

Example template – Course analysis (course evaluation)

Course code 1BI051	Course title Biochemistry	Credits 12hp
Semester (spring/autumn) VT25	Period 20/1 – 10/3	

Course coordinator Manuel Zeitelhofer	Examiner Bernhard Lohkamp
Teacher in charge of component	Other participating teachers various

Number of registered students during the three week check 69	Number approved on the last course date 42	Response frequency course valuation survey 77%
Other methods for student influence (in addition to concluding course valuation) Course committee meetings (3 times, 2 during the course, 1 after)		
Feedback reporting of the course valuation results to the students Survey (without comments) will be published on Drupal and sent to students who have participated in the survey. Survey was discussed with the course committee.		

Note that...

The analysis should (together with a summarising quantitative summary of the students' course valuation) be communicated to the education committee at the department responsible for the course and for programme courses also the programme coordinating committee.

The analysis was communicated to the education committee on the following date: 250331

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1. Description of any conducted changes since the previous course occasion based on the views of former students

The feedback for the lipid lab reports has been improved by improved managing of the lipid lab as well as by improved guidance for the lipid lab teachers. Although the intermediary tests were rated highly by the students, a different grading form was introduced. Instead of compulsory the intermediate tests were now voluntary. Instead, a system of bonus points for the intermediary tests counting for the final examination was introduced. We will continue with this and evaluate after the system has been in place for 3 years. The presentation session of the project work Metabolism in health and disease was shortened and the number of students per group was reduced to 5-6. The number of topics was reduced from 5 to 3 to avoid redundancy during the presentation session and for reducing workload in the week before the final examination. More time was allocated for giving the students feedback on their project work presentations. For improving group work in the project work sessions, the concept of ground rules for group work was introduced. A document for teachers detailing the responsibilities for

every type of teaching (lab, seminar, lecture, project work,...) and general information of the course was introduced. A document for students with an overview of the course information including deadlines, mandatory course occasions and explanation of the bonus point system as well as grading was introduced.

2. Brief summary of the students' valuations of the course

Overall, the course was similarly rated as last year, a few criteria slightly worse and a few slightly better. Although the management as well as the execution of the lipid lab were improved there is more room for improvement for next year's course. For the last PW, students felt that it should be after the examination and that one PW is enough. Regarding the PWs many students however stated that they learnt a lot and better understood integrative metabolism through dealing with the topics of the PWs.

Students felt they could better turn to teachers to ask about course content (up 0.3 points). However, students felt they got less feedback (down 0.4 points). This is mostly due to students complaining that the PW should have similar feedback than lab reports i.e in speed grader. This is maybe partially due to the course directors' input at the course committee meeting since this was discussed with the student representatives.

Also, this time the students openly stated for the first time that they have used AI to a large extent, mostly for improving their understanding of topics learnt in the course.

3. The course coordinator's reflections on the implementation and results of the course

Strengths of the course: Labs, lectures and seminars were in general very highly rated. The improved handling of the lipid lab as well as improved teacher education for the lipid lab led to an improved lab experience for the students. Importantly, the students got detailed and applicable feedback in their lab reports. Students found the constant link between metabolism in general and the current health challenges such as obesity, metabolic syndrome and connected diseases very interesting and inspiring. The students appreciated the project works to integrate knowledge and learn in teams, for instance: "The projects gave us the opportunity to dive deeper into topics that interest us and research about them, gave a chance to do our own research and pose questions." The improved focus on integrative metabolism was very much appreciated by the students: "The focus on integration was very positive, by seeing how all the pathways interacted, converged, and in which situation did each pathway appear and in which order. Showcasing the interconnectedness of the different metabolic systems; using disease models to show this."

The course schedule and the clear structure of the course with 3 course parts was rated highly. In addition, the intermediary tests are viewed as helpful for fostering the student's learning and valuable as preparation for the final examination. Although less students used the intermediary tests since the tests were not mandatory anymore the bonus point system attracted a large percentage of students for these tests. It was pointed out that both the lecture and the theory content clearly explained what the students need to know to achieve the aims of the course.

Weaknesses of the course: The feedback for the project work presentations has to be improved. Currently feedback is given directly after the presentation session. However, students would appreciate more detailed feedback similar to the lab reports. Some lectures were still perceived as too long and rushed through. Students found it difficult to understand the lipid lab protocol and had difficulties interpreting gas chromatography results.

3. Other views

The course management worked very well and the communication with the teachers involved in the course led to specific small improvements in various teaching occasions, especially for the lipid lab and the seminars. Students had difficulties with the calculations needed for the protein lab. Thus, a new quiz will be added giving examples for those calculations.

4. Course coordinator's conclusions and any suggestions for changes

As a possibility for the students to evaluate their current knowledge and understanding of the topic, post-lecture and pre-seminar quizzes could be implemented (MZe). This also represents an incentive for the students to be even better prepared for the seminars and engage interactively. In the protein lab a new quiz will be added giving examples for calculations needed for this lab (TNy and MZe). The lipid lab manual will be reviewed and adapted to a more user-friendly form. In addition, a section on interpretation of gas chromatography results will be added in the lipid lab lecture (ODa and MZe).

The course information documents for both teachers and students can be improved. Especially regarding the labs (for teachers only) it is important to provide separate guidelines on what do and when (before, during and after the lab) (MZe). For the PW metabolism in health and disease a new module responsible teacher (SPa) will be appointed.

To foster group work in the project works (MZe, BLo, SPa and ISu) the following changes are discussed: 1) Introduction of a randomization app for the presentation session, i.e. the students do not know which part they should present. This not only should foster group work but is also a good preparation for the final examination since all the PW topics are part of the final examination. 2) Introduction of a new grading system – assess the whole group (MZe). The course survey questions have to be reviewed potentially removing questions and adding new ones as for instance: “I had a clear picture of what I was expected to learn during the course.” (MZe and BLo).

Changes effecting course plan revisions will be implemented latest by 1 October, schedule changes by October and others by the beginning of the course.

Appendices:

Survey