

# HGO4601 – Economic geography: Institutions, evolution and sustainability transitions

## Course content

The first part of this course introduces students to state-of-the-art theories and empirical research in economic geography that deals with systemic and evolutionary dynamics of territorial industrial change. The second part discusses economic, social and environmental issues associated with evolutionary dynamics. The third part zooms in on the sustainability transition challenge, with particular attention to literature dealing with interactions of global processes with place-specific resources, institutions and policies.

The course provides an introduction to new directions in theory such as evolutionary economic geography and addresses institutions and the dynamics between the local and global. Thematically it delves into debates over environmental sustainability transitions, a more environmentally aware economic geography and empirical examples.

## Learning outcome

### Knowledge

You will learn about:

- evolutionary processes at play in territorial economies
- how these processes shape and are shaped by interactions between global and local forces
- economic, social and environmental sustainability challenges and theoretical perspectives on transitions

- Literature on sustainability transitions and green innovations in economic geography.

## Skills

You will be able to:

- Provide a thorough account of and to discuss central concepts in economic geography such as evolution, institutions and systems
- Understand what industrial development paths are and factors that contribute to their extension, renewal or transformation
- Discuss the interrelatedness of economic, social and environmental sustainability challenges with industrial development paths

## General competence

You will be able to:

- Reflect on sustainability assumptions made in research, policy and practice
- Conduct theoretically informed analysis in your master thesis project

## Admission

Students who are admitted to study programmes at UiO must each semester register which courses and exams they wish to sign up for [in Studentweb](#).

If you are not already enrolled as a student at UiO, please see our information about [admission requirements and procedures](#).

This course is a part of the Master's program in Human Geography. Students with admission to other relevant master's degree programmes can apply for admission as [quest students](#).

## Prerequisites

### Recommended previous knowledge

The course builds upon [SGO2200 - Economic globalisation and regional development](#) and [SGO3200 - Environment and innovation](#).

### Overlapping courses

This course overlaps with the following courses: [SGO4601 - Economic geography: Institutions, evolution and sustainability transitions](#), [SGO4016 - Økonomisk geografi \(discontinued\)](#) and SGO312.

## Teaching

The teaching consists of lectures.

## Examination

Three-day home exam

[Previous school exams](#)

### Examination support material

Students may use dictionaries at this exam. Dictionaries must be handed in before the examination. Please read [regulations for dictionaries permitted at the examination](#).

### Language of examination

The examination text is given in English. You may submit your response in Norwegian, Swedish, Danish or English.

## **Grading scale**

Grades are awarded on a scale from A to F, where A is the best grade and F is a fail. Read more about [the grading system](#).

## **Explanations and appeals**

- [Explanation of grades and appeals](#)

Ask for explanation of your grade in this course:

- [school exam](#)

## **Resit an examination**

If you are sick or have another valid reason for not attending the regular exam, we offer a [postponed exam](#) later in the same semester.

See also our information about [resitting an exam](#).

## **Withdrawal from an examination**

It is possible to take the exam up to 3 times. If you [withdraw from the exam](#) after the deadline or during the exam, this will be counted as an examination attempt.

## **Special examination arrangements**

Application form, deadline and requirements for [special examination arrangements](#).

## **Evaluation**

The course is subject to continuous evaluation. At regular intervals we also ask students to participate in a more comprehensive evaluation.

# Syllabus

## Introduction

\*Scott, A. J., (2000): "Economic geography: the great half-century". In: Clark, G. et al (ed): *The Oxford Handbook in Economic geography*. Oxford, Oxford University Press, pp. 18-44.

@Bridge, G. (2009). Material Worlds: Natural Resources, Resource Geography and the Material Economy. *Geography Compass*, 3/3, 1217-1244. 27 pages

@Neffke, F., et al. (2011). "How do regions diversify over time? Industry relatedness and the development of new growth paths in regions." *Economic Geography* 87(3): 237-265. 28 pages.

@Frenken, K., Oort van, F., Verburg, T. (2007): Related Variety, Unrelated Variety and Regional Economic Growth. *Regional Studies* 41, pp. 685-697. 12 pages

@Schot, J. and W. E. Steinmueller (2018). "Three frames for innovation policy: R&D, systems of innovation and transformative change." *Research Policy* 47(9): 1554-1567. 13 pages.

Vidal, M. (2013). Postfordism as a dysfunctional accumulation regime: a comparative analysis of the USA, the UK and Germany. *Work, employment and society*, 27(3), 451-471. 20 pages

## Part 1a: Evolution

Arthur, W. (1989). Competing Technologies, Increasing Returns, and Lock-In by Historical Events. *The Economic Journal*, 99(394), 116-131. 15 pages

\*Boschma, R. & Martin, R. 2010. The aims and scope of evolutionary economic geography. Boschma, R. & Martin, R. (eds.) *The Handbook of Evolutionary Economic Geography*, 3-43. Edward Elgar, Cheltenham. 40 pages

@ Boschma, R and Frenken, K. (2006) "Why is economic geography not an evolutionary science? Towards an evolutionary economic geography." *Journal of Economic Geography*, 6, 273-302. 29 pages

\*Essletzbitchler, J. & Rigby, D.L. 2010. Generalized Darwinism and evolutionary economic geography. Boschma, R. & Martin, R. (eds.) *The Handbook of Evolutionary Economic Geography*, 43–62. Edward Elgar, Cheltenham, 19 sider

\*David, P. A., (2007): “Path Dependence, its critics and the quest for “historical economics.” In: *The Evolution of Economic Institutions*. Edward Elgar. Cheltenham, pp. 120–144. 24 pages.

@MacKinnon, D., Cumbers, A., Pike, A., Birch, K. and McMaster, R. (2009): *Evolution in Economic Geography: Institutions, Political Economy, and Adaptation*. *Economic Geography*, 85, pp. 129-150. 21 pages

@ Martin, R. and Sunley, P. (2007): Complexity thinking and evolutionary economic geography. *Journal of Economic Geography*, 7, 573-601. 28 pages

@Martin, R. and Sunley, P. (2006). Path dependence and regional economic evolution. *Journal of Economic Geography*, 6, 395-437. Available online

@Martin, R. 2010. Roepke Lecture in Economic Geography—Rethinking Regional Path Dependence: Beyond Lock-in to Evolution. *Economic Geography* 86, 1–27. 26 pages

@Martin, R. 2012. (Re)Placing Path Dependence: A Response to the Debate. *International Journal of Urban and Regional Research* 36, 179-192. 13 pages

@Hassink, R., Isaksen, A., & Trippel, M. (2019). Towards a comprehensive understanding of new regional industrial path development. *Regional Studies*, 53(11), 1636-1645. 9 pages

\*Wicken, O. 2009. The Layers of National Innovation Systems: The Historical Evolution of a National Innovation System in Norway. Fagerberg, J., Mowery, D.C. & Verspagen, B. (eds.) *Innovation, Path Dependency and Policy. The Norwegian Case*, 33–60. Oxford University Press, Oxford.

@Njøs, R., Sjøtun, S. G., Jakobsen, S. E., & Fløysand, A. (2020). Expanding analyses of path creation: Interconnections between territory and technology. *Economic Geography*, 96(3), 266-288. 22 pages

## **Part 1b: Institutions, systems and regimes**

@Bergek, A., Jacobsson, S., Carlsson, B., Lindmark, S., & Rickne, A. (2008). Analysing the functional dynamics of technological innovation systems: A scheme of analysis. *Research policy*, 37(3), 407-429. 22 pages.

@Gertler, M. 2010. Rules of the Game: The Place of Institutions in Regional Economic Change', *Regional Studies* 44, 1–15. 14 pages

@ Hodgson, G. M., (2006): "What are Institutions?" *Journal of Economic Issues* XL (1) pp 1-23. 22 pages.

@Jørgensen, U. (2012). Mapping and navigating transitions—The multi-level perspective compared with arenas of development. *Research Policy*, 41, 996-1010. 15 pages.

Klitkou, A., Bolwig, S., Hansen, T., & Wessberg, N. (2015). The role of lock-in mechanisms in transition processes: The case of energy for road transport. *Environmental Innovation and Societal Transitions*, 16, 22-37. 15 pages

Hoogstraaten, M. J., Frenken, K., & Boon, W. P. (2020). The study of institutional entrepreneurship and its implications for transition studies. *Environmental Innovation and Societal Transitions*, 36, 114-136. 22 pages

@Rodríguez-Pose, A. (2013). "Do Institutions Matter for Regional Development?" *Regional Studies* 47(7): 1034-1047. 13 pages.

@North, D. C., (1991): "Institutions." *Journal of Economic Perspectives* 5, (1), pp 97–112. 15 pages

## **Part 2: Sustainability challenges**

@Bailey I, Caprotti F, 2014, "The green economy: functional domains and theoretical directions of enquiry" *Environment and Planning A* 46(8) 1797 – 1813. 16 pages

@Prudham, S. (2009). Pimping climate change: Richard Branson, global warming, and the performance of green capitalism. *Environment and Planning A* 41(7) 1594 – 1613. 20s. Available online

Goos, M., Manning, A., & Salomons, A. (2014). Explaining job polarization: Routine-biased technological change and offshoring. *American economic review*, 104(8), 2509-26.

Gupta, J., Pouw, N. R., & Ros-Tonen, M. A. (2015). Towards an elaborated theory of inclusive development. *The European Journal of Development Research*, 27(4), 541-559. 18 pages

Henning, M., & Eriksson, R. H. (2021). Labour market polarisation as a localised process: evidence from Sweden. *Cambridge Journal of Regions, Economy and Society*, 14(1), 69-91. 22 pages

Martin, R., Sunley, P., Gardiner, B., Evenhuis, E., & Tyler, P. (2018). The city dimension of the productivity growth puzzle: the relative role of structural change and within-sector slowdown. *Journal of Economic Geography*, 18(3), 539-570. 31 pages

Susur, E., & Karakaya, E. (2021). A reflexive perspective for sustainability assumptions in transition studies. *Environmental Innovation and Societal Transitions*, 39, 34-54. 20 pages

Rodríguez-Pose, A. (2020). The rise of populism and the revenge of the places that don't matter. *LSE Public Policy Review*, 1(1): 1-9. 8 pages

Vallance, S., Perkins, H. C., & Dixon, J. E. (2011). What is social sustainability? A clarification of concepts. *Geoforum*, 42(3), 342-348. 6 pages

Vivanco, D. F., Kemp, R., & van der Voet, E. (2016). How to deal with the rebound effect? A policy-oriented approach. *Energy Policy*, 94, 114-125. 11 pages

### **Part 3a: Sustainability transitions**

@Carvalho, L., Mingardo, G. and Van Haaren, J. (2012). Green urban transport policies and cleantech innovations: Evidence from Curitiba, Göteborg and Hamburg. *European Planning Studies*, vol. 20, 375-396. 21 sider. Available online

@Haarstad, H. and Rusten, G. (2016). The challenges of greening energy: policy/industry dissonance at the Mongstad refinery, Norway. *Environment and Planning C: Government and Policy*, 34, 340-355. Available online.

@Hvarregaard, M. T., Kjeldsen, C. and Noe, E. (2016). It's never too late to join the revolution! - Enabling new modes of production in the contemporary danish food system. *European Planning Studies*. Availbel online

@Coenen, L., Benneworth, P. and Truffer, B. (2012). Toward a spatial perspective on sustainability transitions. *Research Policy*, 41, 968-979. 11 pages.

Jakobsen, S.E; Fløysand, A & Overton, J (2019): Expanding the field of Responsible Research and Innovation (RRI) – from responsible research to

responsible innovation, *European Planning Studies*, 27:12, 2329-2343. 14 pages

@Karnøe, P. and Garud, R. (2012). Path Creation: Co-creation of Heterogeneous Resources in the emergence of the Danish Wind Turbine Cluster. *European Planning Studies*, vol. 20, 733-752. 20 pages.

@Schot, J. and L. Kanger (2018). "Deep transitions: Emergence, acceleration, stabilization and directionality." *Research Policy* 47(6): 1045-1059. 14 pages.

@Steen, M. and G. H. Hansen (2018). "Barriers to Path Creation: The Case of Offshore Wind Power in Norway." *Economic Geography* 94(2): 188-210. 22 pages.

@Kvam, G.T., Bjørkhaug, H. and Pedersen, A.C. (2017). How relationships can influence an organic firm's network identity. *European Planning Studies*. Available online.

Weber, K. M., & Rohracher, H. (2012). Legitimizing research, technology and innovation policies for transformative change: Combining insights from innovation systems and multi-level perspective in a comprehensive 'failures' framework. *Research Policy*, 41(6), 1037-1047. 10 pages

### **Part 3b: Case study readings**

@Gibson, C. and Warren, A. (2016). Resource-Sensitive Global Production Networks: Reconfigured Geographies of Timber and Acoustic Guitar Manufacturing. *Economic Geography*, 92, 4, 430-454. 24 pages

\*Spaargaren, G., Mol, A.P.J. and Buttel, F.H. (2006). Introduction: Governing Environmental Flows in Global Modernity. In Gert Spaargaren, Arthur P. J. Mol, and Hans Bruyninckx (eds.): *Governing environmental flows: global challenges to social theory*. The MIT Press, Cambridge-Mass. 37 sider.

@Affolderbach, J. (2011). Environmental Bargains: Power Struggles and Decision Making over British Columbia's and Tasmania's Old-Growth Forests. *Economic Geography*, vol. 87, 181-206. 25 pages

@Aylett A, (2013) Networked urban climate governance: neighborhood-scale residential solar energy systems and the example of Solarize Portland. *Environment and Planning C: Government and Policy* 31(5) 858 – 875. 17 sider.

@De Laurentis, C. (2013). Innovation and Policy for Bioenergy in the UK: A Co-Evolutionary Perspective. *Regional Studies*. 15 pages

@Dewald, U. and Truffer, B. (2012). The Local Sources of Market Formation: Explaining Regional Growth Differentials in German Photovoltaic Markets. *European Planning Studies*, vol. 20, 397-420. 23 pages

@Gibbs, D og O'Neill, K. (2014). Rethinking sociotechnical transitions and green entrepreneurship: the potential for transformative change in the green building sector. *Environment and Planning A* 46(5) 1088 – 1107. 20 pages

@Thorsøe, M. H., Kjeldsen, C., & Noe, E. (2017). It's never too late to join the revolution!—Enabling new modes of production in the contemporary Danish food system. *European Planning Studies*, 25(7), 1166-1183. 17 pages

@Lovio, R. and Kivimaa, P. (2012). Comparing alternative Path Creation Frameworks in the context of Emerging Biofuel Fields in the Netherlands, Sweden and Finland. *European Planning Studies*, vol. 20, 773-790. 17 pages.

@Simmie, J. (2012). Path Dependence and New Path Creation in Renewable Technologies. *European Planning Studies*, vol 20, 729-731. Available online

**Totalt 718s.**

**761 pages in total (of which 141 pages are case study readings under 3b)**