

EMNERAPPORT – INSTITUTT FOR BIOMEDISIN

ANNUAL EVALUATION REPORT – DEPARTMENT OF BIOMEDICINE

Emnekode: <i>COURSE CODE:</i>	BMED360	Semester / år:	Spring semester 2021
Emnenavn: <i>COURSE NAME:</i>	<i>In Vivo Imaging and Physiological Modelling</i>	SEMESTER / YEAR:	
Emneansvarlig: <i>COURSE COORDINATOR:</i>	Arvid Lundervold	Godkjent:	Undervisningsleder IBM 02.08.2021
Rapporteringsdato: <i>DATE OF REPORT:</i>	02-July-2021	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.

In Vivo Imaging and Physiological Modelling (10 ECTS) is a course mainly offered to students with a background in physics, computer science, mathematics or statistics, on bachelor level. The course is also among courses that have been offered for PhD candidates attending the Norwegian Research School in Medical Imaging, <http://www.ntnu.edu/medicalimaging>

The goal of the course is that the participants shall obtain theoretical and practical knowledge on functional and quantitative in vivo imaging in man and animal using magnetic resonance imaging (MRI) and computer-based image analysis.

3 students registered for the course this semester;

- 2 PhD candidates (PHDMD) at The Faculty of Medicine, as well as
- 1 Master student in Medical Technology (5MAMN-MTEK) at The Faculty of Mathematics and Natural Sciences.

For course descriptions, please visit

<http://uib.no/course/BMED360> (and <https://github.com/computational-medicine/BMED360-2021>)

For previous evaluation reports, please visit

<https://kvalitetsbasen.app.uib.no/popup.php?kode=BMED360>

The evaluation report for 2020 listed following changes planned for 2021:

Only minor adjustments in the GitHub course material will be considered for the Spring 2021 version of the course, e.g. more exercises in the notebooks, and with walk-throughs by the instructor. Also, some updates on MittUiB (<https://mitt.uib.no/courses/22178>) should be performed, and some links on the course description page (<https://www.uib.no/en/course/BMED360>) should be corrected (e.g. linking to GitHub rather than <http://sites.google.com/site/bmed360> or <http://sites.google.com/view/bmed360>). We should also consider a reduction in physical teaching hours next time the course is given.

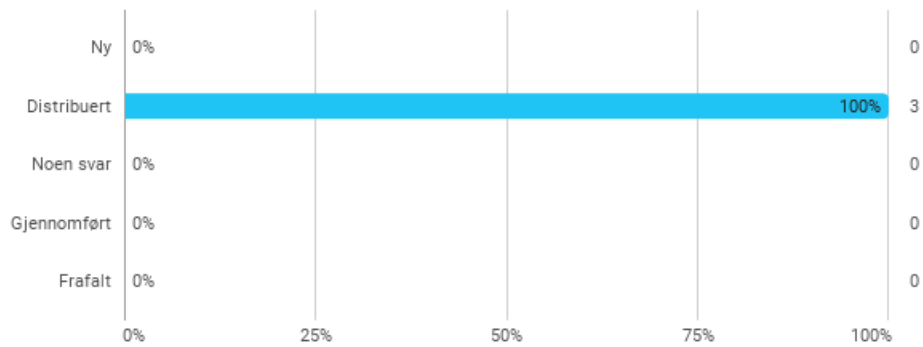
Changes due to the outbreak of global COVID-19 (coronavirus disease) spring semester 2020:

The spread of SARS-CoV-2 virus that made Norway to go for “lockdown” in the Spring semester 2020, had a strong impact on most of the courses in the Autumn semester 2020 and Spring Semester 2021 as well. For this course these changes were made:

- As in Spring 2020, the course was given fully digital with slightly improved computer labs.

STATISTIKK / STATISTICS (admin.):					
Antall vurderingsmeldte studenter: <i>NUMBER OF CANDIDATES REGISTERED FOR EXAMINATION:</i>		3	Antall studenter møtt til eksamen: <i>NUMBER OF CANDIDATES ATTENDED EXAMINATION:</i>		1
Karakter- skala GRADING SCALE	«Bestått/Ikke bestått» «PASS/FAIL»	Bestått / PASS:	1	Ikke bestått / FAIL:	-
KOMMENTARER TIL KARAKTERFORDELINGEN / COMMENTS TO THE STATISTICS:					
<p>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.</p> <p><i>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.</i></p> <p>The final grade is based upon an oral presentation of a personal project (80%) in combination with a MCQ / Quiz test (20%). In order to pass, the students also have to get approved a midterm assignment “The kiwifruit segmentation challenge”.</p> <p>Only one of three students registered for the exam attended.</p>					
SAMMENDRAG AV STUDENTENE SINE TILBAKEMELDINGER / SUMMARY OF EVALUATIONS GIVEN BY THE STUDENTS					
<p>Spørreundersøkelse via Mitt UiB, annen evaluering, tilbakemelding fra tillitsvalgte og/eller andre.</p> <p><i>COURSE EVALUATION ON MITT UIB, OTHER EVALUATIONS, RESPONSES FROM THE STUDENT REPRESENTATIVES AND/OR OTHERS.</i></p> <p>SurveyXact was used as the digital evaluation system. Some of the questions were Multiple Choice Questions (MCQ), while others opened up for the students to give their own opinion as written text.</p> <p>The survey was set up as an anonym survey, and distributed to the students by use of their E mail addresses at UiB.</p> <p>The Survey was distributed the 3rd of June to the students registered for the course. Examination took place 4th of June. A reminder was sent the 7th of June to those that hadn't responded before.</p> <p>The attendees were asked if they have had previous courses in this subject, about the academic content, the organization and the educational level of the teaching, and asked to evaluate the total workload of the course.</p> <p>They were asked to give their responses about the lectures and practical exercises, the course material, and what they appreciate – or found disappointing – about the course, as well as the exam and learning outcomes.</p> <p>Due to the ongoing pandemic was all our students at the department also asked this question:</p> <p>“How have digital teaching methods and restrictions on education on campus affected your learning and your study life? Feel free to mention both negative and positive experiences.”</p> <p>When the survey closed the 11th June, none of the students had answered.</p>					
			<p>Historikk</p> <hr/> <p>12:00 System Undersøkelse stengt for besvarelser</p> <p>2021-06-07 System BMED360 course survey 2021: E-postpåminnelse er sendt til 3 respondenter</p> <p>2021-06-03 System BMED360 course survey 2021: Distribusjon via e-post er sendt til 3 respondenter</p>		

Overall status:



RESULTS:

None of the students responded, giving no answers to comment.

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.

Only one student (on a PhD-program) attended and completed the course to its end. The fall-off of the other students was due to sickness for a longer period of one student, and “course overload” of a very ambitious and active MSc student that had to prioritise other exams during the last weeks. Both of these planned to sign up for BMED360 next Spring.

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

The future of BMED360 is somewhat open due to my emeritus status from mid February 2022. The course topics of computational biomedicine and imaging (hands-on) are increasingly important and appealing to many students from different backgrounds at UiB and other institutions (also outside typical biomedicine). A plan for continuation with a slightly different curriculum adjusted to the computational expertise and research interests of the scientific staff at our Department and at other departments of the Faculty of Medicine should be discussed. There are now several colleagues working in computational biomedicine, systems biology, imaging, bioinformatics and similar, that could be involved and make the course (fully and openly accessible at <https://github.com/computational-medicine/BMED360-2021>) even more viable. A possible cross-disciplinary scenario is also to join forces with mathematical biology and imaging at Department of Mathematics, medical visualization, bioinformatics and machine learning at Department of Informatics and medical physics at Department of Physics and Technology. The course is also suited for an MSc and a PhD track.

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



FS580.001 Resultatfordeling

Eksamen: BMED360 0 M10 2021 VÅR

In vivo avbildning og fysiologisk modellering - Muntlig

Karakterregel: Beste: Bestått, Bestått: Bestått, Dårligste: Bestått

10,0sp

	Totalt
Antall kandidater (oppmeldt):	3
Antall møtt til eksamen:	1
Antall bestått (B):	1
Antall stryk (S):	0 0%
Antall avbrutt (A):	0
Gjennomsnittskarakter:	,00
Antall med legeattest (L):	0
Antall trekk før eksamen (T):	0