Course analysis (course evaluation)

Course code	Course title	Credits
1BI036	General and Organic Chemistry	12
Semester (VT/HT-yr) HT-25	**Dates** 2025-09-25 – 2025-11-16	

Course Director	Examiner
Bernhard Lohkamp	Bernhard Lohkamp
Teachers in charge of different parts of the course Michael Landreh	**Other participating teachers** various

Number of registered students at the 3-week check	Number passed at final course day	Response frequency course valuation survey
71	49	76%
Other methods for student influence (in addition to the final course valuation/survey) Course Council meeting (1 during the course and 1 after; a 2nd one was scheduled during the course but after correspondence with student representatives cancelled/postponed)		
Feedback reporting of the course evaluation results to the students Survey (without comments) published on the open course page. Discussed survey and course analysis (draft) with the student representatives.		

Note that...

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

The analysis was communicated to the education committee on the following date: 2025-12-22
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1. Description of changes implemented since the previous course occasion based on the views of former students, and in relation to the Course Director's conclusions and suggestions for change in the previous course analysis. If changes proposed in the previous course analysis have not been implemented, please explain why

The practical lab sessions and hence reports had been differently distributed throughout the course to reflect the extend of the associated reports. Some general feedback on lab reports and typical mistakes were highlighted in the lab report lecture. However, a later follow up on general lab report feedback was not done as such because there a workshop by KIB on academic writing which partially did this and there was no other suitable activity to add this at this point.
The lab manual has more detailed instructions on size expectations for each section as well as a link to the lab report checklist. A link to specific lab report instructions is not done as yet partially because there are no guidelines from the PN on this yet and hence to avoid having to repeat the work once they are in place. Lab experiments have been revised to omit almost all compounds with are labelled CMR according to new classifications. No extra basic lab skills training has been added for all, instead a voluntary session for lab training has been conducted. No specific breaks have been added since the student's progress in the lab is extremely varying so scheduled breaks may cause waiting times for some and extra time pressure for others. Better communication about this from teacher and student side seems more productive. Content overall was revised and overlap as much as possible omitted, however, this did not lead to significantly more time elsewhere. A workshop on

scientific writing and AI by KIB was held. Due to time constraints lab lecture type of videos or information has not been added but most pre-lab quizzes have been revised to contain some more practical aspects. Some self-studies have been successfully converted back into seminars and the distinction and idea about seminars and self-studies clarified to both teachers and students. Due to time constraints and lack of ideas as how to there has been no formalisation of feedback for lab reports. Instead, the importance of feedback has been emphasised to the teachers.

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

(Based on the students' quantitative responses to the course valuation and key views from free text responses. Quantitative summary and any graphs are attached.)

The students perceive the course as very demanding and high paced with almost too much, interesting content. However, mostly it is manageable eps. since it is well organised. Students in particular enjoyed the laboratory work and took responsibility of their own learning. When feedback was given (e.g. lab reports, seminars) it was good, but there could be more opportunities for feedback. The final exam was perceived appropriate for the course. The student-teacher communication was good. Smaller learning groups such as seminars and esp. self-study with teacher help are very appreciated by the students.

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

Strengths of the course:

The course is well structured and organised incl. the Canvas pages and theory content.
Small study groups such as seminar and self-study with teacher help support the students' learning continuously and get the required help if necessary. The difference in format between these two and/or role of self-studies itself was questioned though.
The laboratory work is very much appreciated, and students enjoy not just the work and learning new techniques but the connection between theory and practice incl. the lab reports.
Recently added content (general reaction mechanisms, feedback and AI) is appreciated although it does always not seem to translate into overall better performance and/or course assessment (e.g. perception of feedback).
The pre-lab quizzes, discussions and video recordings of the experiments prepared the students well for the labs they performed. Teachers were appreciated for their good interaction with students and support esp. in the labs.

Weaknesses of the course:

The content of the course was deemed too much and moving too fast. There was little breathing space with time to catch up and digest.
Lecture times were not always used optimally, and some content was hence missed or rushed. There was occasional discrepancy between the lecture content and theory content.
Group work can indirectly (via bonus points) influence the overall grade of the course.
The group sizes in some sessions were too large.

3. Other views

The change of the first "five" questions together with a change of grading scale from 5 to 6 steps (i.e. forcing a grading onto the better or worse side) makes is difficult to directly compare results from this survey to earlier course instances.

By mistake the final exam was scheduled on the first day of the next course. This was only discovered/pointed out late but resolved swiftly to remain on the initially scheduled, later date.

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

(If changes are suggested, state who is responsible for implementing them and provide a schedule.)

To increase the individual lab experience revision of the lab curriculum is suggested. Instead of two longer groups labs one additional individual lab may be performed. At the same time the introduction lab could be extended to cover some of the lab skill acquired in the omitted lab. Consequently, the lab report progression and scheduling will have to further reviewed. At the same time a change in assessment of the reports can be considered in the following way. a) keep bonus point system but only count the 3 individual lab reports; b) lab reports/assessments get it's own VG/G/U scale and VG in lab and exam are required for overall VG; c) lab reports become voluntary (with feedback) and are assessed in an examination setting (either separately or in conjunction with the final exam or in the lab examination part of the programme). Revision of the lab experiments should include complete omission of CMR compounds. The feedback for the lab reports should be more formalised for the teachers despite being difficult to control/enforce (**BLo and resp. lab teachers**).

The individual, voluntary lab practise will be scheduled more optimally from the beginning and potentially moved to the IBS course (**BLo and course director of IBS**).

The workshop (series) on academic writing will have to be better described and different to previous workshops for the students to make it meaningful for all students (**BLo with academic writing at KI**).

The workshop may include (even more) general feedback on lab report, otherwise this may be provided later in the course (maybe in connection with "lab-lectures" – see below) (**BLo**).

Lab experiments should be supplemented with either more information in the corresponding lectures and/or short "lab lecture" videos maybe even integrated with the pre-lab quiz (**BLo and lab resp. teachers/lecturers**).

Self-study sessions and seminars will be further reviewed, and some self-studies should be considered to become seminars (in the "new" format) again. The purpose of self-studies needs to be clarified even more. Alternative self-studies may be replaced with online quizzes and only seminars remain (**BLo and resp. lecturers**).

Appendices:

survey