals can be found in the appendix. They boil down to three main goals; Understanding what fields exist and how these interact; Being able to understand and apply theory from social science; Being able to judge other people's work and research.

EduCo semester survey: Psychology

n=37, scale: 1-5

EduCo criterion	Mean	SD
1. When possible, this course conveys both theoretical and applied knowledge	3.8	0.9
2. This course features both group and individual work	4.1	0.7
3. During the course, students are provided with a sufficient level of guidance	3.4	1.0
4. For this course, there is a variety of evidence possibilities	3.8	1.0
5. This course facilitates personalisation	3.7	1.0
6. This course relates to the semester project and the other courses	3.6	1.0
7. This course allows for an even distribution of the workload over time	3.7	0.9
8. The communication about learning goals, schedule, deadlines and possibilities for evidence	3.6	0.8

is clear.		
9. Feedback given by the teacher(s) is complete, useful and fast	3.0	1.1
10. The teacher can be reached for feedback from the students and the students' feedback is considered	3.6	0.7
11. The Proof of Concepts helped in reaching learning goals	3.9	1.0
12. The feedback from the Proof of Concepts helped for improvements in other assignments	3.6	1.2
13. The Proof of Concepts offered enough variety in assignments	4.2	0.7
14. The Psychology Project was a valuable learning experience	4.2	0.8
15. The Project offered sufficient opportunities to gather feedback for other domains and learning lines	3.5	0.8

Discussion

Lectures

There were mixed feelings with regards to the lectures. The biggest point was that the lectures and discussions were often of a low quality in terms of the depth they went into. This was especially due to students having to figure out for themselves how to give these presentations without knowing what to expect. The EduCo, together with the teachers, found that the control mechanism of these lectures was not functional because groups did not send in lecture slides and scripts to teachers beforehand – as they were supposed to. We discussed a way to improve this and saw that the quality of both the lectures and the discussions improved over the course of the semester. However, a point that was raised by both students and teachers was that discussions very rarely included scientific theories from psychology, and more personal opinions. This is something that would need some improvement in future. Students were reminded to read the relevant chapters beforehand, but this was usually only done by a few students. Finding a better way to persuade students to prepare for the topics would certainly be beneficial to the course.

Proof of Concepts

The Proof of Concepts were received very well. Many people enjoyed the assignments and pointed out that these were valuable learning experiences. They added a layer of depth to the lectures and the course as a whole. The only major discussion point was that feedback was often very slow to arrive. Some students received feedback on their first Proof of Concept while working on their third or fourth Proof of Concept! The teachers pointed out that this was due to the unexpected workload Proof of Concepts demanded, as well as unforeseeable circumstances with teacher absences. This caused the feedback loop to be almost non-existent and meant it was more difficult (/at times impossible) for students to learn from past assignments. EduCo's suggestions included making use of student assistants (although there is the danger that the feedback will not be of a high enough quality), to hire Elze more days a week, or to even consider a third psychology teacher.

Research Project

The research project was received fairly well. It remains a valuable learning experience and gives insight in academic research. The main concern was a slight lack of clarity; deadlines, trivial knowledge like how the ethics committee functions, and basic knowledge on APA manuscript styling. Other than that we received a fair amount of freedom to do research in the way we saw best fit.

Agreements

- Teachers agreed to look into ways to reduce the latency of the Proof of Concept feedback (e.g. student assistants and increased staff hours)
- Teachers agreed to include an ethics committee presentation into the course, explaining the function of the ethics committee, its purpose, and how to abide by ethics committee standards (similar to the presentation that Class of 2018 received)
- Teachers agreed to introduce the concept and expectations of lectures better, potentially by giving the first presentation so that students know what to expect

Learning Line: Communication

Created by: Stephan Dijkhof

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Semester, Year: Semester 1, 2016/17, Class of 2019

Teacher(s): Ardion Beldad

Summary of the course

For the dominant learning line Communication, six sessions were organised, all related to writing, researching, and reviewing research papers. These sessions covered an introduction to academic writing, the formulation of research questions, systematic information search, critical evaluation of scientific materials/organization of information from various sources, referencing, and synthesizing information from various sources and academic writing styles, respectively. Ardion clearly stated which reading materials should be read before each session, and these reading materials were punctually available on Blackboard. The sessions ran from the start of the semester until mid-October, with roughly one session per week.

EduCo semester survey: Communication

n=31, scale: 1-5

EduCo criterion	Mean	SD
1. This course sufficiently conveyed both theoretical and applied knowledge	3.7	0.8
2. This course offered a good balance between group and individual work	3.0	1.0
3. This course was useful in relation to the semester project	4.3	0.8
4. For this course, there was a variety of possibilities to prove your competence	3.1	0.9
5. Sufficient knowledge input and support was given to reach the learning goals set for this course	3.6	0.9
6. This course allowed for an even distribution of the workload over time	3.8	1.0
7. The communication about learning goals, schedule, deadlines and possibilities for evidence was clear	3.1	1.1
8. During this course, I was provided with a sufficient level of guidance	3.6	1.1
9. Feedback given by the teacher(s) was complete, useful, and timely	3.8	0.8
10. The teacher was sufficiently available for questions/feedback about the course	3.8	1.0

Discussion

Positive

This learning line successfully conveyed knowledge, and the theory and skills from this learning line were very useful for the Semester Project and, later, the Psychology Research Project. Furthermore, the workload was spread out evenly over time. Lastly, the students were generally able to get guidance from Ardion when requested. Students considered the feedback to be very detailed, constructive, and also timely. Ardion was also reachable by email for questions and answered questions well during the sessions. Overall, the course was considered very valuable.

Negative

Although it was useful to receive this course as early on as possible, it meant that the discussions within the sessions were only able to be focused on the Analysis Phase of the project, and not the later stages because the course was already finished by then. The timing was a discussion point between the EduCo and Ardion, because we felt that some sessions would have been more useful to plan around the Psychology Research Project, which really requires a specified structure, unlike the Analysis Report. Another point is that the sessions were focused towards the beginning of the semester, but it may have been better to spread the sessions out more. Or once the course was finished, have organised summary or open sessions at crucial moments, like when the Psychology research paper is being revised.

Another recurring feedback point was that, while the sessions were interactive in the sense that Ardion asked the class questions to start discussions or sometimes allowed us to edit one another's work, they were still perceived as not entirely in line with the "ATLAS way of learning". There was much classical explanation from Ardion on the expected pre-reading, and the work done in classes was usually highly guided by Ardion. As such, some students did not feel like they had much input or chance to shape the sessions to their own liking. One way that was discussed to make it better align with ATLAS, is to let students work in small groups to find out how to properly write a paper, for example by working together and finding out through trial and error, while still giving them the opportunity to get explanation from the teacher. This also creates better synergy with the project and/or Psychology research; by allowing and encouraging students to learn about the theory and apply the skills directly within their own project and research, it is made directly applicable for the students and we suggested that this may fit better with ATLAS.

In general, there were some initial unclarities on whether the students should go to Ardion for Communication evidence, which may have to do with the fact that Ardion was not very visible in ATLAS, especially after the Communication sessions were over. But it did not cause major issues since other teachers, such as project tutors, were able and willing to give feedback on academic writing.

Suggestions to improve the course

Ardion's role in the semester should be more clearly communicated, beyond the classes given, especially in terms of feedback. Also, the teacher should look for ways to make the sessions more in line with ATLAS: this could be achieved through more group-work through which the students try to find out how to do things through trial and error. This could be connected to the semester project and the Psychology research.. It would be an idea to spread the sessions out over the semester and try to align (some of) the sessions with the Psychology research.

Agreements

- Ardion will consider and discuss with the semester team what the best timing for the sessions is and he will also consider ways to make the sessions better suited for ATLAS, such as by letting students work in small groups, as discussed.
- Ardion also expressed that he sees a need to provide full expert feedback to the texts written by project groups, to prevent that the students only request and receive feedback from the project tutors.

Learning Line: Learning Capacity

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Semester, Year: Semester 1, 2016/17, Class of 2019

Teacher(s): Frank van den Berg and Ans Netjes

Summary of the course

Learning Capacity was a dominant Learning Line for Semester 1, and primarily involved learning how to write and update the PDP, the SER, and generally becoming proactive in thinking about where we want to be headed academically. PDP and SER workshops informed students about what these documents are, and PDP and SER laboratories were blocked times in which students could work on their pieces while teachers were available for answering questions. There were multiple workshops and Question and Answer sessions in the first few months of Semester 1, including an introduction to core-quadrants, as well as the opportunity to take the ILS test. A workshop on the ILS test results was also held, as well as the possibility for individual meetings to discuss ways forward.

EduCo semester survey

The questions for Learning Capacity were not in line with the standardised questions in the rest of the survey, as these questions would not have translated well or given much insight. The questions were as follows:

1. Are you happy with the way the PDP was introduced to you at the start of the semester?
2. Did you attend at least one PDP writing workshop?
3. If you attended the PDP writing workshops, did you find them helpful?
4. Could you elaborate on your answer to the above question? Did you appreciate the example PDPs shown? Was everything already obvious? Was it still too vague?
5. Did you find the feedback from your mentor on your PDP, valuable?
6. Did you attend at least one SER workshop?
7. If you attended the SER workshops, did you find them helpful?
8. Could you elaborate on your answer to the above question? Did you appreciate the example SERs shown? Was everything already obvious? Was it still too vague?
9. Are there any ways you think that the PDP/SER system could be improved that you have not already mentioned?
10. Do you find that the PDP/SER system, at a fundamental level, is an effective means for you to learn and develop yourself?

EduCo semester survey: Learning Capacity

n=37 (Q 7:n=35), Scale:1-5

EduCo criterion	Mean	SD
1. Happy with how the PDP was introduced at the start of the semester	3.6	1.0
3. Helpfulness of PDP writing workshop	3.7	0.9
5. Value/quality of feedback from mentor on PDP	3.6	1.1
7. Helpfulness of SER workshop	3.1	0.9

Discussion

This Learning Line is probably the one that was least familiar with the majority of first year students in September. However, it is now an extremely valued and intrinsic aspect of the ATLAS course, as can be seen from the results gathered below. 100% of first years attended at least one PDP writing workshop, and 90% had attended an SER workshop at the time of completing the questionnaire (the questionnaire was taken before the final SER workshop).

The PDP workshops were generally met positively, but not that many found them to be extremely useful – rather as an opportunity to ensure that they were on the right track with how they had set up their own PDP. The example PDPs demonstrate this well; looking at example PDPs was useful for students to see that they had the right idea of what was expected, but otherwise was not of much use. The word “vague” appeared on multiple occasions in the open answers (specifically Q 4, 8, & 10), but predominantly in a positive sense. Many students commented that the entire system is very vague and there is not much information given. But they are aware of the reason for this, and can appreciate ATLAS’ intention of encouraging students to truly think, reflect, and write documents that will be the most beneficial to them. As one student put it in the open response, “getting to figure out what we want from our PDP was more effective than being told how to do it.” A few students commented that discussions with second years would have been useful, and that their student mentors were of more use than the workshops.

For the SER workshops, the feedback was very similar to the PDP workshop; it was vague, but this was appreciated on the whole, and examples were nice to see, but students would have liked to have known the corresponding verdicts of the documents. The atmosphere of the workshops was nice, with the possibility for casual questions to be posed and answered.

When asked what improvements could be made (Q 9), students wanted more of an explanation on how the ATLAS learning goals should be implemented within the PDP and SER, and at least a vague set of guidelines as to what should be included. As one frustrated student mentioned, at the beginning we are told that the PDP and SER can be completed in whatever way we wish; yet after the PDP was handed in, feedback included aspects that they could have easily been told were “mandatory”, beforehand. There is also no prerequisite format, but all the examples shown were extremely similar – plain black-on-white text documents with some bullet points. Some also desired more stress on the “SMART” learning goals at the *beginning* of the semester, to help write sensible and attainable goals in the first PDP. There are also multiple lists of learning goals and intended learning outcomes in the BlackBoard documents – Semester 1, the ATLAS graduate, and detailed, subject-specific ones. It can be confusing to find the same goals repeated in these different documents, with overlaps and slight changes in wording, so that it is unclear in what timeframe goals should be reached. For example, confusion arose from the Semester 1 syllabus, where the ATLAS learning goals and Semester 1 goals were pasted onto the bottom.

Whether students thought that, at a fundamental level, the PDP/SER system was an effective means for learning and development (Q 10), was met with overwhelming positivity. The Class of 2019 values the “ATLAS way of learning”, but needs more encouragement to consult their PDP throughout the semester in order to make the most of this learning style – or have mentor sessions that more explicitly focus on how they are doing with reaching their goals. There is also a line that should be drawn between reflection, and reflection to the point of losing time to execute goals. There was also a comment on how many individual sessions we were given about the PDP and how it felt like a waste of time when everything could have been concisely explained in one, coherent session in the second or third week.

Suggestions to improve the course

The “vagueness” of the PDP/SER system should be retained, however, the initial explanation could be given in a far more concise, single session. Along with the examples could come the respective verdicts, and seeing more “creative” PDPs and SERs would also be refreshing. Emphasising that the PDP is a document that should be regularly opened and analysed, i.e. should be a “working document”, ought to be done more frequently (not just at the start of the semester). A way to do this would be to encourage some mentor meetings to specifically focus on how and to what extent, PDP goals are being fulfilled.

For aiding the writing of the PDP and SER itself, the multiple lists of ATLAS learning goals could be clarified a little more. A possibility would be creating one document that displays all the different lists of learning goals and explains which lists are meant to be addressed in which semester. This could help clarify the goals that are expected to be attained in a semester, with distinct lines drawn between the lists. In short, explaining why they are there, and what they are, would be of great use. This would also link back to helping with showing what is expected to be included in a PDP and SER.

The document on Learning Lines in the ATLAS Documents folder on BlackBoard was invaluable for many when it came to formulating goals and then seeing what constitutes as evidence. A document like this for the domains and other areas of ATLAS would have been much appreciated by Class of 2019 when considering what they could do to reach their goals. Otherwise, clearer sessions on what constitutes as evidence earlier on in the semester, would suffice. And finally, if the assessment process were made more transparent, in the sense of what teachers are looking for in a PDP and SER, students will understand what they ought to include for a successful document.

Agreements

- Having two sessions in the third or so week of the first semester, one to succinctly explain how feedback and evidence works, and the other to explain the PDP and SER system (and how these documents are evaluated), is likely to occur for Class of 2020. (Rather than multiple small sessions which each only give a snippet of the whole picture).
- Examples of creative PDPs and SERs will be shown in future.
- Frank and Ans have agreed to discuss how to move forward with increasing the clarity of the assessment process. They are also looking into how to make the learning goals clearer to comprehend in terms of their applications to particular semesters.

Project

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Semester, Year: Semester 1, 2016/17, Class of 2019

Teacher(s): Ingrid Nota and Jasper Homminga

Summary of the project

The assignment of the semester 1 project was to create a solution for a socio-technical problem including a sensor that changes human behaviour with the help of the socio-technical ATLS design model. Further goals of the project are project management, teamwork and communication.

The project consisted of 4 phases: Analysis, Conceptual design, Embodiment and Implementation/Evaluation, that ran for 6, 3, 5 and 3 weeks respectively.

The assessment consisted of a presentation and a discussion based on a justification report with two assessors.

EduCo semester survey: Project

n=37, scale: 1-5

EduCo criterion	Mean	SD
1. The Semester Project gave you the opportunity to reach your learning goals	3.9	0.7
2. This course allows for an even distribution of the workload	2.9	1.2
3. There was clear communication about the learning goals, schedule, deadlines, and possibilities for evidence	3.0	1.0
4. All ATLAS domains/courses that were taught in this semester can be integrated in this project	3.0	1.2
5. The assessment structure of this project is clearly defined and communicated to the students.	3.4	1.2

Conceptual Design Phase

1. Were you prepared for the design phase when it came?	2.5	1.2
2. Do you think you had enough time to get creative?	2.5	1.1
3. Could you make use of the design tools like the morphological chart, ranking tables etc?	3.6	1.1
4. Could this phase be used in order to reach your learning goals?	3.5	0.9

Embodiment Phase

1. Do you think you were prepared to start building your prototype after the conceptual design phase?	2.7	1.2
2. Do you think you had enough time to build a prototype?	2.5	1.1

3. Could you use this phase to reach your learning goals/semester goals?	3.2	1.1
4. Were the project presentations useful?	3.5	1.2

Evaluation Phase

1. Do you think your prototype was ready to be evaluated?	2.5	1.1
2. Were you able to evaluate your prototype with your target group?	2.4	1.3
3. How much time did you have to evaluate your prototype	1.8	0.8

Tutors

1. How frequent were your meetings with your project tutor?	Weekly (16) biweekly(5) Once a month (7) Other(9)	
2. Did you have to initiate these meetings (with tutor)	yes(31) no(6)	
3. How useful were the tips and support you received from your project tutor?	3	1.2
4. How frequent were your meetings with your project co-tutor?	Weekly (0) biweekly(0) Once a month (8) Other(29)	
5. Did you have to initiate these meetings (with co-tutor)?	yes(32) no(5)	
6. How useful were the tips and support you received from your project co-tutor?	3.7	1.1

Discussion

General: People really enjoyed the project, but overall there were a lot of issues concerning communication of deadlines, possibilities for evidences, schedule and goal. Due to the time management and unclearance in the named topics there was an uneven distribution of workload over the whole semester.

It was said that the biweekly project update session should be more specific content wise. The session about how to collect evidence from the project was requested to be earlier in the year. Some people found the assignment very broad and vague and would have appreciated a clearer topic. In any way we should have been pushed more to focus on a specific target group. The necessity of a sensor in the end product was often perceived as disturbing, as it made people think of solutions very early and hindered the creativity in finding concepts. It was suggested to just mention in the assignment that the end product needs to be technical.

There seems to be a problem with students avoiding the implementation of Newton's mechanics in the project, and for that the bicycle sensor project was added. People didn't see a lot of value in this mini project for the bigger context of their project and the learning experiences was apparently very little. In general people need to be encouraged more to make use of their project tutors and co-tutors!

Analysis phase

Many students disliked the time management of the analysis phase. In the first weeks no one really started working which might be due to the broad topic of the project. People would have wished this phase to be shorter and have more time in the end for building and evaluating their prototype. There was some unclearance about the structure of the report, which seems natural for first year university students.

Conceptual design phase

There were complains again about the timing of the conceptual design phase as it was during the reach week and the psychology experiment execution period. Everyone felt very rushed and as if there wouldn't be enough time to be creative.

The introduction lecture in the beginning of the embodiment phase should have been three weeks earlier, so people could make use of it.

In order to make proper use of the ATLAS design model it should be insured that the definition of functions and requirements is clear to everyone, and best disclosed already in the end of the analysis phase.

Embodiment phase

The learning process in this phase was apparently very high, but people wished to have had more time to really learn all the technical things and build a better prototype. Many groups needed the first weeks(s) of this phase to finish their concepts. The presentations of the prototype was very much appreciated.

Evaluation phase

Most groups didn't test their product on their target groups. Not everyone was aware that the evaluation needs to be finished before the assessment.

There was no introduction to the justification report. The mock assessment was very helpful for many groups, although the feedback came very late so that there was little time to still edit the report.

Suggestions to improve the course

It was discussed if the semester or project coordinator could send out an (bi)weekly email containing information on lectures, deadlines. This could solve a lot of communication issues amongst others caused by students not reading the project syllabus.

Agreements

- Improve the communication and the time schedule

Learning Line: Design

Created by: Emile Menard

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Semester, Year: Semester 1, 2016/17, Class of 2019

Teacher(s): Wessel Wits and Ingrid Nota

Summary of the course

This course began at the beginning of the semester, and introduced conceptual design, and design theory. The course consisted of several workshops and lectures interspersed throughout the semester, with the goal of giving a general understanding of the design process and the ATLAS socio-technical design model. The materials for this Learning Line consisted of *Product Design* by Arthur Eger.

EduCo semester survey: Design

n=37, scale: 1-5

EduCo Criterion	Mean	SD
1. Do you feel as though the classroom session were useful/productive?	2.3	1.0
2. Was the design book helpful?	2.2	1.1

Discussion

The general consensus is that the number of lectures for this course was sufficient. People went into Design with the expectation that it would be more hands on than theoretical. It was expected that this course would delve into topics such as: prototyping, sketching, CAD, and product development. Most people felt that this course did not meet their expectations because it wasn't communicated to them in enough detail what the course would cover.

A specific point that was raised was that functions and requirements were not explained well enough, and many people are still unsure how to distinguish between the two.

Suggestions to improve the course

Suggestions for improvement from the student body lie along the lines of optional workshops where people can delve further into the material if they so wish, and small, optional tangential assignments. It was also suggested that the course be given a different name so as to avoid the confusion over whether or not it is a theory or hands-on class.

Agreements

Mentors and Teachers

Introduction

The EduCo of 2019 thought it might be a neat idea to add a layer of depth to our documentation. We did this by adding in questions with regards to the teachers' and mentors' performance. In doing so we hope to not only help advance the program, but also to provide teachers the opportunity to gather personal feedback from the whole group. This however did carry some challenges; like ensuring that the feedback is constructive and does not contain any personal attacks, but also that the anonymity of students is maintained and that teachers do not receive sensitive data from other teacher which could be perceived as displeased. Following the recommendations of Elze and Ingrid, we found that the best way to execute this endeavor, was to discuss the individual results with the respective teachers in person, and to provide them with the metadata in order to still compare themselves with the other teachers. In the semester documentation, which is publicly available, we will only discuss the meta results.

Teachers

Created by: Besi Sejdijaj

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Year/Semester: Class of 2019, Semester 1, 2016/17

Teacher: Ans Netjes (Program director)

Results

In the next section, you can find the results. We made a distinction between teachers that worked full time and part time (one day a week) because there is a vast difference in approachability and student contact between the two groups.

Questions (scale 1-5, N=37)	Mean Full time N=3	Standard deviation	Mean Part time N=3	Standard deviation
1. Do you feel as though there were enough contact hours between you and the teacher?	3,76	0,88	2,89	1,00
2. Was it easy for you to approach your teacher?	4,09	0,92	3,11	1,13
3. Was the feedback from this teacher useful?	3,86	0,85	3,80	1,08
4. How was the quality of lectures from this teacher?	3,74	1,00	3,52	0,97
5. Was this teacher able to answer your questions?	4,05	0,80	3,86	0,96

Discussion

- Part time teachers are significantly less approachable than full time teachers.
- Teachers with an office in citadel are more approachable in general
- Whether a teacher works part or full time has no significant effects on the quality of lectures or feedback.

Mentors

Created by: Xenia Una Mainelli

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Year/Semester: Class of 2019, Semester 1, 2016/17

Teacher: Leonie Krab (coordinator)

Summary of the course

All first year students were assigned a teacher mentor, who ought to meet with them regularly to discuss their progress both academically and personally, and provide a platform where students should feel safe and comfortable voicing concerns or personal issues, without fear of retribution.

EduCo semester survey

The results for individual mentors was considered to be too personal to publish in this document, and has therefore been discussed with Leonie Krab, the mentor coordinator. Leonie or EduCo 2019 will be forwarding the individual feedback to teachers after the release of the Semester 1 Documentation. Below are the general responses.

Discussion

The question “Do you feel that the feedback from your mentor has been truly useful and personal?” on a scale of one to five (with one being the most negative option, and five the most positive), received an average score of 3.78 with a standard deviation of 1.08. The frequency of mentor meetings varied drastically between mentors, and even then at times rather distinctly between mentees of the same mentor. All of Class of 2019 experienced group mentor meetings, and some expressed that they had too many of these in proportion to personal meetings.

73% of Class of 2019 responded “No” to whether they would like to switch mentors, suggesting that just over 25% of mentors are rated as unsatisfactory by their mentees. However, only two mentors received this response, and then only one of the two received this answer more than once. This means that this is an issue in the mentoring system that can be easily pinpointed and (hopefully) rectified – for example, discussing with the mentor in question what it is they are currently doing as a mentor, and how they can improve.

27% of Class of 2019 had to initiate (one or more) meetings with their mentor, despite the “Mentoring in ATLAS” document stating that mentors of first years are responsible for scheduling meetings. This is not an issue if there is an agreement between a mentor and mentee that the mentee should request meetings on an as-needed basis, however, if this is the case, then it should not be explicitly stated in an ATLAS document, that it is the mentor’s responsibility.

Suggestions to improve the course

Remind mentors of their responsibilities, and draw their attention to the “Mentoring in ATLAS” document on BlackBoard. Make students more aware that Leonie is the contact point for any issues regarding mentoring, such as contact hours or comfort with mentor (and that Ans is the contact point if Leonie is a student’s mentor).

Agreements

An email was sent out reminding first years that if they are unsatisfied with their mentor they should bring this up with Leonie, and if they want to switch mentors, this is entirely possible midway throughout the year i.e. after Semester 1 (or at any point for that matter).

Improvement points for our next documentation (Teacher and Mentor questionnaire):

- Consider asking more than only Semester 1 teachers, but also other staff members which play a role during the program
- Improve the overall quality of the questions, since these are still very superficial and were meant to test the principal
- Formalize/Standardize the questions and documentation format/procedure for these sections because the current format does not fit it well.