

Project management for innovation in sustainable food systems LV0102, 30263.2021

15 Hp Pace of study = 100% Education cycle = Advanced Course leader = Fredrik Ferngvist

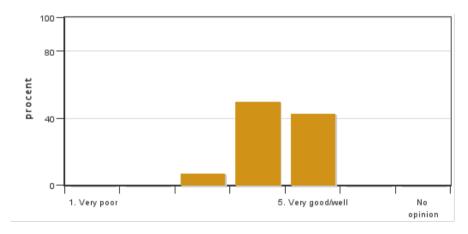
Evaluation report

Evaluation period: 2021-03-16 - 2021-04-06

Answers 14 Number of students 29 Answer frequency 48 %

Mandatory standard questions

1. My overall impression of the course is:



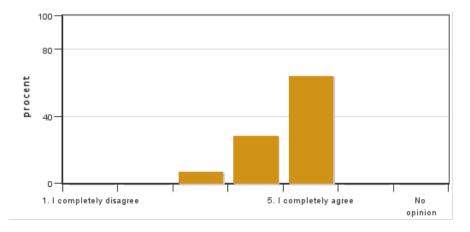
Answers: 14 Medel: 4,4 Median: 4

1: 0 2: 0 3: 1 4: 7

4: 7 5: 6

No opinion: 0

2. I found the course content to have clear links to the learning objectives of the course.



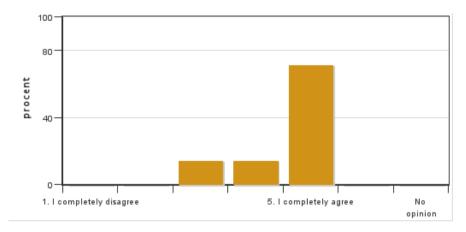
Answers: 14 Medel: 4,6 Median: 5

1: 0 2: 0 3: 1

3: 1 4: 4 5: 9

No opinion: 0

3. My prior knowledge was sufficient for me to benefit from the course.



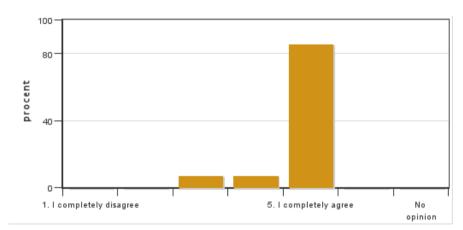
Answers: 14 Medel: 4,6 Median: 5

1: 0 2: 0 3: 2

4: 2 5: 10

No opinion: 0

4. The information about the course was easily accessible.



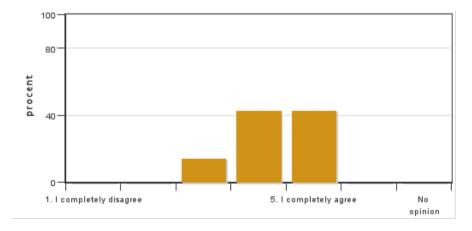
Answers: 14 Medel: 4,8 Median: 5

1: 0 2: 0 3: 1

4: 1 5: 12

No opinion: 0

5. The various course components (lectures, course literature, exercises etc.) have supported my learning.



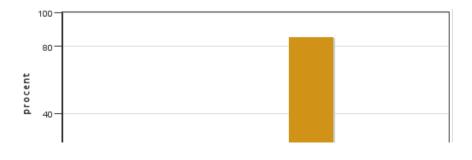
Answers: 14 Medel: 4,3 Median: 4

1: 0 2: 0 3: 2

4: 6 5: 6

No opinion: 0

6. The social learning environment has been inclusive, respecting differences of opinion.



Answers: 14 Medel: 4,9 Median: 5

1: 0 2: 0

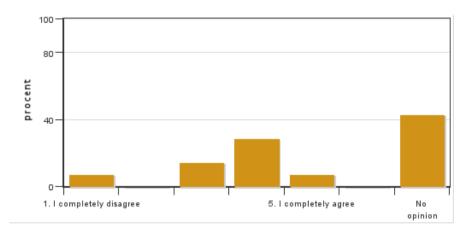
2: 0 3: 0

4: 2 5: 12 1. I completely disagree

Νo opinion

7. The physical learning environment (facilities, equipment etc.) has been satisfactory.

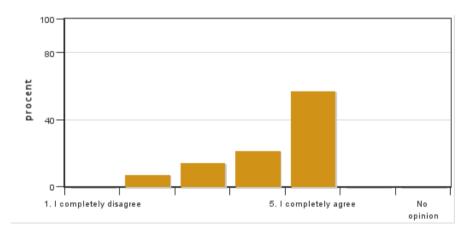
5. I completely agree



Answers: 14 Medel: 3.5 Median: 4 2: 0 3: 2 4: 4 5: 1

No opinion: 6

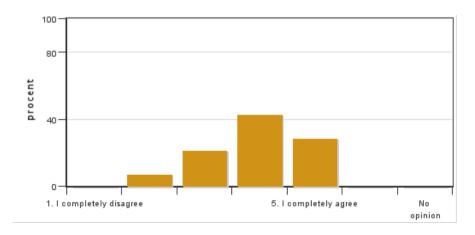
8. The examination(s) provided opportunity to demonstrate what I had learnt during the course (see the learning objectives).



Answers: 14 Medel: 4.3 Median: 5 1:0 2: 1 3: 2 4: 3 5:8

No opinion: 0

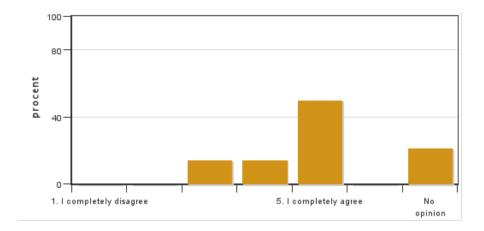
9. The course covered the sustainable development aspect (environmental, social and/or financial sustainability).



Answers: 14 Medel: 3.9 Median: 4 1:0 2: 1 3:3 4:6

No opinion: 0

10. I believe the course has included a gender and equality aspect, regarding content as well as teaching practices (e.g. perspective on the subject, reading list, allocation of speaking time and the use of master suppression techniques).



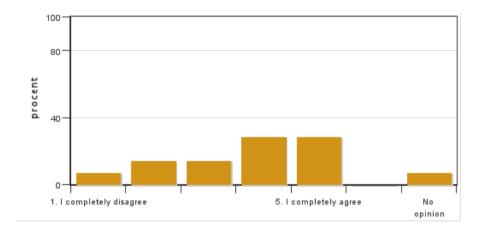
Answers: 14 Medel: 4,5 Median: 5

1: 0 2: 0

3: 2 4: 2 5: 7

No opinion: 3

11. The course covered international perspectives.



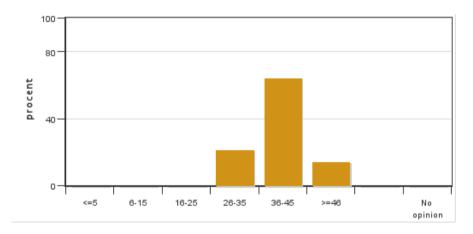
Answers: 14 Medel: 3,6 Median: 4

1: 1 2: 2 3: 2

4: 4 5: 4

No opinion: 1

12. On average, I have spent ... hours/week on the course (including timetabled hours).

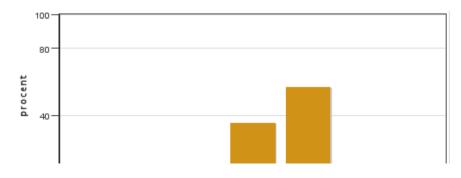


Answers: 14 Medel: 38,7 Median: 36-45

≤5: 0 6-15: 0 16-25: 0 26-35: 3 36-45: 9 ≥46: 2

No opinion: 0

13. If relevant, what is your overall experience of participating in all or part of your course online?



Answers: 14 Medel: 4,4 Median: 5

1: 0 2: 1

3: 0 4: 5 5: 8

No opinion: 0



14. If relevant, please share what worked well when participating in teaching on distance

15. If relevant, please share what worked less well when participating in teaching on distance

Course leaders comments

Spring 2021 was the third time ever the course LV0102 was given. The substantial feedback given each year, in the written course examination as in the discussions in the class, has been influential in how the course continues to be developed.

The main idea with the course is to give both theoretical and practical skills in the topic of innovation management, but also in project management and in gaining competencies in working with complex problems related to sustainability.

On average the course has been given good evaluations, 4.4 on a 5-graded scale. The links to the learning objectives ar clear, as is the feeling that prior knowledge is sufficient. The course information has also been experienced as easily accessible. This is an issue that have been worked with over the three rounds the courser has been given, but still there are some issues in maneuvering the Canvas page more easily. The Canvas Calender function will be tested next occasion as a way to also integrate the schedule in the digital calendar. An "information map" is also a good proposal for the future.

Variation in the course is appreciated, but there are some activities that can be improved even more. A topical week with a new product development task should be looked into, both as regards the structure of the week and the task instructions. Also the examinations could be thought through again. In particular "parallell tasks" put much stress and decreases the focus, which is something that needs to be dealt with. Also, how the home examination should be distributed over time is an important question. Should it be a "course task" over the whole period, or should it be delimited to 1-2 days? A maximum of 1-2 weeks to have the exam seems to be more appropriate than having it "hanging over the head" for the whole course period. This will be changed for the next time.

The social learning environment has been experienced as inclusive, but the physical environment has not been good. Being a fully digital course, with lectures in zoom, has not been optimal. Gender and equality aspects have been included in the cours, although not in all activites. As an introduction to the project, cultural values and differences was included as a topic for discussion and the aim has been to increase the competence in working together in an international environment and in groups with differences between its participants.

The experiences working fully online has been overall positive (4.4. on a 5-graded scale). As the course previously has been on "semi distance" we have had previous experience from it. However, there are activities that have not benefitted from the change from a physical environment to a digital. One is the new product development task, which previously involved experimenting with a new food product. Also, the group work, some of the workshops and not least the social interactions have suffered somehow from not being able to meet in reality. Also, the physical environment at home may not always be ergonomically sufficient.

As regards sustainable development aspects. the dimension of social sustainability has not been experienced to be included sufficiently. This is something to loolk more into. As regards the international perspective (3.6 on a 5-graded scale), most activities have been related to domestic or european settings. In particular the innovation project, a large part of the course, has involved national stakeholders, which possible is an explanation to a more local setting.

The average workload has been around 40 hrs per week. This indicate that the course contents are about right for a full-time course. However, there might be an uneven distribution over time, which is an issue to deal with.

The book "Innovation management and new product development" by Trott received quite good comments (4.0 on a 5-graded scale). This is significantly better than the previous book "innovation management" by Tidd & Bessant. However, the teacher experience is that Tidd & Bessant more focus on the processes of innovation management, whereas Trott provides more a "technical" view on innovation. This is still a a challenge in the course, to find the right book. But we will probably keep this one and add other sources when found relevant.

The introduction case "fruit logistica" was found inspirational and a good start. The concept with student presentations recieved mixed reception. This activity has been a core idea with the course, that students should be able to communicate different aspects of innovation management. But the concept still needs to developed. Mostly, the experience is evaluated positively, but some dont find it rewarding. The feedback from the teachers could be more concrete, and the rest of the class needs to be better engaged.

Another central part of the course has been to work with an innovation project in group. This time five firms gave "challenges". Quite open challenges which should include the students to identify and solve a problem. The project and the process with it was mainly foun interesting and instructive, although stressful at times. Supervision has worked well. The contributions from Torbjörn Jonasson, a new teacher in the course, has significantly improved this part of the course by introducting project management, and in participate in the supervision. Also, the active participation of firms in the course has added a dimension of reality. Although the tasks have been challenging, the results have been very good and added valuable experiences.

Other activites and guests on general also have been appreciated. For the next time they will be looked through again and possible be given another arrangement over time to make the work burden more equal over time, and to provide variation over the course of time.

A final note should be given in that the course has been found to fit very well in the MSC Sustainable food systems programme and that it has been relevant for the education and for the personal development. Also, the order of the course in the programme has been found suitable, in that the preceding course "Management perspectives for sustainable food systems" has given a solid ground for the course "project management for sustainable food systems".

Student representatives comments

Overall Impression

Overall, the course has been highly enjoyed and appreciated by the students. It has received an average score of 4,4 (out of maximum 5) in the course evaluation, as well as lots of positive comments during the in-class discussion with the course representative. One of the main (if not the main) aspects highly enjoyed by the students was course's strong practical nature, which manifested itself in the course project and workshops. Moreover, there were a few students who claimed it to be one of the best and most interesting courses they have ever taken.

When it comes to the actual knowledge gained throughout the course, almost an absolute majority of students (who did the evaluation) found the course content to be clearly connected to the learning objectives. Also, most of the students felt that by the end of the course they gained a good understanding and knowledge of the Innovation concept overall, as well as tools and models used in the New Product Development process.

In general, students strongly agreed (average score 4,8 out of 5) that the course fits well with the MSc programme Sustainable Food Systems and is highly useful for their overall education and personal development. Many students felt that they have learned a lot of new and useful concepts and skills, in addition to the knowledge received on the innovation process. Students felt that the knowledge received during the course made them grow personally and equipped them with tools to work within the sustainable development field.

Regarding the previous knowledge needed to fully benefit from the course, overall students strongly agreed that their knowledge was sufficient (average score 4,6 out of 5). Some students have related this fact to the previously taken course FÖ0440 Management Perspectives for Sustainable Food Systems, which, according to them, served as a great introduction and preparation for the current course. The two courses were seen as greatly complementing each other.

Course Information and Structure on Canvas

Overall students were very satisfied with how information about the course was presented and structured at Canvas; instructions to assignments were also deemed as clear. Everyone enjoyed having the weekly module system; it kept the course structured, allowed students to easily find needed information and provided a nice overview over the relevant week activities, which helped to "mentally prepare" for the upcoming week. Also, the fact that only 1 or 2 weeks were shown ahead was really appreciated. Students highly recommend keeping it the same way.

At the same time, there are a couple of suggestions for further improvement:

- 1. Have a module/folder at the very top, above the rest of the modules, with a general course information, latest updated schedule, information about the main zoom room (link to it and password) etc.
- 2. Sometimes the links were hard to locate, please make them more visible.
- 3. It would be really nice to have the schedule not only as a document to download, but also in Canvas Calendar function and/or other schedule software (like, for example, SU and KTH uses TimeEdit schedules, which you can download to your Google calendar etc. and see on your smartphone calendar app). That would save quite a lot of time and in general be much more comfortable and would ensure that no changes in schedule are missed.

The Home Exam

Students have largely agreed that the examination has provided a good opportunity to demonstrate what had been

learned during the course (average score 4,3 out of 5).

Regarding the time given for the exam, majority of students have indicated that they would prefer to have two weeks for writing the exam. Two persons indicated that one week is enough, while three students voted for having 4, 6 and 8 weeks correspondingly.

The opinion on when it is best to receive exam questions has divided. Some students found it stressful to receive the exam at the beginning of the course, while others appreciate to know what is expected in advance. However, both sides agreed that they could not start writing the answers for the exam questions early in the curse, because they have not received enough knowledge yet and due to that did not know what to write. Many students started working on the exam questions at the very end of the course. Reasons for that are: a). not knowing what to write early in the course; b). lack of time during the course due to other course activities.

Regarding the lack of time, students found that the project work has been quite intense and time consuming, combined with weekly reading requirements, preparation for the student led lecture etc. – all of which left no time to concentrate on the exam during the course. As suggested by some of the students, perhaps getting the exam questions and having a dedicated time for answering them at the end of the course is the most optimal solution. Otherwise, if having the whole course time to write the home exam, it is important to indicate how much time overall students are expected to spend on it, so that students understand the quality expectations.

Structure-wise, some students suggested having less than 3 questions (1 or 2), since they found it difficult to provide deep quality answers to all three questions. Also, some students felt that the individual reflection on the project should not be part of the exam and should not be graded either.

Sustainability and International perspective

The coverage of sustainable development aspects during the course has been deemed rather satisfactory, but with a room for improvement. Students found the main coursebook to be strongly lacking in sustainability perspective. However, the "amount of sustainability" in the rest of the course literature has been appreciated and is said to balance "the lack" in the coursebook. Also, many students felt that the course projects could dedicate much more space for sustainability aspects. Social sustainability aspects were deemed to be lacking the most – an improvement of such would be really appreciated. Last, but not the least, a more critical perspective on innovation is needed – a discussion on its possible positive and negative effects in terms of the social, environmental, and financial sustainability.

When it comes to the coverage of the international perspectives, some students felt that it was too narrowly focused on Sweden, Europe and Western world overall. A more inclusive international approach and more international examples would be highly appreciated.

The Coursebook

The "Innovation Management and New Product Development," coursebook by Trott was not much appreciated by the students; some even named it the least rewarding part of the course. The major drawbacks of the book, according to the received comments, are its focus on the technology industry (whihe is rather irrelevant to the current course) and lack of sustainability aspects and food-related examples. Moreover, some students have found the book to be too "US – centric". A more international perspective was desired.

While the book gives a very good general introduction and overview over the innovation process, many students thought that it contains a lot of unneeded details (long texts with little valuable information). A suggestion proposed by the students, is eliminating the coursebook and substituting it with relevant articles insted (if no coursebook on the innovation in the food industry can be found).

Additional Course Material

Students have appreciated the presence of the additional material. However, among those who has answered the course survey, none of the students have had enough time to look at all the extra material and benefit from it due to the high pace of the course and all the compulsory assignments. Mostly students have looked at the films, but other types of extra material have not received students' attention.

Course Parts

1. The Fruit Logistica case

What is seen from the student survey results, is that overall, the Fruit Logistica seminar was appreciated by the students (average score 4,2 out of 5). Some found it to be a great introduction/opening activity to the course and enjoyed getting acquainted with the real cases of innovation within the food industry.

1. Workshops

When it comes to all the workshops held during the course, all of them were highly enjoyed by the students. The project management sessions received many compliments; students loved how practical and applicable to "real-life" these sessions were. The "Design Thinking" workshop held by the Green Innovation Park has also been a "hit" among students; it received an average score of 4,6 points out of 5 from the students who answered the course

survey. Students found this workshop quite interesting, refreshing and rewarding, as well as enjoyed hearing about the work of the Green Innovation Park and how they (students) can contribute to it. Similarly, the online visit to Drivhuset has been strongly enjoyed by the students (average score of 4,6 out of 5).

Furthermore, the Business Model Case and BMC workshop has been appreciated by the students as well. Students found it to be quite new and relevant for their future work in the food industry, as well as appreciated the possibility to choose between the topics. One aspect that can potentially be improved, however, is the length of the articles provided – since one article was only a couple of pages, in comparison to the other one, which was about 15 pages, many students have chosen the first case only because it required less reading. Similar length of articles, therefore, would be appreciated in the future.

1. Student Held Lectures

In general students were positive towards the experience of student led lectures. Many found it to be a good learning opportunity to practice presentation skills and other competences, such as normative – determining what parts and concepts are worth the attention and shall be included in the lecture, and which ones not.

At the same time, students did not appreciate the strong focus on the coursebook when it came to the lectures. This has to do with the book's irrelevance to the food industry. Therefore, a suggestion for the next course is to encourage students to include more food related examples, and to specify that in the instructions, as well as possibly tell which concepts to focus on. Another alternative - let students prepare the lectures based on articles about innovation in the food industry, instead of the coursebook. Or provide with cases of food innovation and let students relate it to the concepts from the coursebook.

While majority of the students found it rewarding to prepare and give their own lecture, some stated that they did not remember much from the lectures held by other students and that they would appreciate having a classical professor-led lecture for a better learning experience of the topics.

Moreover, many students felt that the amount of the student-led lectures was too high. Instead, a mixture between student – led and external guest lectures was suggested as a better alternative. Also, students desired for inspirational lectures about up-to-date innovations and trends within the food industry.

1. The New Product Development workshop

All students agreed that the workshop would have been very interesting and rewarding if it was done in the food lab at the campus. Oppositely, the format of performing the experiment on one's own at home did not work out, according to the students. Instead, in case of no possibility to have the workshop at the campus again, students suggest to just limit the topic to a lecture or a discussion seminar about the Creative Design method.

If, however, the situation allows for a proper practical workshop at the food lab, information about it should be better and earlier communicated. Moreover, students suggest having the topic and the assignment earlier in the course (maybe even at the beginning, before the work on projects starts) when the course workload is less.

1. The Group Project

Students have called the group project as challenging, but at the same time, the most rewarding part of the entire course. According to them, the project has given a very valuable opportunity to experience working with a real business client in a professional setting – to get a "real-life" practical experience. Moreover, students appreciated all the practical project management tools provided in connection with the project – that is something which students felt can be used outside of the studies context as well. Another aspect which students thought was great, is how the group division was done. Mixing up the groups based on the students' educational/professional background and then assigning the project topics based on that allowed to have a varied expertise needed to implement the project. Also, students got to work with new classmates and exchange with knowledge.

There are, however, some improvements which can be done for future courses. First of all, students felt that there was not enough space to focus on sustainability aspects in their projects, or, in certain cases, it was hard to connect the topic to sustainability in general. More focus towards sustainability while designing the project tasks is therefore needed. As a suggestion, one format of the project aim could be to improve sustainability of already existing product/service (incremental innovation).

Second, some groups found it difficult to define and understand the tasks given by their client company. Too broad and short introduction to cases led to too much time being wasted on figuring out what exactly needs to be achieved and delivered. Therefore, a more extensive written descriptions of cases, as well as clearly defined aims are desired from the very beginning. At the same time, students enjoyed having a lot of freedom when it came to the execution of the project.

In addition, some groups found it quite difficult to connect their projects to theories from the coursebook. While others felt that the theories fit well into their work. Supposedly, that is due to a very different nature of the cases, so it is important to keep this fact in mind while evaluation.

Miscellaneous comments

- Students felt that it was too many reflection assignments throughout the course; they suggest decreasing the amount and making them not graded.
- A suggestion regarding the course structure: to have all the theoretical parts in the beginning of the course and leave the rest of the time to the project solely.
- Invite guest lecturers from SLU itself (or other organizations) who work with food related innovation and let them talk about their latest work and projects. That would be very inspiring!

Kontakta support: support@slu.se - 018-67 6600