



Course analysis template

After the course has ended, the course leader fills in this template. This is an important part of the quality assurance of the programme. The programme director decides whether the template should be supplemented with further information/questions.

Course code 4BP038	Course title Theory in bioentrepreneurship	Credits 4
Semester Fall	Period August 30 to September 29	

Course leader Hanna Jansson	Examiner Madelen Lek
Other participating teachers Cecilie Hilmer	Other participating teachers

Number of registered students 29	Number passed after regular session 22	Response rate for course survey (%) 38
Methods for student influence other than course survey Like last year, we had a mid-course survey instead of a course council. The students were also offered a number of optional sessions.		

Note that...

This analysis shall (together with a summary of the quantitative results of the students' course survey) be submitted to the LIME educational committee.

This analysis has been submitted to the LIME educational committee on this date:

1. Description of any implemented changes since the previous course based on previous students' comments

The course was offered for the second time. The most important change from last year is that a new assignment was developed to better align with the learning objectives. Another important change is that an extra day was added to module 3. A short discussion on what "science" and "scientific evidence" was added as well as some more coursebook references to Canvas.



2. A brief summary of the students' evaluations of the course

(Based on the students' quantitative answers to the course evaluation and comments. Quantitative compilation and possible graphs attached.)

General questions

According to the students' quantitative answers to the course evaluation, all thought that the course developed valuable expertise/skills to at least a small extent (mean 3.3). Similarly, all have achieved all learning outcomes to at least a small extent (mean 3.8). The course follows a common theme according to all respondents, at least to a small extent (mean 3.8). The course promoted a scientific way of thinking and reasoning (mean 3.8).

Programme questions

According to the course evaluation, all but one of the respondents thought that the teachers had been open to ideas and opinions about the course structure and content to a large or very large extent (mean 4.5). All but two thought that they were given the opportunity to reflect on learnings during the course to a very large extent (mean 4.5). However, the replies for the question if the course developed abilities to search for data and scientific evidence is spread among the alternatives to a small, to some and to a large extent (mean 3.1). The same goes for the question if the course develops abilities to use scientific methods but now also includes the alternative to a very large extent (mean 3.4). All but one of the respondents thought that there was a good atmosphere during the course to a large or very large extent (mean 4.5). Most respondents thought that the psychosocial environment was good, all but two to a large or very large extent (mean 4.5). However, the replies for ethical issues are spread among all alternatives except to a very small extent (mean 3.5). The overall result was similar for the question if the course helped to prepare to deal with ethical considerations, but now also including the alternative to a very small extent (3.5). When asked to describe how the course could be improved, a few suggestions were mentioned, but nothing was mentioned twice. One example of something to change was to add various topics for the different groups doing the group work and to add more variety to the modules (different data). It was also suggested to put more emphasis on introducing the canvas structure at the beginning of the course. One student mentioned difficulties writing separate reflection logs for each module, and one wanted to develop the curriculum by adding a section introducing business terms (terminology?) to help correlate with the industrial management course.

Course-specific questions

Overall, the *first learning objective* seems to be a very positive experience for most respondents. It was described as, e.g., good, very good, more than achieved, clearly dealt with, surprising but potentially useful. One respondent had expected to also understand how the research was conducted and what challenges researchers face. The same goes for the *second learning objective*. It was described as good, very positive, clearly dealt with, very good. One respondent added that you need to experience to explain and that this will be the next step now when they know the theoretical background. Similar to the result of the survey last year, the *third learning objective* seems to be more of a decent experience to the respondents. It was described as a very good experience, clearly dealt with, good and now easier than it was before, but also that we did not discuss the bio part of bioentrepreneurship much. In contrast to last year, the *fourth learning objective* seems to be a positive experience. It was described as good, very positive, clearly dealt with, and very good. One respondent

pointed out that it was very good to have time and space to do the reflections, but another one would have preferred to write the logs at the beginning or end of the live sessions.

Overall, the *Reflective learning journal* assignment seems to be a positive experience for most of the respondents. Two respondents mentioned that it was useful to keep track of learning objectives and advancement of the course and make sure that students deal with the content. Another respondent added that it was useful to understand deeply what you were taught. At the same time, one respondent thought that it was difficult to write one log for each chapter (module), and one requested more information about how to write it. One respondent also requested more feedback. When it comes to the other assignment, the *Individual written report*, two respondents argue that the instructions were too vague and two others that the word count was too limited. One respondent did not like the topic since we had been discussing it for four weeks. But on the contrary, three other respondents argued that this was the best way of concluding and evaluating this course by doing your own research and writing down your own interpretation of the main question of the course – What is (bio)entrepreneurship.

3. The course-responsible reflection on the course implementation and results

Course strengths:

- The course lay a solid foundation for the rest of the programme to understand the main subject. The students are introduced to bioentrepreneurship as a discipline, illustrating both the very broad definition (different theories) of the same and the general application of social science (no right or wrong, etc.).
- The course lay a solid foundation for the rest of the programme when it comes to the pedagogical model. Based on the theoretical understanding of bioentrepreneurship, the course also introduces the students to pedagogic theories and train generic skills such as entrepreneurial and self-directed learning.
- The mix of theory and application, utilizing the blended learning approach with theory from webpages and recorded videos mixed with "practice exercises" and campus seminars for discussion, driving the individual learning processes forward.

Course weaknesses:

- The number of mandatory campus sessions was limited (due to the pandemic), but a couple of optional sessions were added to compensate.

4. Other comments

For each of the quantitative survey questions, one respondent answered that the course developed the specific skill, or covered the specific topic, to a small extent. That also goes for the questions where all the other respondents answered to a large or very large extent. Still, the mean value for the two questions linked to scientific evidence and method was slightly increased compared to the result from last year (from 2.8 to 3.1 and from 3.0 to 3.4). And that was the aim behind the new Individual written report assignment.



5. The course-responsible conclusions and any proposals for changes

(If any changes are proposed, please specify who is responsible for implementing these and a time schedule.)

- The course structure on Canvas will be introduced in more detail at the first campus session.
- The introduction to the Reflective learning journal will be slightly adjusted to clarify that a log should be submitted at least once per module (if possible, one before and one after, to follow the design of the reflective questions). It will also be clarified that the aim is not only to test the ability to reflect. The aim is also to drive and support the learning process and invite for a dialogue between student and teacher.
- The introduction to the Individual written report will be looked at, and information from one of the later announcements will be added to the actual assignment. The number of articles related to entrepreneurship might be limited to steer the focus towards the more recent publications, not as covered earlier in the course. A workshop will also be added where we collaboratively start the screening (content analysis) of the knowledge sources provided for the assignment. This would hopefully also give the students a bit more thorough research practice.
- Will consider the possibility of giving slightly different tasks/questions to the different groups for the team project.