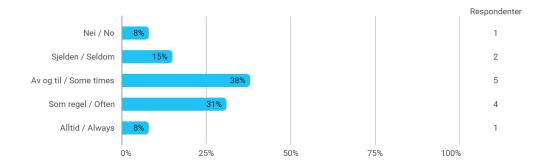
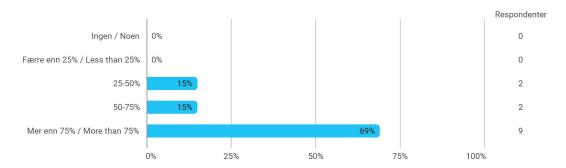
#### Har du forberedt deg til forelesningene? Did you prepare for the lectures in advance?

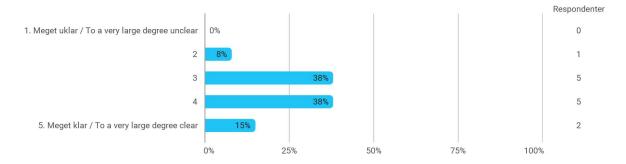


## Hvor stor andel av forelesningene har du fulgt? How many lectures have you attended?

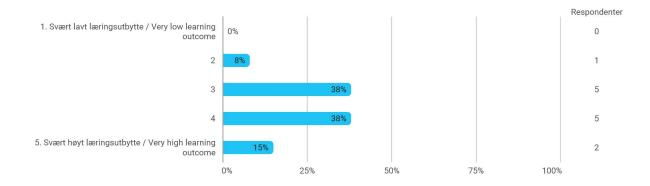


Klarhet i forelesers fremstilling av stoffet i forelesningene. 1 til 5, der 1 er meget uklar og 5 er meget klar.

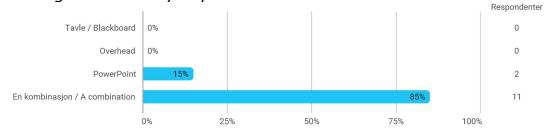
How clear was the presentation during the lectures? Rate on a scale from 1 (=very unclear) and 5 (=very clear)



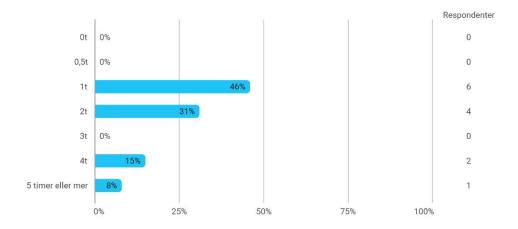
Hvordan har læringsutbyttet av forelesningene vært? 1 til 5, der 1 er svært lavt læringsutbytte og 5 er svært høyt læringsutbytte. How do you rate the learning outcome from the lectures? Rate from 1 to 5, where 1 is very low learing outcome and 5 is very high learning outcome



Hvilket forelesningsmedium foretrekker du? Which teaching medium do you prefer?

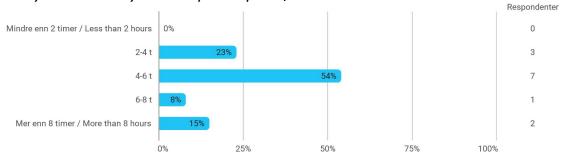


Hvor mange timer har du i snitt brukt til selvstudium (før og etter forelesning) pr. forelseningstime (dvs pr. 45 minutter)? How many hours self-study have you used per 45 min lecture?

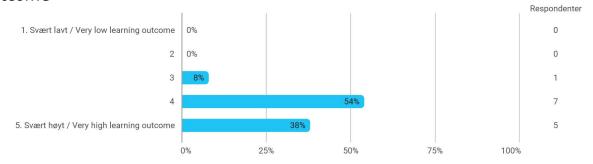


Hvor mange timer brukte du i snitt på å skrive rapport for hver av innleveringene?

How many hours did you use per report / Hand-ins?

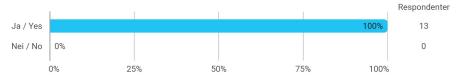


Hvordan har læringsutbyttet av innleveringene vært? 1 til 5, der 1 er svært lavt læringsutbytte og 5 er svært høyt læringsutbytte. How do you rate the learning outcome from the hand-ins? Rate from 1 to 5, where 1 is very low learing outcome and 5 is very high learning outcome



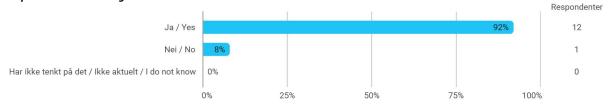
Mener du at du hadde tilstrekkelige forkunnskaper for å følge undervisningen i KJEM235?

Did you feel your background knowledge was adequate to follow the content of this course?



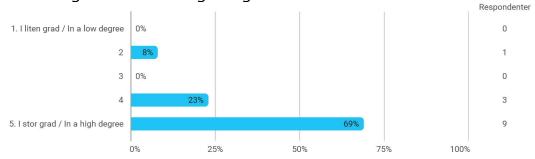
Holder du på med eller har du planer om å ta en mastergrad der du forventer at pensum i KJEM235 kan være nyttig?

Are you now, or are you planning, to do a master thesis in which you expect the subjects in KJEM235 will be useful?



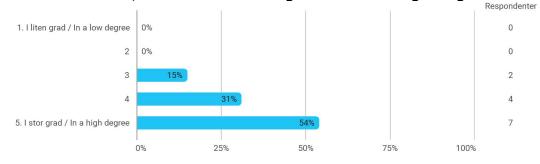
Opplever du at foreleser viser interesse for studentenes læring? Svar 1 til 5, der 1 = i liten grad og 5 = i stor grad.

Does the teacher show interest in the students learning? Rate 1 to 5, where 1 = low degree and 5 = high degree.



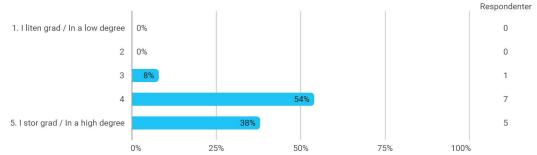
Legger foreleser til rette for at studentene skal få økt kunnskap om temaene i kurset? Svar fra 1 til 5, der 1 = i liten grad og 5 = er i stor grad.

Does the teacher promote and facilitate the learning of the different topics in KJEM235? Rate 1 to 5, where 1 = low degree and 5 = high degree.

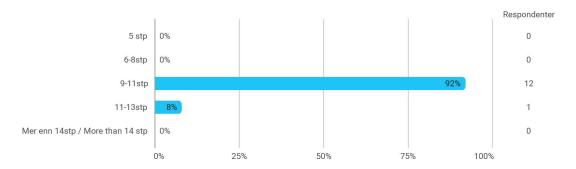


Viser underviser stor kunnskap innenfor emnet som undervises? Svar 1 til 5, hvor 1 er i liten grad og 5 er i stor grad.

Does the teatcher demonstrate great knowledge within the subjects being taught in KJEM235? Rate 1 to 5, where 1 = in a low degree and 5 = in a high degree.

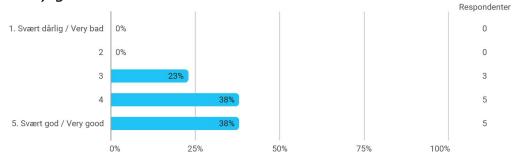


10 studiepoeng skal tilsvare ca. 13t arbeid (organisert undervisn. + egenaktivitet) pr. uke. Hvor mange studiepoeng mener du emnet KJEM235 tilsvarer i forhold til arbeidsmengde? How do you rate the work load of this course, given that 10stp corresponds to 13 h work per week?



Generell oppfatning av emnet KJEM235? 1 til 5, der 1 er svært dårlig og 5 er svært god.

What is your opinion of KJEM235 in general? Rate 1 to 5, where 1 is very bad and 5 is very good.



### Evaluation report 2022 autumn term

#### **Course code:**

#### **KJEM235**

## Faglærers vurdering av gjennomføring/lecturers assessment of implementation:

#### Praktisk gjennomføring/practical implementation

The curriculum is appropriate for the course.

The book used in the course covers the basic knowledge for the level of the students.

The course is divided into four mandatory tasks to access the final exam. For the last task, an oral presentation is carried out with the delivery of a report, where the student must be able to elucidate an unknown compound based on the tools implemented in the course.

#### Strykprosent og frafall/failure rate and apostasy

Initially, the course started with 24 students. On the way, one withdrawal, given a total of 23 students allowed to present the final exam. All the students presented on the final test and obtained passing grades. The average grade was B-C.

#### Karakterfordeling/grade distribution

Grade A: 3 students.

Grade B: 8 students.

Grade C: 8 students.

Grade D: 1 student.

Grade E: 2 students.

#### Studieinformasjon og dokumentasjon/information of studies and documentation

The course was implemented based on the book Donald Pavia: Introduction to spectroscopy, 5<sup>th</sup> edition.

We use "My UIB" to post lectures, exercise schedules, videos, assignments, program lists, etc., which has worked well.

#### Tilgang til relevant litteratur/access to relevant litterature

The students and the lecturer had the appropriate resources to access the book and material posted in Mitt UiB used during the course.

# Faglærers vurdering av rammevilkårene/lecturers assessment of frame terms

#### Lokaler og undervisningsutstyr/locals and teaching equipment

Auditorium 4 (RFB) was used for the physical lectures, which is well equipped with: a computer with internet access, a projector, a blackboard and chalk, a sink, and comfortable chairs and tables for students. The lectures were not recorded.

#### Andre forhold/other conditions

## Faglærers kommentar til student-evalueringen(e)/lecturers comments to student evaluation

Metode – gjennomføring/method – implementation

Within the tasks assigned to access the final exam, it must have some value in the final evaluation so that the student has little more motivation.

#### Oppsummering av innspill/summary of input

The students were open to participating in discussions and solving exercises. They were not afraid to give their opinion even if they were unsure of the correct answer. Around 75% of students attend 90% of the lectures.

#### Ev. underveistiltak/eventual underway measures

This course should not include 2D NMR.

# Faglærers samlede vurdering, inkl. forslag til forbedringstiltak/lecturers overall assessment, incuding suggestions for improvement measures

Structural elucidation of organic compounds is a complete and complex course; it is not fair to pretend that students are only bad or good. It also depends on the course structure and the opportunities the lecturer gives them to improve.

Within the tasks assigned to access the final exam, it must have some value in the final evaluation so that the student has more motivation. At the beginning of the semester, a modification of these assignments was proposed to the commission in charge, for which 10% of the grade was offered in three assignments and 10% for a fourth assignment that includes an oral presentation and a written report, for a total of 20% and the remaining 80% for the final exam.

On the other hand, this course should not include 2D NMR; this should be a more advanced course since 1D NMR has its degree of difficulty; to access 2D-NMR, students should have a minimum of knowledge about the 1D-NMR. It would be more relevant to go deeper into 1D-NMR.

All this considers that this course includes undergraduate and master students, so it is challenging to balance the content.

In the postgraduate program, no course considers 2D NMR in greater depth. Additionally, doctoral students are not eligible to take the KJEM250 course. An advancing NMR course should be implemented where knowledge in structural elucidation using 2D-NMR is deepened. Masters and doctoral students would greatly appreciate this.

The department has a 600 and 850 MHz NMR, to which few universities have access; The postgraduate course must have an advanced NMR course that includes 2D-NMR specifically for structural elucidation. I am thinking about the future, about the possibility of new research groups being implemented, that it would be of great benefit for the program to offer a course of these characteristics.