Emnekode: *COURSE CODE:*	**BMED322**	Semester / år: SEMESTER / Y*EAR*:	**Høst / Autumn 2025**
Emnenavn: *COURSE NAME:*	*Methods in Biomedical Research*		
Emneansvarlig: *COURSE COORDINATOR:*	**Inari Kursula**	Godkjent: *APPROVED:* (admin.)	Utdanningsleder IBM 03.03.2026
Rapporteringsdato: *DATE OF REPORT:*	**03.03.2026**		

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.

Methods in Biomedical Research (24 ECTS) is an obligatory course for students attending the Master's Programme in Biomedical Sciences (MAMD-MEDBI), and replaces BMED320 in the education plan from autumn 2025. The course is aimed at giving the students a theoretical overview of methods and technology commonly used in basic biomedical research, including practical experience in selected methods.

The course begins with 4 weeks of lectures and an introduction to practical laboratory work, followed by 1 week with introduction to data analysis, and concludes with 7 weeks of experimental laboratory work under supervision. The practical introduction to data analysis and all laboratory work are mandatory.The students are evaluated based on an exam (55%) after completing the theory lessons and a term paper (45%) after placement in the lab.

For course description, visit https://www4.uib.no/en/studies/courses/bmed322

Quality Assurance Reports will be available in the database https://quality.app.uib.no/

For reports for the previous version of the course (BMED320), please visit https://quality.app.uib.no/popup.php?kode=bmed320

The previous report listed following changes planned for 2025:

- The Python course will be kept but can be slightly condensed.

- The written exam will be moved slightly earlier in the semester, so that it will be before the lab projects start.

- The introductory lab course will be two days.

- I will talk to the other lecturers about the exam questions and encourage questions measuring broader understanding of the topics

Comments on these planned changes for the 2025 autumn semester:

The Python course was now carried out during one week instead of two, and feedback on that was positive.

The exam was still late in the semester, and this change should be implemented for next semester.

The introductory lab course was now two days, and it will be kept so, as it was generally seen as positive.

The exam was now heavily weighted towards written answers instead of MCQs, and that came as an initial shock to the students. After analyzing the exam answers and also talking to the students after the exam, I will encourage more written answer requiring questions also in the future. In the future, the students should also be better prepared for this, having seen more old exams.

STATISTIKK / *STATISTICS* (admin.)**:**

Antall vurderingsmeldte studenter: *NUMBER OF CANDIDATES REGISTERED FOR EXAMINATION:*	**29**	Antall studenter møtt til eksamen: *NUMBER OF CANDIDATES ATTENDED EXAMINATION:*	**26**

Karakter-skala *GRADING SCALE*	«A-F»	**A:**	**B:**	**C:**	**D:**	**E:**	**F:**
		-	5	18	0	1	2

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.

The assessment consists of two parts:

1. Exam after completing theory lessons.
2. Submission of term paper after placement in the lab.

They account for 55% and 45% percent, respectively, of the total exam result, while the practical data analysis assignments will be approved/not aproved. All parts must be passed for course fulfillment.

The written exam took place 4 December, while the deadline for the semester thesis was 18 December.

Written exam: 27 students attended, 2 students failed. Mean grade: D

Semester thesis: all students that delivered their thesis passed. Mean grade: A

Mean final grade: C

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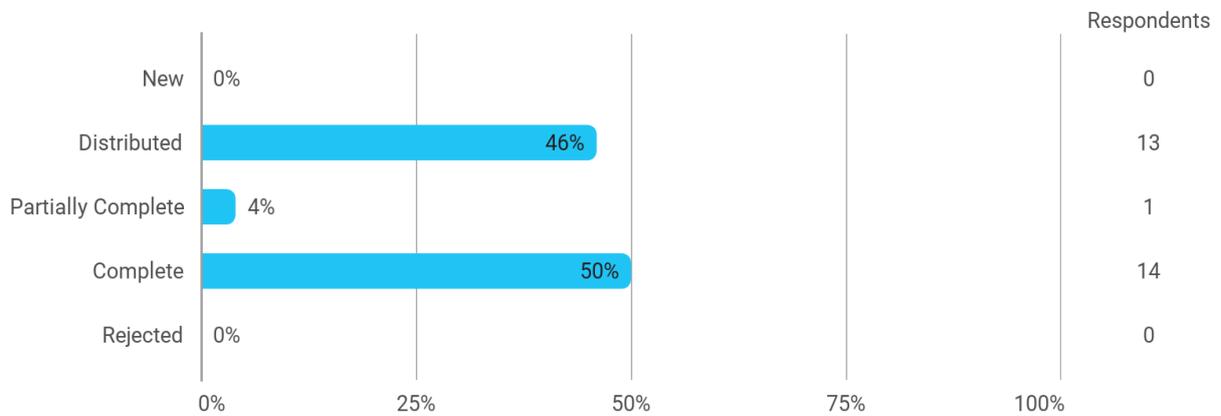
SurveyXact was used as the digital evaluation system. Some of the questions were Multiple Choice Questions (MCQ), while others allowed the students to give their own opinion in writing.

The survey was set up as anonymous and distributed to the students using their E-mail addresses at UiB. The Survey was distributed the 1 December to 28 students registered for the course. Reminders were sent the 4 and 19 December to those (resp. 27 and 18) students that hadn't responded before. This year an announcement was also made on the Course page at Mitt UiB the 22 December as a reminder of the survey.

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. Finally came some questions regarding the exam and their learning outcomes.
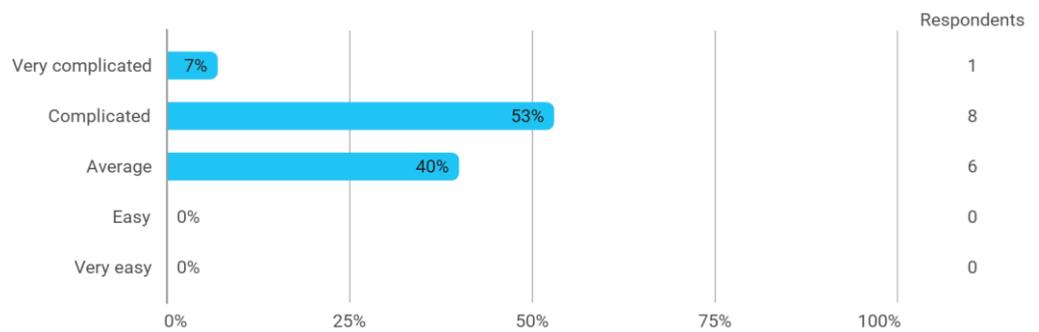
When the survey closed 26 December, responses from 15 (54 %) students were registered.
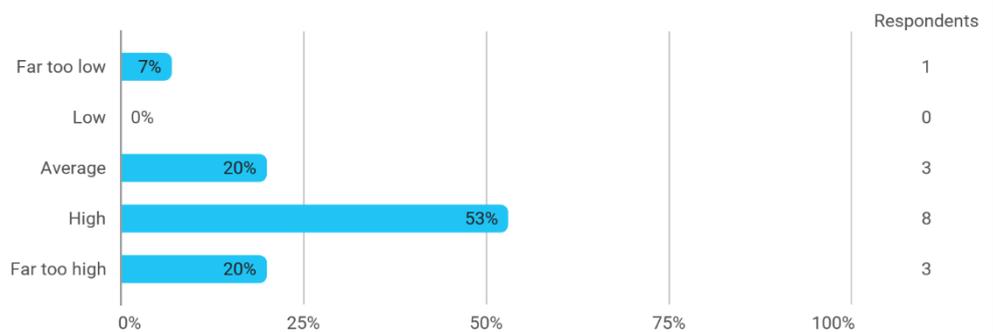
OVERALL STATUS:

	Respondents
New	0%	0
Distributed	46%	13
Partially Complete	4%	1
Complete	50%	14
Rejected	0%	0

SUMMARY OF THE RESULTS:

Do you find the academic contents of this course to be:

	Respondents
Very complicated	7%	1
Complicated	53%	8
Average	40%	6
Easy	0%	0
Very easy	0%	0

How do you evaluate the total workload of the course?

	Respondents
Far too low	7%	1
Low	0%	0
Average	20%	3
High	53%	8
Far too high	20%	3

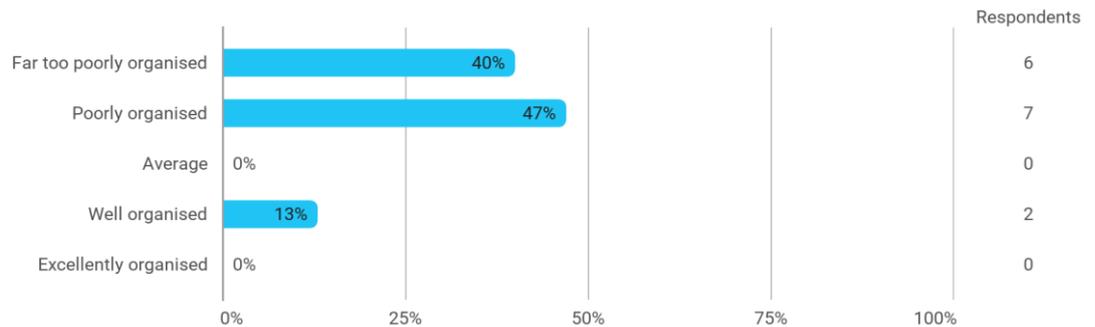## Comments to the academic content/workload:

How do you rate the educational level of the teaching on the course?

Rating	Percentage	Respondents
Far too low	13%	2
Too low	33%	5
Average	27%	4
High	27%	4
Very high	0%	0
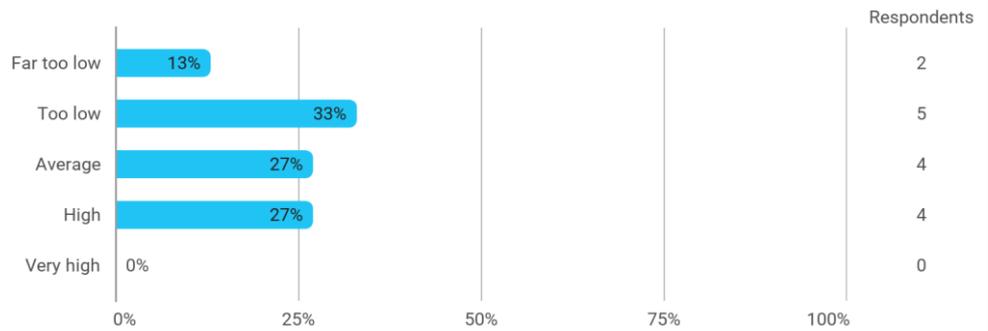
What do you think of the general organisation/structure of the course?

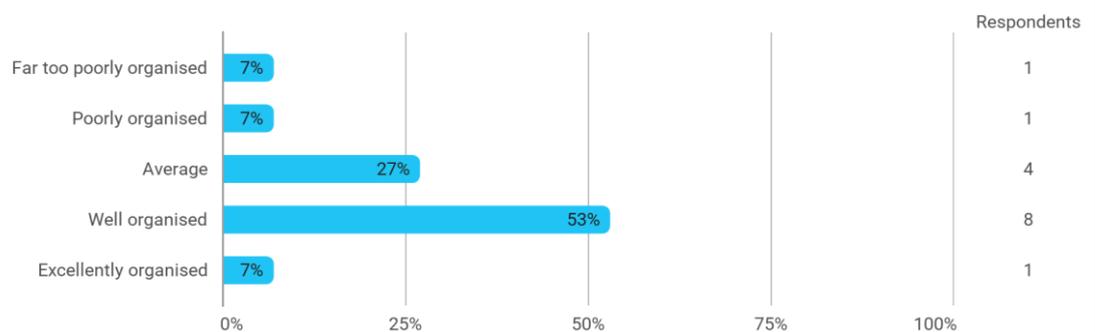| Rating	Percentage	Respondents
Far too poorly organised	40%	6
Poorly organised	47%	7
Average	0%	0
Well organised	13%	2
Excellently organised	0%	0

Comments to the educational level or organisation/structure of the course, and what was good, what was bad:

How useful did you find the laboratory courses?

Rating	Percentage	Respondents
Not useful at all	13%	2
Somewhat useful	20%	3
Average	7%	1
Useful	33%	5
Very useful	27%	4
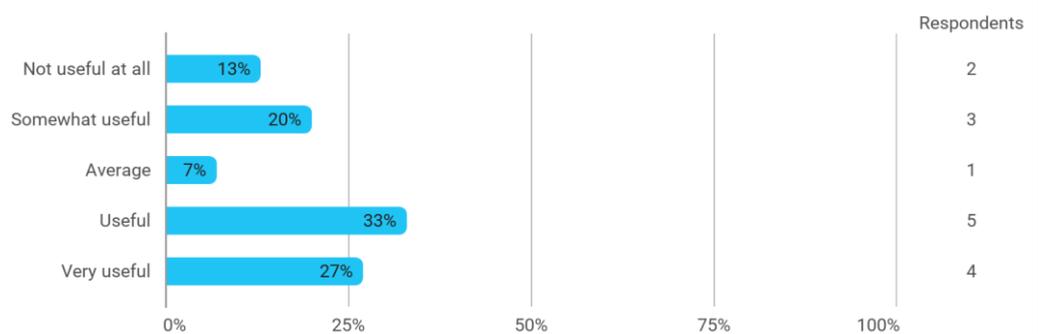
What do you think of the organization/structure of the laboratory courses?

| Rating	Percentage	Respondents
Far too poorly organised	7%	1
Poorly organised	7%	1
Average	27%	4
Well organised	53%	8
Excellently organised	7%	1

Comments to the laboratory courses: What was good, what was bad, what did you appreciate or found disapointing about the course? What would you like to see change?

Comments to the library course:

Comments to the HSE course:

Based on the Learning outcomes, my outcomes has been

		Respondents
Very poor	7%	1
Poor	0%	0
Average	47%	7
Good	33%	5
Very good	13%	2

0% 25% 50% 75% 100%
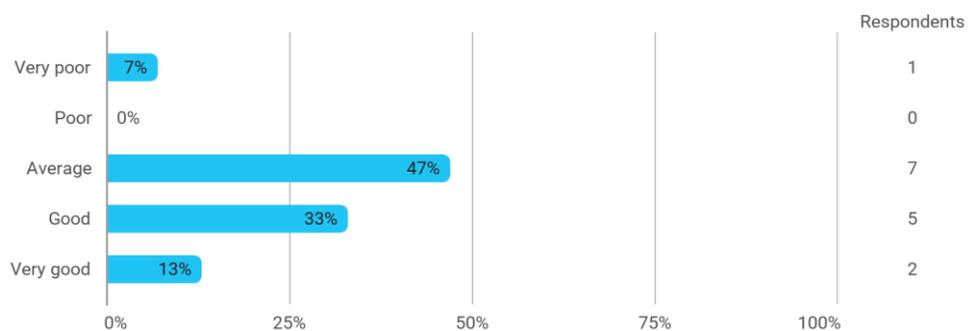
Complementary comments about the learning outcome:

At which level does the assessment (semester thesis) reflect what you have learned during the course?

Level	Percentage	Respondents
Far too low	0%	0
Low	21%	3
Average	36%	5
High	21%	3
Very high	21%	3
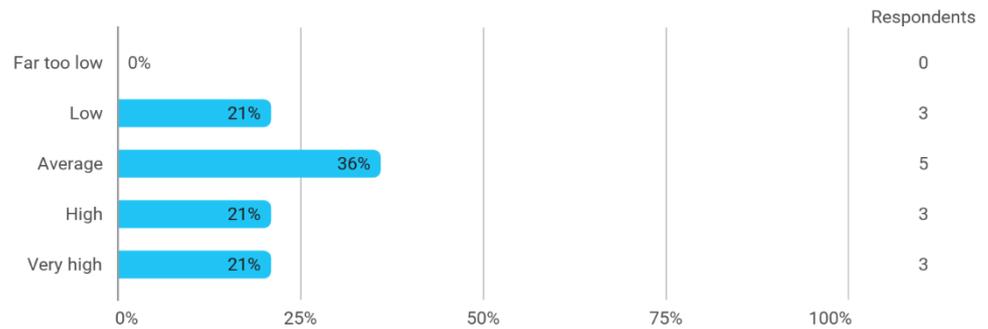
Comments about the assessment (semester thesis):

Comments on what to appreciate or found disappointing about the course, and on how the course could be improved:

The 2025 course included some of the planned changes, especially regarding the laboratory and Python courses and the exam format. However, the exam was still late in the semester, which I hope can be changed for next semester.

The student feedback indicates that:

- The timing of the exam in relation to the laboratory period remains challenging.
- Greater transparency regarding exam format is needed.
- Coordination across lecturers can be further improved and learning goals for each lecture topic better defined.
- Workload distribution across the 7-week laboratory projects varies.

The students generally show strong performance in the semester thesis (mean A) but quite weak performance on the written exam (mean D), resulting in an overall mean grade of C. The weak performance in the written exam may reflect unlear expectations, and this point should be emphasized more next semester.

The recruitment of research groups offering projects for the students remains a challenge, but now there are more channels available for me for recruiting groups from other departments, so it has gotten somewhat easier.

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

Based on student feedback and coordinator evaluation, the following measures will be considered:

1. Moving the written exam to immediately follow the lecture period.

2. Providing more explicit information about exam format and example questions.

3. Strengthening coordination between lecturers regarding scope and expected learning outcomes and encouraging each lecturer to clearly define core curriculum points.

4. Communicating clearer minimum expectations for laboratory project workload and improving early coordination with laboratory supervisors to ensure a more balanced workload.

5. More training on scientific writing was also wished from the students' side, and I am thinking how this could be implemented. It may not be possible to a very large extent for next semester.

FS – resultatfordeling (graf) / FS – DISTRIBUTION OF GRADING (GRAPH):

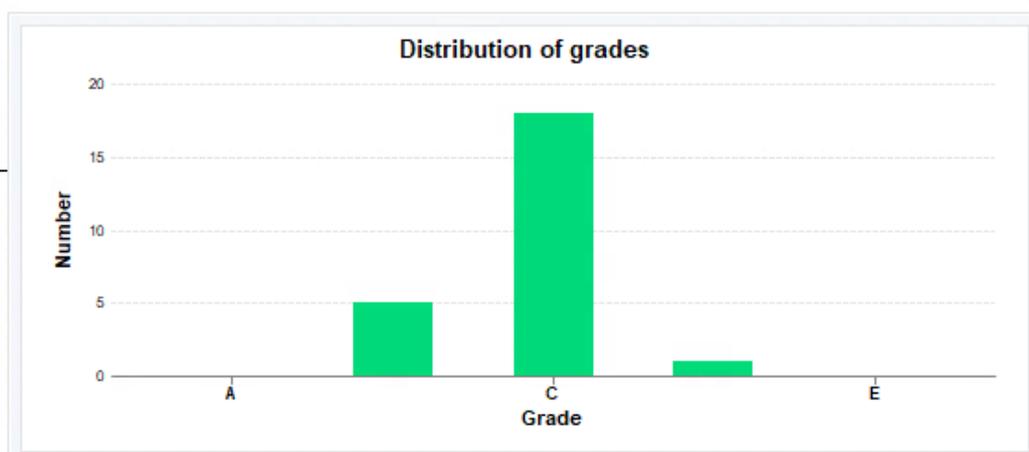**FS580.001 Distribution of results**

Exam: BMED322 0 HO 2025 HØST
Methods in Biomedical Research - Semester thesis and examination   24,0sp
Grading scale: Letter grades - Passed
-

	Total
Number of candidates (registered):	29
Number appearing at the examination:	26
Number of passes:	24
Number of failures:	2 8%
Number of withdrawals during examination	0
Mean grade:	C
Number presenting medical certificates:	1
Number of withdrawals before examination	0

Grade	Number
E	0
D	1
C	18
B	5
A	0

Distribution of grades

The assessment consists of two parts:

1. Exam after completing theory lessons.

2. Submission of term paper after placement in the lab.

They account for 55% and 45% percent, respectively, of the total exam result, while the practical data analysis assignments will be graded as pass/fail. All parts must be passed for course fulfillment.

The results for each part were as follows:

Written exam after completing theory lessons (average grade = D):

FS580.001 Distribution of results

Exam: BMED322 0 S 2025 HØST
Methods in Biomedical Research - Written examination   24,0sp
Grading scale: Letter grades - Passed

	Total
Number of candidates (registered):	30
Number appearing at the examination:	27
Number of passes:	25
Number of failures:	2 7%
Number of withdrawals during examination	0
Mean grade:	D
Number presenting medical certificates:	1
Number of withdrawals before examination	0

Grade	Number
E	3
D	14
C	5
B	3
A	0

Distribution of grades
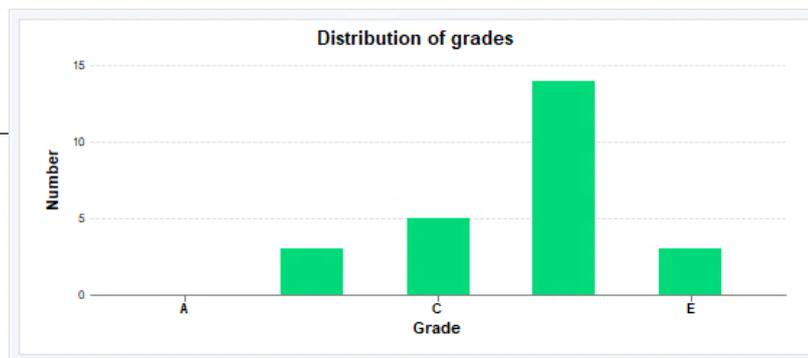
Term paper (semester thesis) after the lab (average grade = A):

FS580.001 Distribution of results

Exam: BMED322 0 SEM 2025 HØST

Methods in Biomedical Research - Semester thesis   24,0sp

Grading scale: Letter grades - Passed

-

	Total
Number of candidates (registered):	29
Number appearing at the examination:	28
Number of passes:	28
Number of failures:	0 0%
Number of withdrawals during examination	0
Mean grade:	A
Number presenting medical certificates:	0
Number of withdrawals before examination	0

Grade	Number
E	0
D	0
C	0
B	12
A	16

Distribution of grades