Study Guide

Sustainability and Global Health, 7.5 credits

Course convenor and teacher: Dr. Sara Gabrielsson (sara.gabrielsson@lucsus.lu.se)

Teachers:
SG - Sara Gabrielsson, Assistant Professor, LUCSUS
LK - Louise Klintner, Dept. of Economics, LU
YM - Yahia Mahmood, Associate Professor, Development Geography, LU
KK - Karin Lundgren Kownacki, Researcher, LTH
TT - Tahir Taj, MD and Researcher at Copenhagen U
KN - Kimberly Nicholas, Associate Professor, LUCSUS
TZ PhDs - PhD Candidates from TZ, Mary, Amour, Isabel and Doglas

Entry requirements

To be eligible for the course the student must have fulfilled course requirements of at least forty higher education credits in the LUMES, Lund University International Master’s Programme in Environmental Studies and Sustainability Science (120 credits).

Course content

The course provides global and local perspectives on and examples of some of the most urgent health problems we face today and their impact on people's health, wellbeing and livelihoods. The course deals with the connections between three important areas of study in sustainability studies: development, environment and global health. By highlighting three key emerging and persistent global health challenges; and their linkages to climate change, the course provides a deeper understanding of the importance of good health for social, economic and environmental sustainability:

- the health implications from global climate change (extreme heat and rainfall, raising incidence of vector-borne diseases, mental anxiety)
- the prevailing sanitation crises (i.e. causing preventable deaths and disease outbreaks, contributing to the poverty trap, affecting economic output, polluting the environment)
- the global dietary transition (i.e. rising global demand for animal products, fats and sugar and its effect on people’s health and the environment, food insecurity and its effects on health, development and environment)
- the health externalities of global electronic (i.e. the human health effects and environmental pollution caused by the electronics we use, produce and waste)
Course Learning Outcomes

Knowledge and Understanding
For a passing grade the student shall demonstrate understanding of some of the key growing and/or persisting global human health challenges facing the planet in the 21st century. The student shall also be able to identify and discuss the global and local origins, drivers, impacts and feedbacks of these growing and/or persisting health challenges on sustainability.

Skills and Abilities
For a passing grade the student shall demonstrate an ability to orally and in writing identify a number of key growing and/or persisting global human health challenges facing the planet in the 21st century. The student shall also be able to demonstrate an ability to discuss, compare and contrast the global and local origins and drivers of these growing and/or persisting health problems and give examples of how to remediate these impacts towards sustainability, taking into account historical, social, cultural, economic and ecological aspects. The student shall also be able to formulate in writing and oral presentations, his/her own analysis and conclusions, arguing for the imperative of human health for social, economic and environmental sustainability and give examples of different tools, technologies and approaches that may respond to these key health challenges today and in the future.

Judgement and Approach
For a passing grade the student shall demonstrate ability to reflect on scientific, societal and ethical issues concerning health and sustainability as well as demonstrate ability to identify own needs of further knowledge and skills for building capacity to analyze complex socio-ecological systems in an interdisciplinary manner.

Attendance
All the events written in bold letters are mandatory. Students, who for some very good reason cannot attend a mandatory session, should contact the teacher in charge or the director of studies in advance, if possible, to discuss how to compensate for this.

Also, please be on time each day and put your mobile phone on silent before entering the lecture room.

Course Assessment
The course is examined by individual writing assignments, seminars and a group project. The group project includes the production of an academic poster to be presented orally. Three opportunities for examination are offered in conjunction with the course: a first examination and two re-examinations. Within a year of the end of the course, two further re-examinations on the same course content are offered. After this, further re-examination opportunities are offered but in accordance with the current course syllabus. Students who fail a test have the right to re-examination. If necessary, a second re-examination will be arranged at a later date. A student who has taken two examinations in a course or a part of a course without obtaining a pass grade is entitled to the nomination of another examiner, unless there are special reasons to the contrary.
Students getting a passing grade cannot re-take an exam or re-submit a paper to get a higher grade.

**Grades Marking scale:** Fail, Three, Four, Five. 
The grades awarded for the individual writing assignments and the group poster as well as for the course as a whole are Fail-3-4-5. The highest grade for the course as a whole is 5 and the lowest grade is 3. The student’s performance is assessed with reference to learning outcomes of the course. The grade 5 denotes outstanding performance in all learning outcomes. The grade 4 signifies very good performance in all learning outcomes. To receive the grade 3, the student must obtain minimum criteria in fulfilling all course learning objectives. The grade of Fail signifies that the student has not fulfilled the learning outcomes of the course, or that additional work is required before the grade can be awarded. At the beginning of the course, students are informed about the learning outcomes of the course and about the grading scale.

Course Assignments

*Please note:* For those assignments that are to be uploaded to the course page at L@L, the deadline is **no later than specified below.** The individual uploaded document (pdf or doc(x) file) must clearly state the student’s student number and refer to the particular assignment at the end of the document. If there is a word limit on the assignment, please include that here too.

- **Final Paper (40% of course grade)**  
  Deadline Friday 25/10 @ midnight  
  Final Paper Seminar Tuesday 29th Oct 13.15-17.00
- **Group Poster and Oral presentation (30% of course grade)**  
  Deadline Tuesday 24/9 at 17.00 pm  
  Poster Presentations September 27th 08.15-12.00
- **Literature Seminars (2 x 10%)**  
  Seminar 1 – 20/9  
  Seminar 2 – 22/10
- **DPSIR Participatory Exercise (10%)**  
  18/10 09.15-12.00 am

Course Evaluation by Students

Upon completion of the course, students shall complete an evaluation of the course via the e-Val system. e-Val is a web based evaluation tool used at LUMES – see page 6 in the General Study Guide. **There will be a deadline for filling in the evaluation.**
Course Readings

**Theme 1 – Climate Change and Human Health**

*Understanding the Problem*

Kjellstrom, T., Holmer, I., & Lemke, B. (2009). Workplace heat stress, health and productivity—an increasing challenge for low and middle-income countries during climate change. *Global Health Action, 2*(1), 2047. (11 s)


National Institute of Environmental Health Sciences (2010) *A Human Health Perspective On Climate Change*


*Searching for Solutions*


Theme 2 – The Dietary Transition

Understanding the Problem


Searching for Solutions


de Boer, J., Schösler, H., & Aiking, H. (2014). “Meatless days” or “less but better”? Exploring strategies to adapt Western meat consumption to health and sustainability challenges. Appetite,76, 120-128. (8 s)

Theme 3 - The prevailing global sanitation crises

Understanding the Problem


Optional reading


Searching for Solutions


Waterkeyn, Juliet Anne, and Anthony James Waterkeyn. "Creating a culture of health: hygiene behaviour change in community health clubs through knowledge and

Gabrielsson, S, Huston, A and S. Gaskin (2018) "Using Sustainability Science to reframe the challenges and opportunities for improved sanitation services in East Africa" in *Sustainability Science for meeting Africa’s Challenges*. Springer Publishing: Forthcoming bookchapter, I will upload on CANVAS


**Theme 4 - Electronics**

**Understanding the Problem**


**Searching for Solutions**


**Optional reading:**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Time</th>
<th>Venue</th>
<th>Theme</th>
<th>Topic</th>
<th>Teacher</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Tue 3/9</td>
<td>13.15 - 16.00</td>
<td>Maathai</td>
<td>Intro</td>
<td>Intro to course and the assignments</td>
<td>SG</td>
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<td>Lecture 1: Why is health important for sustainability</td>
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<td>Lecture 2: Intro to DPSIR</td>
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<td>Fri 6/9</td>
<td>09.15 - 12.00</td>
<td>Carson</td>
<td>Climate Change</td>
<td>Lecture 3: Climate Change and Health</td>
<td>TT, KLK</td>
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<td>2</td>
<td>Thur 12/9</td>
<td>13.15 - 17.00</td>
<td>Carson and room next to it</td>
<td>Diet</td>
<td>Lecture 4: The dietary transition and our ecological footprint, Short films – SVT In the footsteps of the food industry Group Exercise</td>
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<td>Fri 13/9</td>
<td>09.15 - 12.00</td>
<td>Maathai</td>
<td>Sanitation</td>
<td>Lecture 5: The last taboos Short film – Break the Silence</td>
<td>SG, LK</td>
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<td>Tue 17/9</td>
<td>13.15 - 17.00</td>
<td>Maathai</td>
<td>Electronics</td>
<td>Documentary film: Blood in the Mobile</td>
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<td>Lecture 6: Electronic waste in Cameroon</td>
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<td>Fri 20/9</td>
<td>09.15 - 12.00</td>
<td>Carson</td>
<td>ALL</td>
<td>Literature Seminar 1 – Problems</td>
<td>SG</td>
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<td>4</td>
<td>Tue 24/9</td>
<td>13.15 - 17.00</td>
<td>Carson</td>
<td>ALL</td>
<td>No Class – work on posters</td>
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<td>Poster Submission Deadline 24/9 @ 17.00</td>
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<td>Fri 27/9</td>
<td>8.15 - 12.00</td>
<td>LUMES Floor 3</td>
<td>ALL</td>
<td>Poster Presentations</td>
<td>SG</td>
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<td>5</td>
<td>Tue 1/10</td>
<td>13.15 - 15.00</td>
<td>Ostrom</td>
<td>Thesis</td>
<td>Methods Seminar Series</td>
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<td>Fri 4/10</td>
<td>09.15 - 12.00</td>
<td>Carson</td>
<td>Climate Change</td>
<td>Lecture 7: Sustainably avoiding and adapting to climate change health impacts</td>
<td>KLK, TT</td>
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<td>6</td>
<td>Tue 8/10</td>
<td>13.15 - 17.00</td>
<td>Carson</td>
<td>Diet</td>
<td>Lecture 8: The future of food Group Exercise</td>
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<td>Fri 11/10</td>
<td>09.15 - 12.00</td>
<td>Maathai</td>
<td>Sanitation</td>
<td>Lecture 9: Sustainable Sanitation in Theory and Practice Short film – Urine as fertilizer</td>
<td>SG, AS, IR, MK, DB,</td>
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<td>7</td>
<td>Tue 15/10</td>
<td>12.30 - 17.00</td>
<td>Carson</td>
<td>Electronics</td>
<td>Lecture 10: Peer-lecturing on solutions to electronic waste</td>
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<td>Fri 18/10</td>
<td>09.15 - 12.00</td>
<td>Carson and room next to it</td>
<td>ALL</td>
<td>DPSIR Participatory Exercise</td>
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<td>8</td>
<td>Tue 22/10</td>
<td>13.15 - 16.00</td>
<td>Carson</td>
<td>ALL</td>
<td>Literature Seminar 2 - Solutions</td>
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<td>Fri 25/10</td>
<td>09.15 - 12.00</td>
<td>Carson</td>
<td>ALL</td>
<td>Work on individual paper - NO CLASS Submission Deadline @ 15.00</td>
<td>SG</td>
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<td>9</td>
<td>Tue 29/10</td>
<td>13.15 - 17.00</td>
<td>Maathai</td>
<td>ALL</td>
<td>Paper Seminars</td>
<td>SG</td>
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<td>Thur 31/10</td>
<td>10-12</td>
<td>Maathai</td>
<td>ALL</td>
<td>Elevator snapshots &amp; Course Evaluation</td>
<td>SG</td>
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