### **Course analysis (course evaluation)**

Course code 1BI039	Course title Chemical Biology	Credits 8hp
Semester	Period	
(spring/autumn)	April 30 – June 6, 2021	
VT-21		

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

Number of registered	Number approved on the last course	Response frequency course valuation
students during the three	date	survey
week check	37	62.5%
49		

Other methods for student influence (in addition to concluding course valuation)

Course committee meetings (1 during the course), one after to discuss the survey and course analysis.

Feedback reporting of the course valuation results to the students

Survey (without comments) published on course Canvas page and will be published on the kursweb page (Drupal). Whole survey sent to students who have participated in the survey. Will discuss 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: 24/06/21 The analysis was communicated to the programme coordinating committee on the following date: 24/06/21

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

The lab manuals for both the computer and inhibitor (wet) lab have been revised to clarify several points. Now, the computer lab instructions clearly separate the information text and questions. Several general points have been clarified e.g. the overall view of the course, that chemistry will be important, preparation for the workshop is important. A compulsory online pre-lab quiz was introduced for the wet lab. A Labster simulation (for NMR) was introduced. More instructions were given for the project work esp. the presentation outline.

### 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.)

Note: comments on the course due to the digital format will be summarised and discussed under Other views.

The students are overall satisfied with the course from learning new, interesting information to the corresponding examination. Some feel thought there is too much content. It appears that there is still some underlying thread missing in the course which holds the different parts together, although this continues to improve. The computer lab was generally perceived as interesting and fun. The group, project work was

overall well received. Students were positive to it, learned a lot, appreciated the compulsory meetings, random presentation approach, group members/dynamics. However, there was feedback on the presentation missing (Note: usually the assessor discusses the presentation with the group directly afterwards, but this was not done due to time constraints and digital format). The lab manuals appear still to require some more clarification here and there. Although the wet lab was only performed partially and voluntarily so it is difficult to comment there exactly. It appears the grading on the reports was uneven and feedback occasionally lacking (depending on the teacher). Students would appreciate more reading instructions/source since there is no text book available as such.

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

Teaching staff, topic, and content as such is very much appreciated by the students. The computer lab incl. introduction of Chimera appears well liked and teaches the students a lot. The project work focused in the end of the course allows students to apply the gained knowledge in their own work. Seminars are a good way of learning for the students.

### Weaknesses of the course:

The lack of a (one!) suitable text book and "different" topics make it difficult to gel the course together and give it a common thread. Overall, it appears that the course is very lecture based with little student active teaching. Some instructions need clarification and/or be extended e.g. for the lab compendia. Feedback and grading for lab reports is not always satisfactory.

#### 3. Other views

Students had difficulty in analysis of data using e.g. excel and doing simpler lab related calculations. These may have been the result of less lab work due to the pandemic but are recurring issue (at least for some students). This will be addressed in the programme to be included in several courses.

Some lectures included more interactive elements but not all and more interactiveness together with more seminars (or similar) would be appreciated.

Due to the Covid-19 pandemic the course had to be changed to a digital online format. Overall, the course adapted well to the digital format. The wet lab was shortened from 1 full day to ½ day and voluntary. Students not performing the lab were given data for analysis. Video recording of the lab procedure(s) were deemed not valuable. A Labster simulation (NMR) was included, however, this was rather to reinforce the NMR theory than replacing laboratory skills (there is usually no NMR lab). Overall students appreciated the digital format of the course. (Rather) General advantages of digital teaching are mentioned to be e.g. less time for commuting, better time management and flexibility (esp. since almost all lectures were recorded), disadvantages are e.g. motivation and concentration difficulties. The final examination (digital, at distance) was conducted as previously and a demo exam (from last year) was made available.

### 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 compendia will be revised further; esp. for the wet lab to clarify the procedures in particular in connection with a new inhibitor used (but without being too explicit) (BLo). The online pre-lab quizzes will be extended to ensure more complete preparation of the students which will result in a smoother lab operation and higher learning experience (BLo, teachers on wet lab). A lab report checklist (for teachers and students) could be introduced to allow more consistent grading and feedback on the reports (BLo). The course content will be discussed again as to see how to emphasise the common thread. In this context possible text books will be evaluated again to see if the course can be more comprehensive in this way (BLo, P. Arvidsson, M. Haraldsson). However, there is usually the problem that text books will either focus on Chemical Biology or Drug Discovery but not both, a new edition of a published text book may actually change this but is still not published yet. Replacing some lecture with a seminar or lecture AND seminar will be considered esp. for longer lectures. Alternatively, some topics could be approached by TBL (BLo). The majority of bonus points will be removed since individual assessment for the groups lab (report) and group project work is problematic. Instead additional requirements for VG will be introduced, e.g. certain grade for lab report,

project work assessment. However, the peer-assessment for the project-work will remain as a check for
participation in the group work (BLo).

### Appendices:

Survey