This UCU interdepartmental summer course combines cutting edge research in science and technology studies with reflections on its impact for societal issues. This includes a reflection on the position of women in science, both within institutions and within their academic discipline, and on the ways in which science is gendered.

The course is unique as it combines a series of lectures by prominent women scientists in the Netherlands talking about famous women scientists in history, who have won a Nobel Prize such as Marie Curie and Barbara McClintock, in relation to their own work and achievement. The second part of the course consists of in-depth reading and analysis of the theoretical sources that explore the production of gender with scientific and technological knowledges and practices. The course also offers practical workshop and a final project linked to your own disciplinary background.
Scheduled public lectures (dates and location to be announced)

Together with EMMEPH and the UU Gender Programme, the University College Utrecht (UCU) invites you to a series of public lectures given by prominent female scientists in the Netherlands in the frame of a new interdepartmental Summer Course on Gender, Science and Technology. The lectures are free of charge and no reservation is required. You are all warmly welcome!

June 1st 2016, 14.00
Prof. Dr. Petra Rudolf (University of Groningen, Professor Experimental Solid State Physics)
Female scientists – a historic perspective
Petra on her own work – Molecular Motors and Switches at Surfaces

Prof. Dr. Cristiane Morais Smith (Utrecht University, Professor of Condensed Matter Physics)
Emmy Noether: the most important woman in the history of mathematics
Cristiane on her own work: Graphene: the good, the bad, and the beauty

Dr. Anna von der Heydt (Utrecht University, Institute for Marine and Atmospheric Research)
Sofia Kowalewskaja – princess of science
Anna on her own work: Fascinating fluids – from turbulent flows to climate

Dr. Henriette Schlupmann (Utrecht University, Biology - Environmental Biology - Molecular Plant Physiology).
Barbara McClintock: temperamental inheritance before the age of DNA
Henriette on her own work: Ferns for food

Flore Kunst (Vree University, Berlin)
Well, you are a woman after all**: Positive discrimination in science as help and hindrance

Rosemary Orr, (Utrecht University College, Linguistics)
A woman’s voice

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Course Content
The key theme of this course is to explore how the production of gender and the production of science and technology have been mutually defining. The question of scientific objectivity and neutrality, nature versus nurture, will be addressed by putting the history and development of science and technology in relation to gender questions and feminist epistemology. By studying cases from biology, neuroscience, medical science, quantum physics, as well as feminist approaches...
to the discipline of science and technology studies, students learn to analyze how gender has been central to scientific endeavors – not only through the exclusion of women, but in the ways that masculinity has been shaped and performed through its practice. Students will further study how this has affected the built environment and sustainability, the ethics and gendering of laboratory research practices, question of the human and its current post-human status.

We pose such questions as: How is gender embedded in the institutions of a complex technological society? How does social and cultural change occur and toward what should we aim? If there are in-born differences between the sexes, should we use technology as a way of enabling or overcoming these differences? Are there feminist technologies? What was the topic of research of prominent scientists? For what kind of technological advance did their pioneering research allow? (i.e.; how are we to understanding their contribution and, as an additional consideration, in what context was it received?)

We raise issues such as cyborgs, the gender of engineers and reproductive technology, as well as questioning if women and feminism have changed science. Furthermore, the course will explore how gender issues have been an integral part of the organization and institutionalization of the natural sciences and engineering thus influencing women's and men's lives and careers. The course will also address how the relation between gender, technology and science impact upon social constructions and the dynamics of institutions.

Aims
After completing the course, students are able to

- analyze questions of gender, science and technology on the level of individual scientists’ careers, scholarly institutions, and the content of science and technology.
- demonstrate their understanding of specific scientific discoveries by using a life history approach to women scientists' careers.
- explain the societal implications and relevance of scientific discoveries in the contexts of gender, science and technology;
- distinguish different approaches to gender, science and technology relating to issues of emancipation (including women to the institution / the curriculum), difference (developing a specifically feminist science and technology), diversity (deconstructing femininity and masculinity), and intersectionality (analyzing gender, ‘race’ /ethnicity, class, generation, etc. as co-constituting each other);
- develop and complete an individual research project in the field of gender, science and technology;
- position the understanding of scientific discoveries and the role of women’s career and their implications for humanities, science and society.

Format
There will be three sessions of four hours each week. Each four hour session
will be delivered in two hour blocks, with an hour’s break between.
In the first sessions, students will have plenary lectures from guest scientists operating in various fields (physics, biology, astrophysics). These will include senior scientists working in Dutch universities, as well as younger scholars and UCU alumni. A seminar will follow the lecture in which content and questions emerging from that forum will be put into discussion with biographical accounts of the lives and contributions of selected Nobel Prize winning women scientists.

The second sessions consist of in-depth reading and analysis of the theoretical sources that explore the production of gender with scientific and technological knowledges and practices. As part of these sessions we will draw on case studies that bring figures and figurations in science and technology into conversation with a weekly topic or conceptual approach. For these case studies, short excerpts from theoretical texts will help students to identify and critically examine the multi-layered intersections and influences of gender, science, and technology.

The third session will include lectures from guest researchers and seminars devoted to group work and the development of individual projects. Note: some guest lectures require that you prepare reading and discussion questions in advance of the lecture.

Literature
- Classical articles in gender studies and short excerpts for case study analysis