Technology and Public Policy - (d) Technology and innovation policies for grand and global challenges

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Cours généraux et externes EDOC

Sem. Obl.

Language: English
Credits: 2
Session: Term paper
Exam: 60h
Workload: 24
Hours: 24
Lecture: 24
Number of positions: 20

Remarque
Next time: Spring 2020

Summary
This course is about how to structure a policy response to the so-called grand challenges (climate change or global health). It examines mission-oriented R&D programs in various sectors as well as specific policy instruments to learn about the best ways to accelerate innovations in a given sector.

Content
1 - Context, problems
   The definition and identification of societal Grand Challenges
   Difficulties and problems raised by the Grand Challenges of our time - "the Moon and the Ghetto" argument
   The policy debate - sector neutral policy versus sector non neutral policy and the Washington consensus
   The need for restoring a non neutral-sector policy approach and the centrality of policy design

2 - Lessons from the past
   ICT revolution, life science, agriculture

3 - Policy design
   Beyond principal-agent governance and the principle of self discovery
   Some specific policy instruments: public procurement for innovation; ex ante prizes

4 - The approach of smart specialisation strategy as an example
   The students will have to write an individual term paper on a case of policy addressing a Grand Challenge (preferably within their field of expertise (energy, health, IC, agrofood and water, etc.))

LEARNING OUTCOMES
By the end of the course, the student must be able to:
to understand the centrality of technology policy in order to meet Grand Challenges and to appreciate the role, procedure and design's implications of sector non neutral policies in order to address any Grand Challenge

Keywords
Grand Challenge, smart specialisation, self-discovery
Non neutral sector policy

Resources
Bibliography

Ressources en bibliothèque
• Research Policy (online)
• The moon and the ghetto revisited / Nelson
• Accelerating innovation in energy / Henderson
• Smart specialisation / Foray