

## Course analysis (course evaluation)

<b>Course code</b> 1BI036	<b>Course title</b> General and Organic Chemistry	<b>Credits</b> 12hp
<b>Semester</b> (spring/autumn) HT-22	<b>Period</b> September 21 - November 13, 2022	
<b>Course coordinator</b> Bernhard Lohkamp		<b>Examiner</b> Bernhard Lohkamp
<b>Teacher in charge of component</b> Michael Landreh		<b>Other participating teachers</b> various
<b>Number of registered students during the three week check</b> 54	<b>Number approved on the last course date</b> 39	<b>Response frequency course valuation survey</b> 65%
<b>Other methods for student influence</b> (in addition to concluding course valuation) Course committee meetings (3 time, 2 during the course, 1 after)		
<b>Feedback reporting of the course valuation results to the students</b> Survey (without comments) published on the open course page. Whole survey sent to students who have participated in the survey. Discussed survey 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: **07/12/22**

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

Lab experiments and compendium were revised. Pre-lab quizzes could be repeated unlimited but needed to be passed before the lab sessions. The assessment of pre-lab discussion is only done for individual labs but not group labs. The content of the course was revised and reduced. The intermediate test was followed up by a review session. The biomolecules part was condensed and emphasis on application of chemistry rather than new knowledge.

### 2. Brief summary of the students' valuations 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.)*

Students were engaged in critical thinking, enjoyed the laboratory work, took responsibility of their own learning and mostly achieved the intended learning outcomes. The final exam appeared not as relevant to the learning outcomes and appropriate as intended. Overall, the student-teacher communication was good. In contrast to previous years the workload was deemed as too high again. Smaller learning groups such as seminars and esp. self-study with teacher help are very appreciated by the students.

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

#### *Strengths of the course:*

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 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. The pre-lab quizzes, discussions and video recordings of the experiments prepared the students better for the labs they performed. Teachers were appreciated for their good interaction with students and support. The course is well structured and organised incl. the Canvas pages and theory content.

#### *Weaknesses of the course:*

There was some overlap between content of lectures esp. in the beginning and resulted in missing of some more advanced content. The content of the course is perceived as too much, and some topics feel out of context. Depending on the teacher some parts of the lab assessment esp. reports are not graded uniformly and lack feedback. The examinations (intermediate and final) felt constrained with respect to the given time. The level and number of questions for the seminars and self-study sessions are not well adjusted. (Too) low pace in the beginning of the course and much content in short time towards the end.

### 3. Other views

For health reasons several lectures had to be cancelled. However, for most of these recordings were available, summary lectures and/or questions sessions added as well as Canvas discussion forums implemented.

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

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

The lab report instructions and guidelines seem to require clarification. Possibly a form will be used for the earlier reports in the future to clarify what is required in each of the reports since they are very different due to a progressive element. Additionally, the lab report check list together with some size expectations will be added directly to the report instructions (BLo together with PN to give general report guidelines). The lab compendium will be revised to include even more detail on the experiments. And some experiments itself may be revised to prevent the use of potentially dangerous chemicals and waste. (BLo+responsible teacher). The content of the course will be reviewed to remove and replace parts which are not (as) relevant to biomedical students. Content will be mapped better to avoid overlap and free time for more advanced topics. (BLo) A condensation of the general chemistry part will be investigated esp. in connection with the introduction of course and programme preparatory material in chemistry and mathematics. (BLo, M. Dagnell, L. Coppo). The intermediate test will be given more time (or fewer questions) (BLo). A workshop (series) on academic writing should be included (again) (BLo with academic writing at KI and course directors of year one). Self-study sessions and seminars will be better aligned with the corresponding lectures and content (BLo and resp. lecturers). The feedback for the lab reports will be reconsidered in different ways. E.g. the time students have to hand in the next report after receiving feedback for the previous may be increased. And/or students may receive first general feedback and then have a possibility for revision. (BLo)

### Appendices:

Survey