

## EMNERAPPORT

Emnekode: INTH321A Emnetittel: Experimental Epidemiology	Semester: Vår 2019	Institutt: Institutt for global helse og samfunnsmedisin
Emneansvarlig: Thorkild Tylleskär Dato: 27 May 2019	Godkjent i: Programutvalg for 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 trails 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 Europa'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: 19

Mengde studenter møtt til eksamen: 16

Karakterfordeling ->:  
Eller ->:

A: 5

B: 10

C: 1

D:

E:

F:

Bestått:

Ikke bestått: 0

**SAMMENDRAG AV STUDENTENE SIN EMNEEVALUERING (hovedpunkt):**

	Number	Min	Max	Average
1. Relevance of the course (all in all)	20	3	5	4.40
2. Coherence of the course	20	2	5	3.85
3. Quality of the teaching (all in all)	20	3	5	4.00
4. Quality of lectures	20	3	5	3.85
5. The balance between lecture and other activities	20	2	5	3.90
6. How did you find the group assignments?	19	1	5	3.74
7. How did you find the individual assignment?	13	3	5	4.00
8. How did you find the exam?	6	2	4	3.17
9. How was the recommended literature?	20	3	5	4.30
10. How would you rate the usefulness of MittUiB?	20	2	5	4.30
11. Course management/administration	19	3	5	4.42
12. How well did the course fulfil your expectations?	20	3	5	4.20
13. Your overall evaluation of the course	20	3	5	4.15

- I thought the course was very relevant. I was happy.
- I liked that we had 2 lecturers present in the class. So that one could compensate or help others. And it was effective for us.
- All the teachers were excellent!
- Professor Duolao lecture was an amazing experience. The lectures by Prof Wang were very good and timely. I was very impressed. The invitation of Professor Duolao was a GREAT IDEA.
- It's already perfect. Three of the best professors of the CIH - Thorkild, Ingunn and Tor Strand.
- By probably grading the class activities, it can be more motivating for people to participate and will learn more.
- Grading the group and individual assignments will be ideal.
- Administration was wonderful. Linda is so nice and helpful in every way.
- More activities --- STATA exercises

**EMNEANSVARLIG SIN EVALUERING:**

- Overall the course worked well.

**MÅL FOR NESTE EVALUERINGSPERIODE - FORBEDRINGSTILTAK:**

- By coordinating better with the previous course, observational epidemiology, where a lot of concepts are introduced and discussed.
- Statistical analysis using Stata needs to be emphasised or improved. The plan is to provide some of the basics in YouTube videos
- Correct the problems with quizzes in MittUiB
- The students wants the exercises to be graded
- The students wants smaller groups, 4 rather than 6 per group
- The students loved Prof Duolao Wang, we should invite him again.