

**Trial Exam I**  
**MOT113a Technology Dynamics**

Trial Exam I is the first part of this year's trial exam. It covers chapters 0 to 4 of the course and takes 90 minutes.

For trial exam you can get up to 90 points. The number of points is equal to the minutes you have available to answer the questions, which gives you a rough indication of how much time you should be spending on each part of the examination.

No means of aid are allowed whatsoever.

Success!

**Question 1 (45 points):**

- a) Please quick-read the [paper on Chilean biotech by Romero, 2018](#), and figure out what the major concepts used, the research questions and resolutions of the paper are (20 points).
- b) Please figure out the differences between the innovation system's approach and the cluster's approach (10 points).
- c) Please discuss the influence of personal, social and geographical proximity on the generation of business relations in the Chilean biotech industry (15 points). Please note that the abbreviation DBF stands for dedicated biotechnology firm.

**Question 2 (45 points):**

Please have a look at the [innovation indicators of Switzerland](#) as depicted on the European Innovation Scoreboard, 2022.

- a) Pick five individual innovation indicators shown on this sheet, tell what they measure and discuss their advantages and disadvantages (15 points).
- b) Please critically discuss the summary innovation index by particularly considering the criticism by Edquist et al. (2018) in your answer (5 points).
- c) Please analyse the Swiss innovation system based on Marxt and Brunner, 2013, and the individual indicators provided by the European Innovation Scoreboard, 2022. Please elaborate also on the weaknesses and strength of the Swiss innovation system while doing so (20 points).
- d) What would be your recommendations for Swiss policy? (5 points)