

HUM-388 Personalised and Global Health

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Cursus	Sem.	Type
Humanities and Social Sciences	BA6	Opt.

Language of English teaching Credits Session Summer Semester Spring Exam During the semester Workload 60h Weeks 14 Hours 2 weekly 2 weekly Courses Number of positions

Summary

The rise of 4Ps (Personalised, Preventive, Predictive and Participatory) Medicine changes established medical knowledge, institutional configurations of medicine, and the lived experiences of illness. The course analyses such processes through a collaborative and interdisciplinary approach.

Content

The course is open to both english- and french-speaking students.

The students will be offered the conceptual, empirical and analytical resources to problematise 4Ps Medicine as social, cultural and political phenomenon. To do so, the course consists of:

- 1. An introductory course presenting the theme: historical and sociological perspectives on the shift towards 4Ps Medicine:
- 2. Several joint interventions by social scientists and biomedical experts on selected illustrative developments of 4Ps Medicine (e.g. patient-tailored cancer therapies, the genomicisation of individual health risks, big data and computational epidemiology, developmental epigenetic programming and individual lifecourse health risks, digital technologies and health monitoring, personalised health economics);
- 3. Several time slots during the semester specifically dedicated to the preparation (e.g. planning, coordination and monitoring), finalisation and presentation (one session at the end of the semester) of student projects.

Keywords

Personalized Health, Personalized Medicine, Precision Medicine, Precision Public Health, Genomics, Post-Genomics, Multi-omics, Big data, Science and Society, Science in Society, Science and Technology Studies, Sociology of Science and Medicine, Interdisciplinarity, Biosocial.

POLY-perspective:

- interdisciplinary perspective
- global perspective

https://www.epfl.ch/schools/cdh/cdhs-vision/

Learning Outcomes

By the end of the course, the student must be able to:

- Interpret the scientific, technical and social reconfigurations induced by the development of 4Ps Medicine.
- · Identify conceptual and empirical tools to problematise the social dimensions of biomedical innovation.
- Transpose this analytical skillset to reflect upon her own technical and/or scientific domain.

Transversal skills



- Set objectives and design an action plan to reach those objectives.
- Take account of the social and human dimensions of the engineering profession.
- Respect the rules of the institution in which you are working.
- Demonstrate the capacity for critical thinking
- Write a literature review which assesses the state of the art.
- Write a scientific or technical report.

Teaching methods

Ex cathedra lectures and interactive sessions

Expected student activities

- 1. Attending the course and participating actively to discussions
- 2. Realisation of individual/group projects directed at employing the conceptual and empirical tools acquired during the course to subject of student's curriculum.

Assessment methods

- 1. Continuing evaluation through presentation and discussion of projects throughout the course (dedicated time slots during lectures)
- 2. Poster redaction and presentation. In the case of collective projects the poster and the presentation provide clear demarcation between collective (e.g. introduction and conclusion) and individual contributions.

Supervision

Office hours Yes
Assistants Yes
Forum Yes

Resources

Bibliography

- 1. Barbara Prainsack, *Personalized Medicine: Empowered Patients in the 21st Century?* (New York: NYU Press, 2017).
- 2. Deborah Lupton, ed., *Self-Tracking, Health and Medicine: Sociological Perspectives*, 1 edition (Routledge, 2017).
- 3. Giovanni Boniolo and Marco J. Nathan, eds., *Philosophy of Molecular Medicine: Foundational Issues in Research and Practice*, 1 edition (New York: Routledge, 2016).
- 4. Sarah S. Richardson and Hallam Stevens, eds., *Postgenomics: Perspectives on Biology after the Genome* (Durham: Duke University Press, 2015).
- 5. Nikolas Rose, *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century* (Princeton University Press, 2007).

Ressources en bibliothèque

- Barbara Prainsack, Personalized Medicine: Empowered Patients in the 21st Century?
- Deborah Lupton, ed., Self-Tracking, Health and Medicine: Sociological Perspectives
- Giovanni Boniolo and Marco J. Nathan, eds., Philosophy of Molecular Medicine: Foundational Issues in Research and Practice
- Sarah S. Richardson and Hallam Stevens, eds., Postgenomics: Perspectives on Biology after the Genome
- Nikolas Rose, The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century