



# UNIVERSITÀ DI PISA

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## ECONOMICS AND MANAGEMENT OF INNOVATION

### GIOVANNI DOSI

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|---------------|-----------|
| Academic year | 2021/22   |
| Course        | ECONOMICS |
| Code          | 370PP     |
| Credits       | 6         |

| Modules                                | Area      | Type    | Hours | Teacher(s)    |
|----------------------------------------|-----------|---------|-------|---------------|
| ECONOMICS AND MANAGEMENT OF INNOVATION | SECS-P/08 | LEZIONI | 42    | GIOVANNI DOSI |

#### Bibliografia e materiale didattico

##### • Economics of Innovation

###### Core readings

- Dosi G. (1982), 'Technological Paradigms and Technological Trajectories. A Suggested Interpretation of the Determinants and Directions of Technical Change', *Research Policy*
- Dosi G. and R.R. Nelson (2010), 'Technical Change and Industrial Dynamics as Evolutionary Processes', In B.H. Hall and N. Rosenberg: *Handbook of the Economics of Innovation- Vol-I*, Burlington: Academic Press, pp. 51-128
- Pavitt K. (1984), 'Patterns of Technical Change: Toward a Taxonomy and a Theory', *Research Policy*

###### Background readings

- Nelson R., Winter S. (1982), *An Evolutionary Theory of Economic Change*, Harvard Univ. Press, Part I-III (ch. 1-7)
- Dosi G. (2007), 'Statistical Regularities in the Evolution of Industries. A Guide through some Evidence and Challenges for the Theory', in F. Malerba and S. Brusoni (eds.) *Perspectives on Innovation*, Cambridge U.P.
- Dosi G., O. Marsili, L. Orsenigo, R. Salvatore (1995), 'Learning, Market Selection and The Evolution of Industrial Structures', *Small Business Economics*
- Freeman C., Soete L. *The Economics Industrial Innovation*, Routledge; 3 Reprint edition (June 3, 2012)

##### • Economics of Information

###### -Mandatory readings

- Arrow (1996) 'Technical Information and Industrial Structure', *Industrial and Corporate Change* 5(2), pp. 645–652.
- Rasmusen (2007) *Games and Information: an introduction to game theory*, 4th edition, Blackwell Publishing [Section 2.2, 2.3, 7.1, 7.2, 7.3, 9.1, 9.2].
- Shapiro and Stiglitz (1984) 'Equilibrium Unemployment as a Worker Discipline Device', *American Economic Review* 74(3), pp. 433–444.
- Stiglitz (2000) 'The Contributions of the Economics of Information to Twentieth Century Economics', *Quarterly Journal of Economics* 115(4), pp. 1441–1478.

###### -Optional readings

- Arrow (1974) 'Limited Knowledge and Economic Analysis', *American Economic Review* 64(1), pp. 1–10.
- Arrow (1994) 'Information and the organization of industry', *Rivista internazionale di scienze sociali* 52, pp. 111–124.
- Atkinson and Stiglitz (1969) 'A New View of Technological Change', *Economic Journal* 79(315), pp. 573–578.
- Dasgupta and Stiglitz (1980) 'Industrial Structure and the Nature of Innovative Activity', *Economic Journal* 90(358), pp. 266–293.
- Dosi and Virgillito (2016) *The Schumpeterian and the Keynesian Stiglitz: Learning, Coordination Hurdles and Growth Trajectories*, LEM Working Paper Series n. 2016/20.
- Greenwald and Stiglitz (1986) 'Externalities in Economies with Imperfect Information and Incomplete Markets', *Quarterly Journal of Economics* 101(2), pp. 229–264.
- Greenwald and Stiglitz (1987) 'Imperfect information, credit markets and unemployment', *European Economic Review* 31(1-2), pp. 444–456.
- Hayek (1945) 'The Use of Knowledge in Society', *American Economic Review* 35(4), pp. 519–530.
- Radner and Stiglitz (1984) 'A Non-Convexity in the Value of Information', in Boyer and



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Kihlstrom, eds. Bayesian Models in Economic Theory: Studies in Bayesian Econometrics, Vol. 5, Elsevier Science.

Stiglitz and Weiss (1981) 'Credit Rationing in Markets with Imperfect Information', American Economic Review 71(3), pp. 393–410.

Stiglitz and Weiss (1983) 'Alternative Approaches to Analyzing Markets with Asymmetric Information: Reply', American Economic Review 73(1), pp. 246–249.

Stiglitz and Weiss (1992) 'Asymmetric Information in Credit Markets and Its Implications for Macro-Economics', Oxford Economic Papers 44(4), pp. 694–724.

### Modalità d'esame

Scritto e Orale

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