

EMNERAPPORT

Emnekode: INTH321A Emnetittel: Experimental Epidemiology	Semester: Vår 2022	Institutt: Institutt for global helse og samfunnsmedisin
Emneansvarlig: Thorkild Tylleskär Dato:	Godkjent i: PU internasjonal helse	

INNLEDNING:

- Oppfølging fra tidligere evalueringer:

Emnets læringsutbyttebeskrivelse:

Objectives and Content

- This course addresses critical methodological aspects of clinical and field trials and a special effort is made to address trials that will measure the impact of relevant interventions against poverty related diseases, for instance HIV infection, diarrhoea and pneumonia. The lectures in the course cover the following: General principles of field trials, literature review: what & how to read, randomization & blinding, review of basic statistics (Mean, SD, SE, 95%CI), proportions, 2 x 2 tables, trial size for adequate precision and power, cluster design, data management and study implementation, interaction & confounding, effect measures (Risk ratio, rate ratio, difference in means), relative risk reduction, measurement: validity & reproducibility, analysis plan, data exploration, baseline comparison, main effects, analysis of community-based studies, hypothesis tests & precision of effect, analysis of repeated outcomes, data collection (questionnaire design, field organization, training & standardization) & quality control, interpretation of negative trials and ethical aspects of clinical trials in developing countries.
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- The group work covers the development of proposal and protocol, the structure of baseline and main effect tables, randomization & blinding.
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- The computer laboratory exercises include generating random numbers, calculating trial size, importing files, data exploration, baseline comparisons, main effects, adjustment for confounding, adjustment for confounding, subgroup analysis and interaction.
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- Learning Outcomes
- On completion of the course the student should have the following learning outcomes defined in terms of knowledge, skills and general competence:

Knowledge

- The student:
- demonstrates understanding of the principles of clinical and field trials,
- explains the principles behind adjustment for repeated measurement of outcomes in the same individuals

Skills

- The student is able to:
- contribute to the planning and conduct of clinical and field trials in accordance with the EU Directive 2001/20/EC on Good Clinical Practice and the highest ethical principles, including those reflected in Article 6 of the Treaty on the European Union, in the Charter of Fundamental Rights of the European Union and the Council of Europe's Convention on Human Rights and Biomedicine
- assess and select relevant designs for clinical/field trials,
- for both individually and community-randomized trials, conduct: sample size estimations, random allocation and blinding/masking
- analyze clinical and field trial data-sets, also from community-randomized trials
- identify interaction (in trials with stratified as well as un-stratified randomization)
- identify and adjust for any confounding effect (mainly relevant for trials with limited sample size).

General competence

- The student is able to:
- critically interpret published results from clinical/field trials
write a competitive research grant proposal for funding of a clinical/field trial.

STATISTIKK:

Mengde vurderingsmeldte studenter: 24			Mengde studenter møtt til eksamen: 23			
Karakterfordeling ->: Eller ->:	A: 1	B: 8	C: 11	D: 3	E:	F:
	Bestått:			Ikke bestått:		

SAMMENDRAG AV STUDENTENE SIN EMNEEVALUERING (hovedpunkt):

- The course on the whole was evaluated as interesting, but the amount of work involved was demanding
The different essay topics made the course interesting – interviewing, self-chosen topic for essay, some specific assigned reading
The discussions were interesting and the time allocated was short sometimes
There were many different topics; some of these could have been discussed in breakout room
The breakout rooms did not work out well, because the allocated times were short; and a couple of times the entire zoom connection broke down
Some students wanted feedback on the essays with the hope of doing better on subsequent essays, and future essays as well

EMNEANSVARLIG SIN EVALUERING:

- The course on the whole went fine, but encountered a number of technical issues that resulted in ending a class too early
Lectures were recorded but the technical issues also affected the recording and lectures appeared fragmented
As pointed out by the students, there were some problems with breakout room discussions did not go as expected

MÅL FOR NESTE EVALUERINGSPERIODE - FORBEDRINGSTILTAK:

There are three things that I will want to work on/improve during the next time the course is run (Spring 2024). The course is going to be entirely online.

Use more breakout rooms and allow the students more time to engage in discussions

I will try and introduce peer review process where the students will give feedback to each other's essay.

The last two courses – Spring 2020, and Spring 2021 were both online course. The 2020 course stated just the very week that covid-19 pandemic lockdown started. Much of the course then involved pre-recorded videos that the students had to watch. The students also received powerpoint slides with elaborated notes. But this was very unsatisfactory

The 2021 course involved online synchronous sessions. Much of the teaching involved 2-hour sessions, and no breakroom discussion was included. The sessions were short, and the group discussions were also short.

The spring 2022 course is an improvement on the two previous times the course has been run.

The next time the course will be taught is Spring 2024, and the changes described above will be implemented.