



APPLIES TO ACADEMIC YEAR 2016/2017

## GRA 6829 Strategies for Industrial Competitiveness

### Programme

Master of Science in Business, Master of Science in Business (Strategy), Master of Science in Political Economy, Specialization Course

### Responsible for the course

Torger Reve

### Department

Department of Strategy

### Term

According to study plan

### ECTS Credits

6

### Language of instruction

English

### Introduction

The course explores the determinants of industrial competitiveness and successful economic development viewed from a bottom-up, microeconomic perspective. While sound macroeconomic policies and stable legal and political institutions create the potential for industrial competitiveness, wealth is actually created at the microeconomic and firm levels. The sophistication and productivity of firms, the vitality of industrial clusters, and the quality of the business environment are the ultimate determinants of the productivity and innovation capacity of nations, regions and industries.

### Learning outcome

The main learning objectives of GRA 6829 "Strategies for Industrial Competitiveness" are:

- To make students understand how the competitiveness of firms is embedded in the external context of an industry and industrial clusters.
- To enable students to use the diamond framework of Michael Porter's "On Competition" to assess and influence the potential of industries and economic regions.
- To enable students to perform a strategic analysis of an industry, an industrial cluster or a region and drawing policy implications from the analysis.

Hence, the students should have a broad view on value creation in societies, understanding the role of knowledge and innovation, and they should be able to identify areas where collaboration among specific institutions is crucial to gain welfare effects.

### Prerequisites

All courses in the Masters programme will assume that students have fulfilled the admission requirements for the programme. In addition, courses in second, third and/or fourth semester can have specific prerequisites and will assume that students have followed normal study progression. For double degree and exchange students, please note that equivalent courses are accepted.

### Compulsory reading

#### Books:

Porter, Michael E. 2008. On competition. Updated and expanded ed. Harvard Business School

#### Articles:

Mercedes Delgado, Michael E. Porter & Scott Stern. 2010. Clusters and entrepreneurship. Journal of Economic Geography. Vol 10. pp 495-518

Mercedes Delgado, Michael E. Porter & Scott Stern. Clusters, convergence and economic performance. Research Policy, Vol. 43. pp 1785-1799

Michael E. Porter & James E. Heppelmann. 2014. How smart, connected products are transforming competition. Harvard Business Review. Nov

Porter, Michael E & Kramer, Mark R.. 2011. Creating shared values. Harvard business review. January –

February. 62-77

Reve, Torger. 2011. From industrial clusters to global knowledge hubs. Journal of Competitiveness. pp 63-79

Torger Reve & Amir Sasson. 2015. Theoretical and methodological advances in cluster research.

Competitiveness Review, Vol. 25:5. pp 524-539

### **Recommended reading**

#### **Books:**

Glaeser, Edward L. 2011. Triumph of the city : how our greatest invention makes us richer, smarter, greener, healthier, and happier. Penguin Press

Reve, Torger and Sasson, Amir. 2012. Et kunnskapsbasert Norge. Universitetsforlaget. 389 p

#### **Articles:**

Cortright, Joseph. 2006. Making sense of clusters: Regional competitiveness and economic development. The Brookings Institution, Washington D.C.

#### **Other:**

Amir Sasson and Atle Blomgren. 2011. Knowledge Based Oil and Gas Industry. BI Norwegian Business School. 130

### **Course outline**

In this graduate course we will present the diamond model, the emerald model and the development of industrial clusters in advanced, emerging and developing economies. The model is extended to include current research on knowledge based competitiveness. The course will draw on recently completed research from the large national research project "A knowledge-based Norway" ([www.ekn.no](http://www.ekn.no)), headed by professor Torger Reve and associate professor Amir Sasson. Relevant current research includes "Innovative Nordics" and MIT-REAP.

Strategies at both firm level, cluster level, regional and national levels will be discussed, integrating variables at the business, industry and societal levels. The course is targeting graduate students of business and strategy, but the course is also relevant for other specializations. The empirical approach is global, and the students are asked to analyse industries on all continents.

The course is offered in cooperation with Professor Michael E. Porter, Institute for Strategy and Competitiveness, Harvard Business School, and his highly successful, second year Harvard MBA course, Microeconomics of Competitiveness (MOC). The Harvard MOC Network now consists of more than 100 universities in 70 different countries.

BI students taking GRA 6829 will have free electronic access to lectures and case discussions at Harvard, and extensive net based data resources at Harvard Business School are available for project work. This also includes free downloading of the HBS cases used in the course.

#### 1. Firms and Industries

Introduction to Competitiveness  
The Drivers of Competitiveness  
Industrial Contexts  
Industry Competition, Strategy and Locations  
Competing Across Borders  
Globalization and Internationalization of Firms

#### 2. The Microeconomic Business Environment

The Diamond Model: Advanced Economies  
The Diamond Model: Transitional Economies  
The Diamond Model: Developing Economies  
Developing Cluster Charts  
The Emerald Model: Knowledge-based Policies

#### 3. Industrial Cluster Development

Clusters and Competitiveness  
Natural Resource Based Clusters  
Knowledge Based Cluster  
Emerging and Mature Clusters  
Transformations of Clusters  
The Global Knowledge Hub Model  
Innovation and entrepreneurship  
Institutions for Collaboration  
Mechanisms for Cluster Upgrading

#### 4. Economic Strategy for Industries, Regions and Nations

National Economic Strategies  
Role of Government  
Incentives and Regulation

Regional Economic Strategies  
 Stagnation, Transformation, Innovation  
 Economic Strategies: Emerging and Developing Economies  
 Asian Competitiveness and the Role of China  
 Increasing Role of Emerging Economies

## Computer-based tools

### Learning process and workload

The course is structured as a combination of short lectures and extensive case discussions, as well as selected top level guest lectures. The Harvard Business School (HBS) format of the course requires that the students should prepare extensively for case discussions in class. **It is simply impossible to come to class unprepared for the topic to be discussed.**

Cases are taught using the HBS case approach where all students are expected to **participate actively in case discussions** on an individual basis. At the same time we use the Kellogg case approach which implies that study groups prepare structured **case presentations in advance**.

Class sessions may be audio- and videotaped, and the class output can be shared with other universities in the Harvard Microeconomics of Competitiveness (MOC) network.

The students are required to undertake a **group project** analysing the competitiveness and cluster development of a specific industry or region. The empirical settings for these group projects are provided by the large national research project: "A knowledge-based Norway" ([www.ekn.no](http://www.ekn.no)), but students are free to choose industries in any country. Students also have an excellent chance to write their MSc theses within the framework of the course.

The best student project is entered into the Harvard MOC project competition, and both in 2008, 2011, 2014 and 2015 BI MSc students have won prizes in this international competition. The winning paper and the video taped project presentation by Joachim Espen and Marius Nordkvelde on Oslo Cancer Cluster (2008) and by Morten Finslo, Rune Steihaug and Javad Mushtaq on Oslo Maritime Finance Cluster (2011) are available as a quality benchmark on It's Learning.

Please note that while attendance is not compulsory in all courses, it is the student's own responsibility to obtain any information provided in class that is not included on the course homepage/It's learning or text book.

### Examination

The course grade will be based on the following activities and weights:

Active class participation in case discussions and case presentations (50%), based on detailed recording and evaluation of every student participation item in class.

Group project (50%), based on hand-in of written report and presentation material.

Form of assessment	Weight	Group size
Class participation	50%	Individual
Report	50%	Group of max 3 students

Specific information regarding student assessment will be provided in class. This information may be relevant to requirements for term papers or other hand-ins, and/or where class participation can be one of several components of the overall assessment. This is a course with continuous assessment (several exam components) and one final exam code. Each exam component is graded using points on a scale from 0-100. The final grade for the course is based on the aggregated mark of the course components. Each component is weighted as detailed in the course description. Students who fail to participate in one/some/all exam components will get a lower grade or may fail the course. You will find detailed information about the points system and the mapping scale in the student portal @bi. Candidates may be called in for an oral hearing as a verification/control of written assignments.

### Examination code(s)

GRA 68291 continuous assessment accounts for 100% of the final grade in the course GRA 6829

### Examination support materials

Permitted examination support materials for written examinations are detailed under examination information in the student portal @bi. The section on support materials and the use of calculators and dictionaries should be

paid special attention to.

**Re-sit examination**

It is only possible to retake an examination when the course is next taught. The assessment in some courses is based on more than one exam code. Where this is the case, you may retake only the assessed components of one of these exam codes. All retaken examinations will incur an additional fee. Please note that you need to retake the latest version of the course with updated course literature and assessment. Please make sure that you have familiarised yourself with the latest course description.

**Additional information**

Honour code. Academic honesty and trust are important to all of us as individuals, and are values that are integral to BI's honour code system. Students are responsible for familiarising themselves with the honour code system, to which the faculty is deeply committed. Any violation of the honour code will be dealt with in accordance with BI's procedures for academic misconduct. Issues of academic integrity are taken seriously by everyone associated with the programmes at BI and are at the heart of the honour code. If you have any questions about your responsibilities under the honour code, please ask. The learning platform itslearning is used in the teaching of all courses at BI. All students are expected to make use of itslearning.