

## Course analysis (course evaluation)

<b>Course code</b> 4NT001	<b>Course title</b> Molecular and genetic mechanisms in nutrition science	<b>Credits</b> 10
<b>Semester</b> Autumn -23	<b>Period</b> Second period (11 Oct - 24 Nov)	
<b>Course coordinator</b> Christian Riedel		<b>Examiner</b> Christian Riedel
<b>Teacher in charge of component</b> Christian Riedel		<b>Other participating teachers</b> Eric Poortvliet, Maria Henström, Johanna Zilliacus, Martin Bergö, Federica Laguzzi, Leonidas Lundell, Eckardt Treuter, Rongrong Fan, Paul Petrus, Scott Frendo-Cumbo, Federico Pietrocola, and others
<b>Number of registered students during the three week check</b> 33	<b>Number approved on the last course date</b>	<b>Response frequency course valuation survey</b> 61 %
<b>Other methods for student influence</b> (in addition to concluding course valuation) Discussions during the course as well as an oral course evaluation at the end of the course.		
<b>Feedback reporting of the course valuation results to the students</b> The students were informed via an email through Canvas on 07/12		

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

This is the second time this course is given. Based on last year's feedback, we introduced multiple changes: First, we included one more workshop. To not overburden the students, we made only 8 out of the 10 workshops mandatory, where students could choose the workshops that they wanted to attend. Further, we asked students to no longer hand in reports for each workshop and to peer review them. Instead, the students should write down questions and unclarities for each workshop which eventually would be answered and discussed in a dedicated session late in the course. After that session, the students were asked to write reports on two of the workshops. Further, we introduced mentors that would guide the students for the writing of their final reports. Finally, we changed the methods club: The students now would first visit a lab or facility that uses the method, and only after seeing the method assemble their presentations. The students were also asked to present a research study that was using one of the methods presented during the methods club.

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

Overall, the students were satisfied with the course. In the course evaluation, the overall opinion of the course was mostly good (35%) or very good (30%). These ratings are similar but a little bit lower than for the previous year. It remains unclear why the ratings have gone down slightly, as the course leader perceived the course as working better than in the previous year. One reason may be the unusually low valuation response rate of only 60% and possibly higher expectations from this year's students. In general, the questions in the course evaluation received positive responses. However, the work load was still viewed fairly high. Also, there were some students that questioned the value of this course and the feedback received for their own career plans.

We received a lot of good suggestions from the students on what to further improve about the course, i.e. to move the methods club to the beginning of the course and the journal clubs to a late stage.

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

***Strengths of the course:*** The course in general worked well regarding the content and structure. A broad spectrum of molecular and genetic mechanisms relevant to nutrition science were covered. The students found these lectures and workshops very stimulating. The site visits during the methods club were appreciated. The mentoring for the report preparation was found helpful. Also some of the advanced teaching forms in the course were much appreciated, e.g. some workshops and the journal clubs.

***Weaknesses of the course:*** It is big challenge for the course that the students have different backgrounds and thus different prior knowledge about molecular and genetic mechanisms in nutrition science. This leads to the contents of the course being easy or even repetitive for some students, while for other students the information is very novel and challenging. This leads to some dissatisfied students from both sides. One part feels like they do not get much out of the course, while some others are concerned about the workload and that the contents of the course are too difficult for them to comprehend.

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

The course has now found a good balance and the content is quite refined. It would be nice to still improve the valuation results, but this seems difficult due to the diverse scientific background of the students. Regardless, we will implement several changes to improve the course for next year. We will move the methods club to the beginning of the course, to teach students about the methods early. Then follow with the workshops, in which some of the methods will get mentioned. Next, the journal club takes place, where some of the methods get mentioned again. Then we will close with the oral presentations of the individual reports. Further, we will consider introducing a crash-course on molecular biology and genetics in the beginning of the course, comprised of classroom sessions and self-study activities, to try to bring students with a limited molecular background up to class-level.