**TID7106:** **Clusters & Innovation Systems in Industrial Development**

**Short description**

Clusters are a prominent feature on the landscape of every advanced economy, and cluster formation is an essential ingredient of economic development.  Clusters offer a new way to think about economies and economic development; new roles for business, government and institutions; and new ways to structure the business-government or business-institution relationship.  Dozens of cluster initiatives have sprung up in many parts of the world, and this course outlines some of the learning gleaned from both advanced and developing economies.

**Course objectives:**

The overall aim of the course is to improve an understanding of how local clusters can be transformed into local systems of innovation and how local clusters can be better connected to global actors. The students are supposed to draw out implications for policy and practice and provide guidance to governments, private sector associations, and non-governmental organizations like companies and business entities. It presents the science and facts behind industrial clusters and innovation systems as away of fostering high levels of production and innovation for competitiveness.

**Learning objectives:**

By the end of this course the student should be able;

1. To learn that increasing levels of specialization, ongoing technological development and growing number of links between technologies have led to greater importance for inter-organizational collaboration in the creation and realization of innovations.
2. To deepen their knowledge, insights and skills with regard to design and governance of clusters, chain and innovation networks to improve competitiveness.
3. Examine the incidence and role of clusters as a viable and increasingly important form of industrial organization.
4. To draw out implications for policy and practice and provide guidance to governments, private sector associations, and non-governmental organizations like companies and business entities.
5. To reveal important insights about the microeconomics of competition and the role of location in competitive advantage.

**Methods of course delivery:**

1. lectures and discussions
2. self study assignments
3. case studies and group discussions

**Method of assessment**

Assessment will be done through coursework which will include assignments, class room and take home tests, project work and presentations and a written examination. Course work will carry a total of 40% and written examination carries 60%. Coursework marks will be divided into; Assignments 5%, Tests 10% and Practical Work 25%.

**Course outline:**

The theory of clusters and innovation system, clusters as geographically and sectored bounded entity (8 hours); cluster location and competitive advantage relationship, the role of clusters in competition, and their implications for government policy, company and institutional behavior (8 hours), cluster formation as an essential ingredient of economic development (4 hours).  Clusters relationship with economies and economic development; new roles for business, government and institutions and new ways to structure the business-government or business-institution relationship (8 hours). Cluster’s effect on competition, Case studies of cluster initiatives in many parts of the world, and some of the learning learnt from both advanced and developing economies (7 hours). Firms possessing different knowledge bases which create synergy; idiosyncratic depositions of knowledge, skills and experiences, clustering emphasizing collective efficiency through joint action by firms and associations to realize productive efficiency, industrial clusters as a forum of industrial organization (10 hours), Case Studies of the world successive clusters (15 hours)

**Basic reading list/references**

1. Banji Oyelaran-oyeyinka, Dorothy McCormick *Industrial Clusters and Innovation Systems in Africa: Institutions, Markets and Policy* (Paperback) Publisher: United Nations University (June 15, 2007), ISBN-10: 9280811371, ISBN-13: 978-9280811377
2. Örjan Sölvell, Göran Lindqvist, Christian Ketels *The Cluster Initiative Greenbook,* September 2003
3. G. Clark, M. Gertler, and M. Feldman, eds [*Oxford Handbook of Economic Geography*.](http://www.oup.co.uk/isbn/0-19-823410-4) Oxford: Oxford University Press, 2000
4. Christian Ketels, Göran Lindqvist, Örjan Sölvell May 2006, *Cluster Initiatives in Developing Transition Economies.*
5. Michael E. Porter***.****“ “Location, Competition and Economic Development: Local Clusters in a Global Economy****.*** *Location, Clusters, and Company Strategy Clusters and the New Economics of Competition"*

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