At the dawn of the Fourth Industrial Revolution: employment, skills, and labor market policies revisited

Céline Ferré

Course Description

Today, we are at the beginning of a Fourth Industrial Revolution that will shake the current labor market paradigm. While the impending geopolitical, socio-demographic, and technological changes hold great promise, the patterns of consumption, production and employment created by it also pose major challenges requiring proactive adaptation by corporations, governments and individuals.

This course is a first step in understanding the current labor market problematics: identifying the issues at stake, reviewing labor market policies that have been/are being implemented, rethinking social protection, and preparing the next-generation workforce for the Fourth Industrial Revolution.

Each module/session will be built around a presentation by the lecturer, followed by a short debate with the whole class. External speakers may be brought in to discuss their own field of research related to the module topic (TBC). The course will have a strong focus on data sources and how to build evidence on labor market issues.

For each course, you will be asked to read articles/papers or/and listen to a podcast or/and watch a video. The material will be discussed during the class debate.

Course schedule

The course will take place on Mondays, from 9am to 12pm. It will consist of 8 sessions of 3 hours for a total of 24 hours.

Course agenda

Module 1: Concepts and definitions, issues at stake, data sources

First came steam and water power, then electricity and assembly lines, then computerization... So what comes next?

Reading 1: News brief from Le Figaro “Une étude affirme que 85% des emplois de 2030 n'existent pas aujourd'hui”, 18 juillet 2017 [3 pages]


Module 2: The mitigated impact of Active Labor Market Policies (ALMPs)
In a current state of high unemployment, which policies are successful at bringing jobseekers back on the labor market?


Module 3: The challenge of youth unemployment

With unemployment rates being especially high among youth, are there labor market policies that work out better to match young people with available jobs? Or are we really facing a lost generation?

Reading 1: Kluve, J., 2014. “Comprehensive programs that focus on skills can reduce unemployment and upgrade skills in OECD countries.” Youth labor market interventions. IZA World of Labor 2014: 106 [10 pages]


Module 4: Innovative solutions and behavioral economics

Are there innovative solutions that can help jobseekers and employers find the right match? How can you use behavioral economics technics to nudge people into finding employment?


Module 5: Students’ oral presentations by group of 2-3 persons (length of presentation: 15 min)

Module 6: Beyond labor market policies

Which policies need to be put in place to foster a shift from the current labor market paradigm to that of the Fourth Industrial Revolution? Fundamentals need to be in place, and constraints to the creation of jobs with high development payoffs need to be removed or offset.


Module 7: Rethinking social protection: covering gaps, non-standard workers, universal basic income

With ever shifting employment relationships, what challenges await social protection systems? How are new/non-standard forms of employment (temporary workers, self-employed, migration workers) going to be integrated in the system? Is the universal basic income the key to high unemployment rates?


Module 8: Preparing the workforce for the Fourth Industrial Revolution / Final exam

Conclusion and final comments on ways forward.


Course grading
- 1/3rd = class participation
- 1/3rd = a mid-term presentation (by group of 2-3 students on a topic defined at the end of Module 2)
- 1/3rd = a final written exam during the last class (duration 1.5 hours)