

# 3-year course evaluation

Course MOL200

Semester and year for completed course evaluation: HT23

Name of course coordinator(s): Fergal O'Farrell

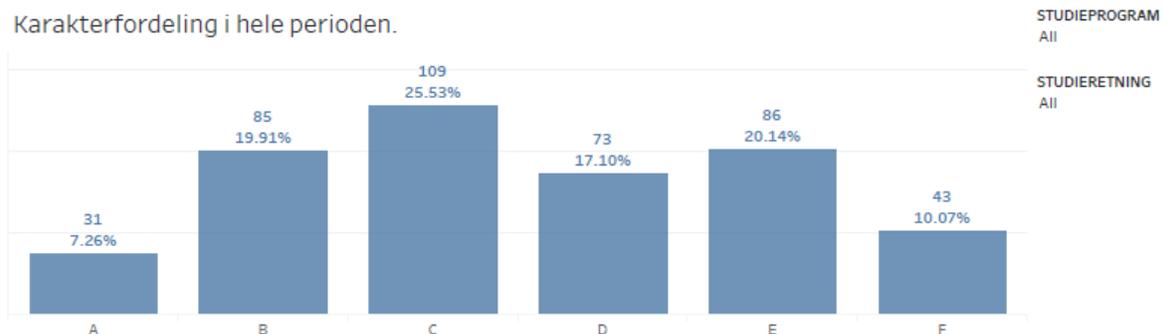
---

## Content

### 1. Describe and justify pedagogical choices in the course, reflect on the students' learning as a result of these choices

This course has employed a flipped classroom approach over the last 3 years. This allows for multiple rounds of feedback between the student and lecturer. The reason for this is to stimulate the students to take responsibility for their learning while providing a structure of support for this. Prerecorded lectures are released to the student 2-3 days in advance of meeting in class. They should watch and fill in an online form with their questions. Lecturer then prepares a short in class lecture 15 minutes approximately to answer these questions. There is often follow up questions and answers to this. Then the remaining class time is used in a colloquia format. The students are asked to work in groups with a set of questions online. Taking about 20-40 minutes. The results of their effort are available in real time to the lecturer who can identify problem issues and explain them. Finally the students have the chance to again ask questions. I actively encourage them to speak, provide the possibility, allow the time for it. But they need to find their voice. Many do. This approach has the added benefit that once lectures are released the students can view anytime afterwards. Similarly "colloquia" questions can be reset and used as exam practice. Students gain a lot of experience here interpreting exam questions. The course has recently been constructively aligned internally in terms of structure and targeted coverage of exam material, as well as externally aligning with surrounding courses, to reduce redundant coverage of material. Student grades have been in general good the last 3 years with class average between 60 and 70%. A C-average (typically more A's than E and F's). The distribution combined over the last 6 years is quite normal, shown below, but I would say has shifted to the left over the last 3 years. Notably the failure rate over the past 3 years is reduced from about 20% to about 5%.

Karakterfordeling i hele perioden.



For comparison, this years rates are indicated in the in the bottom of the below table.

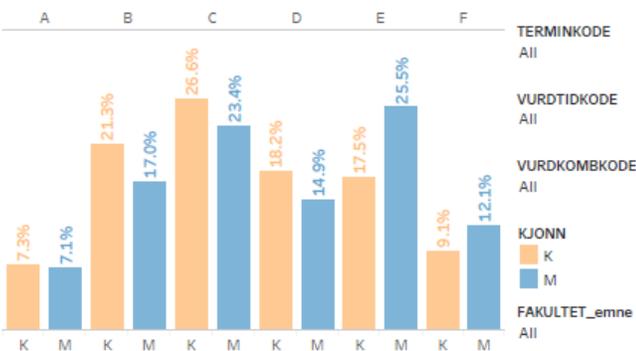
Velg emne her:

MOL200 Metabolisme; reaksjoner, regulering og kompartmentalisering

Karakterfordeling tabell

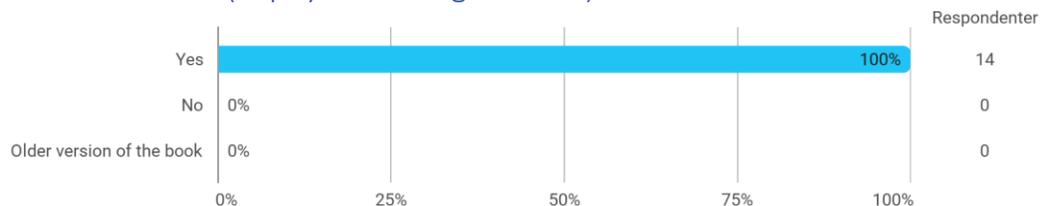
	A	B	C	D	E	F
2018	5	18	15	8	13	14
2019	3	21	20	15	16	11
2020		3	17	19	27	9
2021	6	18	28	8	9	2
2022	8	13	16	13	11	5
2023	9	12	13	10	10	2

Karakterdistribusjon på kjønn



The last year (2023) I have introduced a new book to the course, exchanging Lehninger for Miesfeld Biochemistry. This book contains less than 50% of the content while being a bit more metabolism focused, in line with the course. This was in response to the high price of the previous book (1150NOK) compared with 670NOK for a physical copy and about 400 for a digital copy. And the free online tools the book comes with compared to Lehninger which required an extra payment from the student. This is because very few students bought the book (less than 30%). This term it seems those that filled in the survey had the book, see graph below, so this measures have helped and ultimately can contribute to better grades, more independent learning and use of more than once source material to inspire some reflection and critical thinking on the subject matter.

Did you have the course book (in physical or digital form)? 2023



As with previous years the course maintains a mandatory element, the semester assignment. This has a more course focus (internal constructive alignment step) than the past, where student groups go through exam relevant articles/reviews and present the work in class sessions.

Course evaluations must also include, at least:

## 2. Follow-up of previous evaluations.

The above statement includes follow up (constructive alignment changes and introduction of flipped classroom). Additionally, as stated in 2020, some remapping of Nano student requirements has been done and its no longer compulsory for them to take this course. Some course requirements have been remapped from 2024, students require to pass their 1<sup>st</sup> year chemistry, rather than just recommended. Unintentionally, this can prevent MOL student

“progression” if they have failed this prerequisite compulsory course, so this step will be evaluated over the coming 3 years.

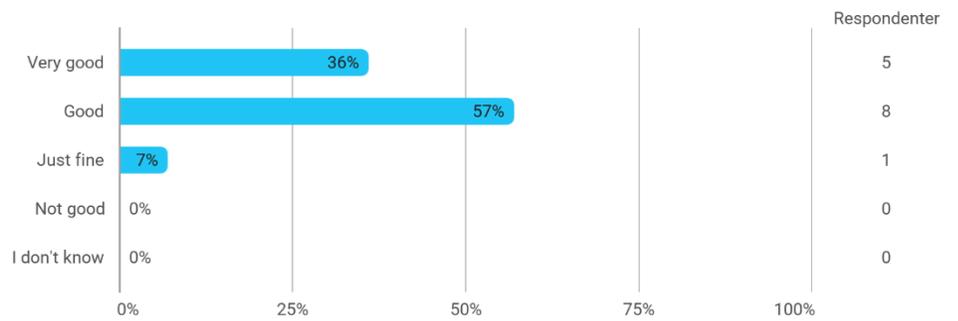
**3. Student evaluation and other evaluations that are relevant to the course.**

Satisfaction with the course remains high the last years. When asked what they thought of the course overall there is an upward trend in satisfaction from 2020 (very good 0 -> 36%, good 8% to 57%, not good 38->0%).

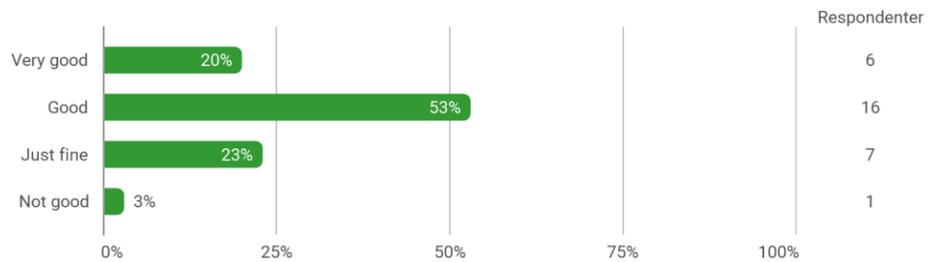
Evaluated by an external reviewer of the MOL program and was commended for its more modern approach to teaching and learning.

Many students have been very positive to the semester assignment portion of the course (in its new form), leading to this part of the course not being removed since its introduction in new form from 2021.

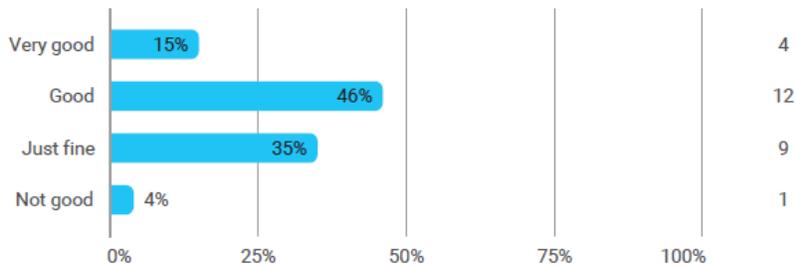
2023



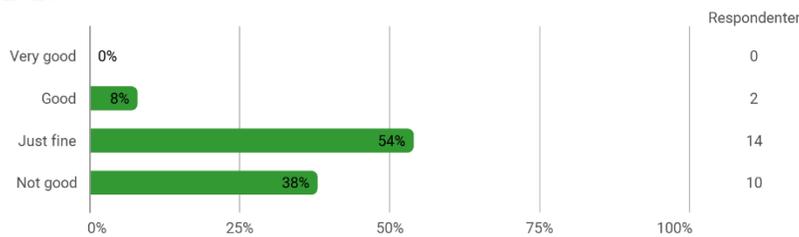
2022



2021



2020



**4. Experiences from others who contribute to the teaching of the course, both students and staff.**

In general positive although always complain too large a course, even this year despite year on year cuts of material. Most students work part time and then expect University to be also part time.

Have had one case of dyslexia and one case of ADHD that found the flipped classroom videos very helpful.

3 Staff members help on the course and are very positive to both the approach used and the overall improvements made to the course. Most decisions have been taken following discussion with colleagues on the needs and ways to meet them.

**5. The percentage of failure in the course.**

Report in Tableau: [https://rapport-dv.uhad.no/#/views/SVP3Emnegjennomfring\\_1/Emnegjennomfringslister?iid=2](https://rapport-dv.uhad.no/#/views/SVP3Emnegjennomfring_1/Emnegjennomfringslister?iid=2)

**6. Possible peer review.**

This has not happened for this course, an external peer review to lectures.

Internally we have discussed proposed changes before and after implementation. In general the course in its current state has received positive feedback on the steps taken from other lecturers internal and external to the course.

**7. Assessment of correspondence between the course's learning outcome description and teaching, learning and assessment methods.**

There is good alignment both before and after restructuring.

**8. Assessment of whether the progress and structure of the course is in accordance with the established goals for the course and program.**

This seems to be a judgment for the programstyre, so I will put on my programstyre hat here and comment that it aligns well with the molecular biology bachelor program.

**9. In those cases where there is associated practice or work relevance in the course, it must be evaluated whether the scheme works satisfactorily.**

Not applicable.