

EMNERAPPORT – INSTITUTT FOR BIOMEDISIN

ANNUAL EVALUATION REPORT – DEPARTMENT OF BIOMEDICINE

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| Emnekode: <i>COURSE CODE:</i> | BMED370 | Semester / år: | Spring semester 2024 |
| Emnenavn: <i>COURSE NAME:</i> | <i>Computational methods for drug design</i> | SEMESTER / YEAR: | |
| Emneansvarlig: <i>COURSE COORDINATOR:</i> | Ruth Brenk | Godkjent: | Utdanningsleder IBM 04.12.2024 |
| Rapporteringsdato: <i>DATE OF REPORT:</i> | 03.12.2024 | APPROVED: (admin.) | |

INNLEDNING / INTRODUCTION:

Kort beskrivelse av emnet, inkl. studieprogramtilhørighet. Kommentarer om evt. oppfølging av tidligere evalueringer.

SHORT COURSE DESCRIPTION, INCLUDING WHICH STUDENTS/CANDIDATES MAY ATTEND. COMMENTS TO CHANGES BASED ON PRIOR EVALUATIONS.

Computational methods for drug design (5 ECTS) is a course that focuses on important aspects of biomolecular recognition which form the basis on which many computational methods are built. The principles of computational methods used for structure- and ligand-based drug design will be explained, and publicly accessible databases that are important for the field will be introduced. The students will gain hands-on experience with industrial standard modeling methods through practical exercises.

12 students were registered for the course this semester;

- 3 Master students in Biomedical Sciences (MAMD-MEDBI),
- 1 Master student in Pharmacy (MATF-FARM),
- 1 visiting/exchange student (INTL-MED), and
- 1 PhD candidate (PHDMD)

at the Faculty of Medicine,

- 3 Master students in Molecular biology (MAMN-MOL),
- 1 Bachelor student in Molecular biology (BAMN-MOL),
- 1 visiting/exchange student (INTL-MN), and
- 1 visiting/exchange student at PhD level (ZDGMNFAK)

at the Faculty of Mathematics and Natural Sciences.

One of these students later withdraw from exam registration.

For course descriptions, visit <http://uib.no/course/BMED370>

For evaluation reports, please visit <https://kvalitetsbasen.app.uib.no/popup.php?kode=BMED370>

The evaluation report for 2022 listed following changes planned for 2024:

Considering the general teaching content of our master program, I suggest extending this course to a 10 credits course to have more focus on drug discovery generally as this is lacking in the program but needed to set the course into context. Alternatively, one could have a 5 credits course about drug discovery in addition to this course, but make sure that the drug discovery part is taught before this course. In future, we should also consider grading the course because a mark will be more helpful for the

students when applying for jobs or uptake into PhD programs, especially if they performed excellent in this course.

Comments:

With the thread of increasing the teaching load of all professors in the department due to the current financial situation, it does not make sense to extend this course to a 10 credits course. However, there will be a dedicated lecture to explain the main approaches for drug discovery for the course in 2025. Likewise, since grading an oral exam would make conduction the exam much more complicated as external sensors would be required, this idea is currently not implemented.

STATISTIKK / STATISTICS (admin.):

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|---|---|--------------------|---|-----------------------|-----------|
| Antall vurderingsmeldte studenter: <i>NUMBER OF CANDIDATES REGISTERED FOR EXAMINATION:</i> | | 11 | Antall studenter møtt til eksamen: <i>NUMBER OF CANDIDATES ATTENDED EXAMINATION:</i> | | 11 |
| Karakter- skala <i>GRADING SCALE</i> | «Bestått/Ikke bestått» <i>«PASS/FAIL»</i> | Bestått / PASS: | 11 | Ikkje bestått / FAIL: | - |

KOMMENTARER TIL KARAKTERFORDELINGEN / COMMENTS TO THE STATISTICS:

Emnerapporten utarbeides når sensuren etter ordinær eksamen i emnet er klar. For muntlige eksamener er da resultatfordelingen endelig, men for skriftlige eksamener kan endelig resultatfordeling avvike noe om evt. klagebehandling ikke er fullført.

THIS REPORT IS PREPARED AFTER ORDINARY EXAMINATION. FOR ORAL EXAMS, THE RESULTS ARE FINAL, FOR WRITTEN EXAMS, THE FINAL GRADING DISTRIBUTION MAY DIFFER SLIGHTLY IF CANDIDATE COMPLAINTS/APPEALS HAVE NOT BEEN PROCESSED.

SAMMENDRAG AV STUDENTENE SINE TILBAKEMELDINGER / SUMMARY OF EVALUATIONS GIVEN BY THE STUDENTS

Spørreundersøkelse via Mitt UiB, annen evaluering, tilbakemelding fra tillitsvalgte og/eller andre.

COURSE EVALUATION ON MITT UIB, OTHER EVALUATIONS, RESPONSES FROM THE STUDENT REPRESENTATIVES AND/OR OTHERS.

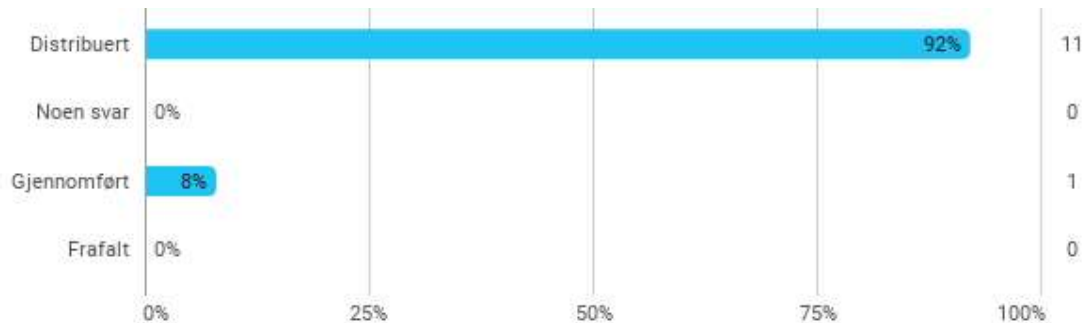
SurveyXact was used as the digital evaluation system. Some of the questions were Multiple Choice Questions (MCQ), while others gave the students opportunity to give their own opinion as written text.

The survey was set up as an anonym survey, and distributed to the students by use of their E mail addresses at UiB. The Survey was distributed the 22 March to the students registered for the course. Oral examination took place the 5 April. Reminders was sent the 5 and 9 April to those (resp. 12 and 11) that hadn't responded before.

The attendees were asked about the academic content, the organization, and the educational level of the teaching, and asked to evaluate the total workload of the course. They were asked to give their responses about the lectures, what they appreciate – or found disappointing – about the course, and to evaluate the practical course. Finally came some questions regarding the exam and their learning outcomes.

When the survey closed 12 April, one week after the exam, responses from only 1 student was registered.

Overall status:



Distributed (but no responses): 11 – Some answers: 0 – Completed: 1

RESULTS:

The number of students who gave their feedback on the survey was too small to draw any unequivocal results.

In addition, one exchange student send feedback directly to the course leader:

The reason for my message is a seminar on the subject of docking here in [...] as part of the 8th semester of pharmacy. This was conducted with SeeSAR and unfortunately taught very few competences. However, I only realised this because of your BMED CADD course. As a result, I was able to give feedback here in Mainz and the course will be adapted more to yours next semester, at least I hope so.

Because in the last few weeks I've realised once again how much fun the BMED course with Maestro was with you and Knut and how much we learnt there. Please keep it up, you really gain a lot of understanding a lot of understanding and also have fun the subject matter. (Translated with DeepL.com, free version))

EMNEANSVARLIG SIN EVALUERING OG VURDERING / EVALUATION AND COMMENTS BY COURSE COORDINATOR:

Faglæreres vurderinger av emnet. *TEACHER COMMENTS.*

Eksempel: Kommentarer om praktisk gjennomføring, undervisnings- og vurderingsformer, evt. endringer underveis, studieinformasjon på nett og Mitt UiB, litteraturtilgang, samt lokaler og utstyr.

EXAMPLE: COMMENTS ABOUT PRACTICAL IMPLEMENTATION, TEACHING AND ASSESSMENT METHODS, IF NECESSARY. FUTURE CHANGES/CHANGES IN PROGRESS, STUDY INFORMATION ON THE INTERNET AND MITT UIB, LITERATURE ACCESS, LOCALES AND EQUIPMENT.

The course went well with many engaged students. The timing and length of the exercise has now been established and works out well,

MÅL FOR NESTE UNDERVISNINGSPERIODE – FORBEDRINGSTILTAK / PLANNED CHANGES FOR THE NEXT TEACHING PERIOD – HOW TO BE BETTER:

Give a new, additional lecture as introduction to drug discovery in general.

Keep up the good work.