# **Economic Development in the Arctic**

Course Syllabus - Spring 2020 - University of Greenland / Ilisimatusarfik

#### Lecturer

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#### **Course description**

The goal of the course is to introduce the student to the main issues of economic development in the arctic region with particular emphasis on Greenland. Through brief review theory, evidence, and country-case studies, the course aims to answer key questions such as: What has been the evolution of the arctic economies since 1950? Which arctic countries have lagged behind and why? What is the impact of climate change in the arctic economies? Is economic growth good for the environment in the arctic? Are urbanization and migration important for growth in the arctic? How different is the 'human development' across the arctic region what has been the role of policy?

## Course learning outcomes

Upon completion of the course the student will be able to: identify the main issues of economic development in the arctic; understand different perspectives and their basis in theory and evidence; develop an independent opinion on the long-term economic evolution of the arctic, and ultimately use the relevant concepts of the theories of economic growth & development to reflect critically on local problems.

### **Teaching methods**

Series of lectures using an active learning approach – problem-based learning

#### **Topics**

- 1. Catching up, economic structure and diversification in the Arctic
- 2. The problem of youth unemployment in the Arctic
- 3. The economic effects of climate change in the Arctic
- 4. Mining development in the Arctic
- 5. Living conditions in the Arctic
- 6. Human capital in the Arctic

#### Criteria for final assessment

Class exercises: 20% Final essay: 80%

The final essay is a written assignment (at home) approximately of 1.200 words as minimum (or five pages double-spaced excluding the references) on a related topic of economic development in an arctic country/region (a development issue on a case-study of the arctic or an analytical reflection). This essay should be written in a fairly understandable English using scientific citations. Grades will be given according to the Greenlandic Grading Score (GGS).

The final essay should contain:

- 1. An introduction to the main question.
- 2. What is the relevant literature (what has been said about the issue/topic before)?
- 3. Your argument or explanation of the issue.
- 4. Your discussion of other authors' works/views on the issue using the literature (articles/books).
- 5. Conclusions.

#### Recommended literature and class exercises

# **Topic 1 "Catching up, economic structure and diversification in the Arctic" (2 sessions)**

- Szirmai, A. (2015). Developing countries and the concept of development. In Szirmai, A. *Socio-Economic Development*. Chapter 1. Cambridge University Press (<a href="https://intranet.uni.gl/media/2642637/chapter-1-szirmai.pdf">https://intranet.uni.gl/media/2642637/chapter-1-szirmai.pdf</a>)
- Larsen, J. N. (2015). The Arctic Economy in a Global Context, in Evengård, B., Larsen, J. N., & Paasche, Ø. (Eds.). Chapter 12. *The New Arctic*. Springer.
- Kaiser, B. A., Fernandez, L. M., & Vestergaard, N. (2016). The future of the marine Arctic: Environmental and resource economic development issues. *The Polar Journal*, 6(1), 152-168.
- Moe, E. (2012). "Structural Change, Vested Interests, and Scandinavian Energy Policy-Making: Why Wind Power Struggles in Norway and not in Denmark." *The Open Renewable Energy Journal*. 6/1. Download: <a href="https://benthamopen.com/contents/pdf/TOREJ-5-19.pdf">https://benthamopen.com/contents/pdf/TOREJ-5-19.pdf</a>

Student exercise 1. Disaggregate the structure of the Greenlandic economy from 2010 to 2018 (using data from <a href="https://www.stat.gl">www.stat.gl</a>)

# **Topic 2.** The problem of youth unemployment in the Arctic. (1 session)

- Karlsdóttir, A., Cuadrado, A., Gaini, F., Jungsberg, L., & Ormstrup Vestergård, L. (2019). "Enabling vulnerable youth in rural areas not in education, employment or training." NordRegio. <a href="https://norden.diva-portal.org/smash/get/diva2:1326483/FULLTEXT01.pdf">https://norden.diva-portal.org/smash/get/diva2:1326483/FULLTEXT01.pdf</a>
- MacDonald, J. P., Ford, J., Willox, A. C., & Mitchell, C. (2015). "Youth-led participatory video as a strategy to enhance Inuit youth adaptive capacities for dealing with climate change". *Arctic*, 486-499.

Student exercise 2. Calculate youth unemployment rates in Greenland by region from 2000 to 2018 (using data from www.stat.gl)

### Topic 3. The economic effects of climate change in the Arctic (1 session)

- Tol, R. S. (2018). The economic impacts of climate change. *Review of Environmental Economics and Policy*, 12(1), 4-25.
- Gill, A. R., Viswanathan, K. K., & Hassan, S. (2018). The Environmental Kuznets Curve (EKC) and the environmental problem of the day. *Renewable and Sustainable Energy Reviews*, 81, 1636-1642.

# **Topic 4. Mining development in the Arctic (1 session)**

- Tolvanen, A., Eilu, P., Juutinen, A., Kangas, K., Kivinen, M., Markovaara-Koivisto, Arto Naskali, V. Salokannel, S. Tuulentie, and J. Similä. (2019). "Mining in the Arctic environment—A review from ecological, socioeconomic and legal perspectives." *Journal of Environmental Management*, 233: 832-844
- Arnaut, J. (2019). Can we predict the future of arctic mineral mining? A primer on statistical forecasting using Greenland's mineral commodities. *Mimeo*
- Video analysis: "Kuannersuit / Kvanefjeld" from the International Uranium Film Festival (by Lise Autogena and Joshua Portway): https://vimeo.com/214697146

# **Topic 5. Living conditions in the Arctic (1 session)**

- Poppel, B. (2017). Well-Being of Circumpolar Arctic Peoples: The Quest for Continuity. In *The Pursuit of Human Well-Being* (pp. 565-605). Springer, Cham.
- Christensen, J., Arnfjord, S., Carraher, S., & Hedwig, T. (2017). Homelessness across Alaska, the Canadian North and Greenland: A Review of the Literature on a Developing Social Phenomenon in the Circumpolar North. *Arctic*, 70(4), 349-364.

# **Topic 6. Human capital in the Arctic (1 session)**

- Brincker, B., & Lennert, M. (2019). "Building a nation in the classroom: Exploring education policy in post-colonial Greenland". In: *Including the North: a comparative study of the policies on inclusion and equity in the Circumpolar North.*
- Larsen, J. N., & Fondahl, G. (Eds.). (2015). Education and human capital (Chapter 9; p. 349-399). In: *Arctic human development report: Regional processes and global linkages*. Nordic Council of Ministers.