Teacher's Feedback: CHEM-E0100 Academic Learning Community

Course facts: 4-5 cr; periods I-V (2019-20); number of students: 131 (104 students in total passed the course, *ca.* 79%); grades: pass–fail;

MyCourses: https://mycourses.aalto.fi/course/view.php?id=24144.

Teaching and learning methods: Lectures, workshops, quizzes, independent studying and exercises, attending events, as well as academic advising and major-specific feedback sessions. For the bachelors coming from outside Aalto University, the orientation week events formed a part of the course, enabling these students to receive 5 cr. For Aalto bachelors, elective Career Planning Exercises were offered, which increased the extent of the course to 5 cr. For those not attending the orientation week or the Career Planning Exercises, the extent of the course was 4 cr. In addition to the themes already mentioned, the topics covered during the course included: Aalto Ethical Guidelines, Study Techniques, Information Search and Databases, Intercultural Communication (ICC), Master's Thesis Review, and Entrepreneurship/Circular Economy.

Assessment methods: The possible grades for the students were "pass" or "fail". To pass the course, the exercises and quizzes had to be carried out in an acceptable manner. In addition, the students were required to attend certain activities and events (major-specific orientation, CHEM Career Forum, academic advising, and feedback sessions). Details on this can be found in MC (click the link above).

Feedback summary: Feedback was collected actively during the course (discussion in class, as well as open questions in the quizzes). In addition, the standard electronic survey (Webropol) provided valuable feedback – see Table 1 for a summary of the results.

Table 1. Summary of the student feedback from the electronic (Webropol) survey. The figures are averages from the students' responses. The number of the responses given in the option "E=not applicable" is displayed in parentheses after the calculated average. The deviation of the answers is described presenting the range of the given responses (the column titled Min.-Max.; only for 2020). For comparison, the corresponding average values are also shown for last year (2019). The number of respondents (n) was 48 or 49 in 2020 and 54 in 2019.

| | Average 2020 (E) | MinMax. | Average 2019 (E) |
|--|------------------|---------|------------------|
| 1. Overall assessment | 2.63 (1) | 1-5 | 1.96 (0) |
| 2. Teaching methods | 3.04 (2) | 1-5 | 2.43 (0) |
| 3. I am pleased with my study effort | 3.56 (1) | 1-5 | 3.12 (3) |
| 4. Workload compared to other courses | 2.94 (2) | 1-5 | 3.23 (5) |
| 5. Correspondence to the description | 3.54 (1) | 1-5 | 3.03 (2) |
| 6. Effect on the study motivation | 2.65 (0) | 1-4 | 1.70 (0) |
| 7. Difficulty compared to other courses | 2.23 (5) | 1-4 | 2.26 (7) |
| 8. The course enhanced my general skills | 2.98 (3) | 1-4 | 2.26 (0) |

The numerical averages of the students' feedback are fair, *e.g.* the average of the overall assessment of the course is 2.63 and the evaluation for the teaching methods is 3.04. Yet, in the open questions – both in the quizzes, as well as in the Webropol survey – many characteristics of the course were criticised. The lecture time (Mondays 8-10 AM) was seen unsuitable, the course was extended to too many periods, there was too much overlap with certain bachelor's courses, and some students saw the topics overall trivial. In more detail, many exercises and tasks were criticised for being trivial and/or frustrating (Information Search, ICC), while others were seen laborious and unimportant (Information Search, ICC, Entrepreneurship/Circular Economy). Some, but very few, students questioned the whole existence of the course, and demanded it to be removed from the curriculum completely. Kyösti Ruuttunen June 11, 2020

The students gave positive feedback to Master's Thesis Review and the Career Planning Exercises. Similarly, CHEM Career Forum, Academic Advising, and the Feedback Sessions were mostly seen as very good activities. A general, very positive trend is seen in the numerical student feedback: the values are remarkably higher in 2020 compared to the ones obtained in 2019 (see Table 1).

Development actions for next year: I am extremely happy to see the positive development of the student feedback. It is also noteworthy that the percentage of students passing the course increased significantly (from 61% in 2018-19 to 79% in 2019-20). Yet, based on the student feedback, it is clear that this course can be further improved. In the curriculum 2020-22 there will be some major changes, which are based on analysing students' and teachers' feedback. The extent of the course will be changed to 3-5 cr, enabling inclusion of an elective Matlab module (1 cr); the elective Career Planning Exercises module (1 cr) will continue to be offered. Also all the other themes of the course will be included, but to enable the inclusion of the elective one-credit modules, the workload of the ICC and Entrepreneurship/Circular Economy themes will be decreased to *ca*. 0.5 cr each.

The development of all the aspects of the course will continue in 2020-21. The contents of the Information Search Exercise will be changed completely (thank you, Prof. Riikka Puurunen!), and also the contents of the other modules will be looked into. Due to the COVID-19 situation, the mode for teaching will be extensively online. This is seen more as an opportunity, not so much as a threat: *e.g.* the lectures will be recorded, making them more approachable to the students.

General feedback from the teacher: I am very grateful for the students' justified and analytical feedback. It is delightful to see that the improvements implemented to the course have proven successful. This shows me the path which to follow, and gives me the confidence of continuing with the changes. As previously, also this year some students gave very critical comments, but all in all the tone of the feedback was much more pleasant than before; I was also much better prepared for the fierce comments compared to previous years.

In the end, I quote myself from last year: I am fascinated by the different themes covered in this course, and I am convinced that all of the topics are of extreme importance for CHEM School students during the studies, as well as in their future working life. Therefore, my motto for this course continues to be: "Let's make this the best course ever!"