

Economics of Innovation

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2 SWS

Lecture and exercises:

Thursday	2-4 pm	weekly	SPA 1, 22
Friday	2-4 pm	weekly	SPA 1, 22

Teaching starts on 20 May 2010.

Participating students are required to have a solid background in microeconomics and macroeconomics. The objective of the course is to provide students with a comprehensive and advanced understanding of the origins, dynamics, and consequences of innovation from an economic perspective. Doing so, the course taps into many different fields within economics, including macroeconomics, industrial organization and labour economics. The course aims at improving modeling skills. The language of instruction is English. At the beginning of the course there will be 10 traditional lectures, followed by a series of student presentation at the end of the course. A reader that includes all required articles will be supplied to students.

As mentioned above, students are required to have a solid background in microeconomics and macroeconomics. I recommend the following material to “bring you up to speed” and as a valuable resource for your studies:

- Varian, H. 2006. *Intermediate Microeconomics*. Norton. Chapters 1, 15, 16, 18, 22-24, 27-29, 34-36.
- Sørensen, P.B. and Whitta-Jacobsen, H.J. 2005. *Introducing Advanced Macroeconomics*. McGraw Hill. Chapters 1-3, 5.

Literature (in chronological order):

1. Schumpeter, J. 1942. *Capitalism, Socialism and Democracy*. New York: Harper, ch. 7, 81-86.
2. Baumol, W. 2002. *The Free Market Innovation Machine – Analyzing the Growth Miracle of Capitalism*. Princeton University Press, ch. 1, 1-16.
3. Fagerberg, J. 2005. Innovation – A guide to the literature. In: Fagerberg, J., Mowery, D. and Nelson, R. (Eds). *The Oxford Handbook of Innovation*. Oxford University Press, ch. 1, 4-9.

4. Smith, K. 2005. Measuring innovation. In: Fagerberg, J., Mowery, D. and Nelson, R. (Eds). *The Oxford Handbook of Innovation*. Oxford University Press, ch. 6, 148-177.
5. Sørensen, P.B. and Whitta-Jacobsen, H.J. 2005. *Introducing Advanced Macroeconomics*. McGraw Hill, ch. 9 & 10, pp. 249-310.
6. Arrow, K. 1962. Economic welfare and the allocation of resources for invention, In R. Nelson, Ed: *The Rate and Direction of Inventive Activity*. Princeton University Press, Princeton.
7. Cohen, W. and Klepper, S. 1992. The anatomy of industry R&D intensity distributions. *American Economic Review* 82(4), 773-799.
8. Stoneman, P. 2002. *The Economics of Technological Diffusion*. Blackwell Publishers, Oxford. Chapter 2-3, 12-54.
9. Arthur, B. 1989. Competing technologies, increasing returns, and lock-in by historical events. *Economic Journal* 99(394), 116-131.
10. Katz, M. and Shapiro, C. 1985. Network externalities, competition, and compatibility. *American Economic Review* 75(3), 424-440.
11. Acemoglu, D. 2002. Technical change, inequality, and the labor market. *Journal of Economic Literature* XL(March), 7-72.