



Microeconomics of Competitiveness: Firms, Clusters, and Economic Development

PROSPECTUS FOR INTERESTED UNIVERSITIES AND FACULTY



MICROECONOMICS OF COMPETITIVENESS

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Participating Universities in 2005

North America

US University of S. Carolina
 University of Kansas
 Mexico ITESM

Caribbean

Trinidad University of the West Indies
 & Tobago

Europe

Austria Vienna School of Economics
 Croatia University of Osijek
 University of Zagreb
 Cyprus CIIM
 Finland Helsinki School of Economics
 Ireland University College Cork
 Italy SDA Bocconi
 Latvia SSE Riga
 Netherlands Universiteit Nyenrode
 Russia Bauman Technical University
 Spain ESTE- University of Deusto
 IESE
 Sweden SSE
 Switzerland Robert Kennedy Collage
 University of Applied Sciences
 Solothurn
 UK Manchester Business School
 University of Bradford

Middle East/Central Asia

Armenia Yerevan State University
 Israel IDC Herzliya
 Jordan University of Jordan
 Kazakhstan KBTU
 Pakistan Lahore University

Asia/Pacific

Australia Macquarie University
 China Peking University
 Tsinghua University
 Wuhan University
 India MDI
 Indonesia University of Indonesia
 Japan Hitotsubashi University
 Korea KAIST
 Singapore Nanyang Business School
 National U. of Singapore
 Taiwan National Taiwan University
 Yuan Ze University
 Thailand NIDA
 Sasin Grad. Institute of Business

Central/South America

Argentina IAE
 Universidad de San Andrés
 Bolivia Universidad Catolica
 Brazil Fundaçao Getulio Vargas
 Chile Universidad del Desarrollo
 Colombia Universidad de los Andes
 Costa Rica INCAE
 Nicaragua INCAE
 Peru Universidad Catolica
 ESAN
 Uruguay Universidad Catolica
 Venezuela IESA

Africa

Rwanda Kigali Institute of Science'
 Technology & Management
 S. Africa GIBS



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Course Information for Interested Universities and Faculty

The *Microeconomics of Competitiveness* is a distinctive course platform developed at Harvard by Professor Michael Porter and a team of colleagues that is designed to be taught at universities around the world. Seventeen universities participated in 2003, forty participated in 2004, and we currently have 55 universities that can teach the course in 2005.

The course addresses the determinants of competitiveness from a bottom-up, microeconomic perspective. A focus on competitiveness centered on firms is a missing element in most traditional development courses. The course is not only an educational vehicle but also a tool enabling universities to influence and support economic development in their country and region. In addition to training future leaders of business and government in competitiveness concepts, the course can be adapted to offer executive programs and become a focal point for projects and initiatives that engage the university in economic policy and business development with government and the private sector. The ultimate aim of the course is no less than to make a meaningful impact on the economic competitiveness of the countries in which it is taught.

Given the complex nature of the subject and the learning value of peer interaction and discussion, the course is taught at each university by a local instructor rather than delivered online or taught via distance learning. However, an unprecedented amount of course content and assistance to instructors is provided by our team at Harvard.

This document describes the course content and structure as well as the support available to affiliate schools.

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Course Focus. This course explores the determinants of national and regional competitiveness building from the perspective of firms, clusters, subnational units, and entire economies. The course probes the ultimate determinants of a nation's or region's productivity, rooted in the strategies and operating practices of locally based firms, the vitality of clusters, and the quality of the business environment in which competition takes place.

This course examines both advanced and developing economies and addresses competitiveness at multiple levels – nations, subnational units such as states or provinces, particular clusters, and the role that economic coordination among neighboring countries plays in competitiveness.

The course is concerned not only with government policy but also with the roles that firms, industry associations, universities, and other institutions play in competitiveness. In modern international competition, each of these institutions has an important role in economic development that is shifting. Moreover, the process of creating and sustaining an economic strategy for a nation or region is a daunting challenge. The course explores not only theory and policy but also the organizational structures, institutional structures, and change processes required for sustained improvements in competitiveness.

Selection of Affiliates. The Microeconomics of Competitiveness course is still under development, and our capacity to work with affiliate universities is limited. The Institute for Strategy and Competitiveness reserves the right to select participating schools at its sole discretion. The Institute reserves the right to use multiple decision criteria, including but not limited to the goals and objectives of the course and course-related research.

As affiliates, the Institute for Strategy and Competitiveness seeks to enroll leading universities and institutes in their regions. The ideal school will have faculty with doctoral degrees and an ongoing research program. The Institute does not offer exclusivity to affiliates in their region or country.

Participation in the course is on an invitation-only basis. However, schools interested in participating that believe they can meet all of these criteria and course requirements (including payment and technical infrastructure as described in this document) should contact Sinead Fitzmaurice (sfitzmaurice@hbs.edu) to obtain a short application. No third-party intermediary represents the Institute for Strategy and Competitiveness in the application process, and interested schools must contact the Institute directly for official information regarding the course.

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Student Qualifications. This course is a graduate-level course that can be taught in business schools, economics departments, government departments, or other schools concerned with economic development. Participating universities are encouraged, though not required, to establish the course as an interdisciplinary course that is open to students from various departments, as we have done at Harvard. Mid-career students who are working in government or other organizations can also participate. In a number of universities, sitting government officials have taken the course as part-time students.

Faculty Qualifications. Faculty teaching the course at other universities are expected to have doctoral training in either management or economics. We hope that at least one of the instructors is a senior professor with access to senior national leaders in business and government.

Course Schedule and Architecture. The course is taught during the spring semester at Harvard, but it may be taught during any semester. Universities are free to teach the course more than once per year. However, prior to teaching the course, local faculty are asked to attend the December New Faculty Workshop at Harvard.

The course is taught using case studies drawn from all major regions of the world. (See the Course Outline on page 10.) Part of the purpose of the course is to expose students to some of the most successful countries and regions. There is a textbook as well as other readings, a series of lectures, and videotapes of appearances by guests who are national, regional, or business leaders involved in the cases studied.

At Harvard, the course meets for seventeen two-hour sessions. Each session begins with a case discussion, followed by lectures and guests. The course also includes a significant team project, which involves assessing the competitiveness of a country and a cluster within that country under the supervision of a skilled instructor. Class sessions are suspended for two weeks to provide additional time to work on the team project.

Course Materials. All the material is available in English. While we are considering translating cases into other languages, there are no definite current plans to translate the materials into languages other than English.

Instructor Website. A unique feature of the course is an extensive website for instructors. In addition to the case studies and other written materials, the site includes a range of content designed to assist

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instructors in teaching the course: (1) audiotaped “teaching group meetings” in which the Harvard instructors discuss how each case/session can be taught; (2) videotapes of Professor Porter (and some other faculty) actually teaching the class; (3) videotapes of all lectures; (4) edited videotapes of guest protagonists. Items (1) and (2) are designed only for instructors, while items (3) and (4) can be downloaded by instructors and utilized in class.

Student Website. Participating schools are provided with a student website designed to be customized locally. We provide instruction on customization and management of the site at the December workshop. The student site contains areas for each class session. An online discussion group is “turned on” after the class session concludes to give students the opportunity to join a discussion group that also includes other schools. The site also allows local instructors to post answers to student questions. Video lectures and guest appearances relevant to the session are archived on the student site after the class session concludes and indexed so students can search for specific topics.

In addition to utilizing the Harvard video content in classes, other schools can “sit in” on the Harvard class via live webcast if the instructor desires. We also encourage affiliates to interact with one another via videoconferencing or by hosting instructors from other participating universities. Such interaction was carried out very successfully in the Spring of 2002 among the Fletcher School at Tufts, INCAE Nicaragua, and INCAE Costa Rica. Similar interaction was experienced in 2004 and is anticipated for 2005.

Additionally, Professor Porter is able to make a limited number of live videoconference appearances in courses at other schools. These videoconference opportunities are allocated among interested affiliates during the December workshop using a lottery system.

Faculty Workshop. We hold an annual two-day workshop in Boston in December for professors from participating universities. This year, the workshop will be held December 13th and 14th. **The workshop is mandatory for new affiliates.** The New Faculty Workshop provides intensive instruction in how to teach the course, how to structure and manage student teams, and how to prepare case studies for use in the course. Faculty participants will also receive training on course management and on administrative and technical issues. We welcome up to two faculty per academic institution. Host schools are responsible for arranging travel and hotel accommodations for faculty who attend the workshop and for bearing the associated costs.

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For faculty who have attended a previous workshop, a Veteran Instructor Workshop is available, also in December, to learn about new material and case preparation techniques, raise issues and questions, and meet and interact with faculty from other schools. The workshop for veteran instructors will overlap with the workshop for new faculty to allow interaction, and we will call on veterans to participate in sessions with new faculty and share their experiences.

Localization of Course Materials. The course can be taught exclusively with materials we have developed at Harvard. The material covers a wide array of countries, clusters, and issues and is designed to be applicable to any country or region.

Local faculty can choose how much of the available video material to utilize and can supplement or replace the videotaped lectures with their own lectures. Depending on the school, it may be desirable to modify the pace of topics or the length of sessions. Extra sessions on local topics, the particular advanced topics to cover, and the design of the group project can also be determined locally.

We recommend, however, that the instructors **teach the full course as we do at Harvard at least once** to fully understand the material before substantial modification or new case study preparation is undertaken. We will provide guidelines for preparation of case studies and, based on mutual agreement, can take a more active role in assisting in the development of local materials.

Affiliate faculty responsibilities. Besides teaching the course, faculty members from participating universities are expected to coordinate the local team that is involved in the delivery of the course, including all local administrative and technical staff. Given the number of affiliated universities, we must work through the faculty member as our primary contact.

Cost Sharing. The host school is responsible for its own local costs, including local faculty, technology, and communications.

Schools are expected to purchase the case studies from Harvard Business School Publishing at a cost of approximately \$45-48 per student for the entire course. Schools are also expected to purchase textbooks, either through Harvard Business School Publishing or through Amazon.com or other sources.

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Each school is also asked to contribute a cost-sharing fee of \$2,500 per semester in which the course is taught. Schools are required to pay for any wiring fees associated with this payment – in the past these fees have ranged between US\$15-25. This fee covers access to the video and audio content, student website, technical support, and attendance at the December faculty workshops. This fee not only defrays a part of the ongoing cost of delivering the course to affiliates but also the substantial costs of developing and filming new content.

As noted above, Professor Porter participates live in a modest number of classes at other universities via videoconference for thirty minutes. Participating schools are asked to contribute an additional payment of \$750 plus the line charges. This payment does not go to Professor Porter but covers technical support for the videoconference in Boston and contributes to the cost of course development.

Long-term Vision for Participating Universities. Economic development depends on a shared understanding of competitiveness among business, government, and university leaders. We find that the microeconomic foundations of competitiveness are less understood than the broader macroeconomic, political, legal and social issues in development. Moreover, the role of the private sector in competitiveness, and the ways in which the private, public and university sectors can work together to boost productivity, represent important gaps in thinking and practice.

The *Microeconomics of Competitiveness* course not only builds a cadre of young people trained in the new competitiveness thinking but also can serve as a platform for other efforts by universities to contribute to national economic development. The course can be adapted to produce executive programs for government officials and private sector leaders. It opens the potential for field projects in which students and faculty work with business and government. Faculty can become important leaders in national policymaking and competitiveness initiatives. Participating universities become part of a network of affiliated schools, and can collaborate on local and regional competitiveness projects. The multiplier effects of the course have been evident in our early experiences over the past two years.

**Microeconomics of Competitiveness: Firms, Clusters and Economic Development
Winter 2005 – Overview**

Harvard Business School (1260) and Kennedy School of Government (PED-329)

Prof. Michael E. Porter

Hawes Hall 102 4:15-6:15 PM

Module	Date	Session	Case Study	Readings
I Firms, Industries and Location	1-Feb	1. Introduction to Competitiveness	<ul style="list-style-type: none"> • Finland and Nokia (9-702-427) 	<ul style="list-style-type: none"> • <i>On Competition</i> Chapters 1, 6, 7
	7-Feb	2. Industry Competition, Strategy, and Location	<ul style="list-style-type: none"> • Intel Corporation 1968 - 1997 (9-797-137) 	<ul style="list-style-type: none"> • <i>On Competition</i> Chapters 1, 2, 5
	8-Feb	3. Competing Across Borders	<ul style="list-style-type: none"> • Volvo Trucks (A): Penetrating the U.S. Market (9-702-418) 	<ul style="list-style-type: none"> • <i>On Competition</i> Chapters 8, 9
II The Microeconomic Business Environment	14-Feb	4. The Diamond Model: Advanced Economies	<ul style="list-style-type: none"> • The Japanese Facsimile Industry in 1990 (9-391-209) 	<ul style="list-style-type: none"> • <i>Can Japan Compete?</i> • <i>On Competition</i> Chapter 6
	15-Feb	5. The Diamond Model: Developing Economies	<ul style="list-style-type: none"> • Estonia in Transition (9-702-436) • Chile: The Latin American Tiger? (9-798-092) 	
	22-Feb	6. Clusters and Competitiveness	<ul style="list-style-type: none"> • The California Wine Cluster (9-799-124) • The Australian Wine Cluster: Supplementary Information (9-703-422) 	<ul style="list-style-type: none"> • <i>On Competition</i> Chapter 7
	28-Feb	7. Clusters in Developing Countries	<ul style="list-style-type: none"> • Building a Cluster: Electronics and Information Technology in Costa Rica (9-703-422) 	
	1-Mar	8. Institutions for Collaboration	<ul style="list-style-type: none"> • Overview to Institutions for Collaboration (9-703-436) • Asociación Colombiana de Plásticos (Acoplásticos) (9-703-437) • Centre Suisse d'Electronique et de Microtechnique (CSEM) (9-703-438) 	
	7-Mar	9. Internationalization of Firms in Developing Countries	<ul style="list-style-type: none"> • Atlas Eléctrica: International Strategy (9-704-435) • AFP Provida (9-703-424) 	

Module	Date	Session	Case Study	Readings
III Nations, States, and Regions	8-Mar	10. Economic Strategy: Emerging Economies	• Singapore (9-793-096)	<i>March 14-18 Spring Break</i>
	21-Mar	11. Economic Strategy: Developing Economies	• Rwanda	
	22-Mar	12. Economic Strategy: States and Sub-National Regions	• Building the Competitive Advantage of Connecticut (9-703-426)	<i>March 28-April 1 Spring Break</i>
	4-Apr	13. Economic Strategy: Cross-National Regions	• Central America: Strategy for Economic Integration (9-703-425)	
IV Advanced Topics	5-Apr	14. Alternative Session	<ul style="list-style-type: none"> • Business Groups in Developing Economies • European Competitiveness • New Strategies for Urban Revitalization 	
	25-Apr	16. Alternative Session	<ul style="list-style-type: none"> • Cluster-based IFCs • The Impact of Private Sector Firms on National Competitiveness 	
V Country Projects	12-Apr	17. Project presentations	• Prepare critique of presentations	
	19-Apr	18. Project Presentations	• Prepare critique of presentations	
VI Summary	26-Apr	19. The Process of Economic Development; Wrap-Up	• Ghana: National Economic Strategy	
	6-May	FINAL PROJECT REPORTS DUE		



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Technology Requirements

To conduct the course at your location, Harvard Business School (HBS) will provide you with access to downloadable files such as:

- Audio recordings of the HBS teaching group meetings where the pertinent class session's case is discussed and the teaching goals are determined;
- A video and slide view of each class lecture presented by HBS faculty;
- Edited videos of guest protagonists; and
- A video of the HBS class case discussion, which can be used to train faculty in the HBS case method.

Therefore, in order to participate in the *Microeconomics of Competitiveness* and gain access to all course content, each affiliate school will need to have a certain level of technical infrastructure and capabilities.

Connectivity. Because much of the interaction between HBS and your university will be through the Internet, you will need:

- A connection speed to the Internet of at least 750kbps; or
- Access to the Internet from an offsite location with a speed of at least 750kbps, such that the necessary files can be placed on a CD for your use at your location.

Please note that a 750 kbps connection is the minimum requirement and that T1 connection will allow for the greatest flexibility in interacting with HBS for this course.

All of the video files are provided in downloadable formats. However, if you have a fast connection speed, then you may consider using streaming video when delivering it to your class. Due to the everyday risks of Internet connectivity, however, we recommend that you download the video of the lecture and provide it off of a local machine to your classroom. This will ensure a high quality video and a superior classroom experience.

Technical Contact. In order to facilitate all of the file transfers and technical communications, your university will need appoint a technical contact responsible for coordinating all technology issues at your location. This person will be given access to the site where downloadable and streaming video/audio materials are located. This person should be responsible for downloading all of the lectures to your local machines or to a CD. He or she will also be the point of contact for the HBS technical team.

Instructor Website and Faculty Contact. Each school must appoint a faculty contact who will be responsible for coordinating course materials and communications with Professor Porter and his team. This individual will be given access to the Instructor site to access course materials as well as the video/audio files designed for their own preparation.

Course Materials Website. Your location will be responsible for maintaining a student course materials website. This site provides students with access to assignment information, online course materials, discussion groups with all affiliate schools, and a member directory that connects students from all of the participating schools.

HBS will provide your location with the template for this website as well as a way for your students to register for access to this site. This site is most often administered by the faculty teaching the course.

Video Playback Requirements. In order to playback any of the videos provided by HBS, you will need to meet the following configuration requirements:

- RealPlayer 7 or higher (RealPlayer settings should be set to optimize CPU and use optimized video display. However, in some systems you must deselect "use optimized video display" to get a good image.)
- Netscape 4.x or IE 4.x
- PowerMac or Pentium II with at least 4mb video ram
- Screen display of 800x600 to receive optimal viewing. (We recommend no greater than 1024x768 or the image may seem distorted.)

File Size and Storage. A typical one-hour video file is 250mb and the case discussion video alone is approximately 150mb in size. Therefore, for each class day, the multiple files you may need to download could reach approximately 400mb total. On a full 1.5Mbps T1, a normal class session will take approximately twenty-six minutes to download. At 750kbps, your location will still be able to download a session in about an hour.

There are approximately fifteen class sessions, which could bring the total storage space needed for these files to 6gb. If you do not put these files on CD, you will need to ensure that you have ample storage space to run them.

Videoconference Requirements. To enhance the learning experience of all students involved, Professor Porter may hold live videoconferences with participating universities.

For large group videoconferencing in a classroom setting, HBS prefers to conduct the call over traditional ISDN videoconferencing networks. However, we also have the ability to connect over I.P. based networks. You must meet the technical requirements below to conduct a videoconference over either method:

- Network: ISDN
Standard: H.320
Preferred Connection Speed (bandwidth): 384K
Minimum Connection Speed: 128K
Video Algorithms Supported: H.263, H.261
Audio Algorithms Supported: G722, G728

OR

- Network: I.P.
Standard: H.323
Preferred Connection Speed (bandwidth): 384K-768K
Minimum Connection Speed: 128K
Video Algorithms Supported: H.263, H.261
Audio Algorithms Supported: G722, G728

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To allow students to communicate between locations and to help facilitate the Question & Answer portions of the videoconference, you must have one of the following microphone configurations as well:

- One wireless microphone that can be easily passed between students;
- A single podium with a quality microphone that students may approach in an orderly fashion; or
- A microphone at each student's seat.

If you participate in a videoconference with Professor Porter, then you will be asked to cover the cost of the line charges to connect to your location as well as a \$750.00 fee. Past line charges have run approximately \$350-\$500 for a thirty-minute session.

“Sitting In” on the Harvard Class. If you choose to view a live lecture or case discussion happening at HBS, then you must have a connection of T1 or greater in order to gain the full benefits of this type of technology. Please note that a T1 (1500kbps) connection would be shared with whatever other Internet traffic you may have, so the larger your connection the better. You will be asked to cover a \$450.00 Boston technical support fee.

Final Note. Please be aware that there may be other course functionality implemented before the start of the 2005-2006 academic year. The HBS technology team will communicate with you to determine your capabilities and needs.



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Harvard Course Description

Course Content. This course explores the determinants of national and regional competitiveness from a bottom-up, microeconomic perspective. The course probes the ultimate determinants of a nation's or region's productivity, rooted in the strategies and operating practices of locally-based firms, the vitality of clusters, and the quality of the business environment in which competition takes place.

This course examines both advanced and developing economies and addresses the competitiveness of nations, subnational units such as states or provinces, and particular clusters. The course also examines the role that economic coordination among neighboring countries plays in competitiveness.

The course is concerned not only with government policy but also with the roles that firms, industry associations, universities, and other institutions play in competitiveness. In modern international competition, each of these institutions has an important role that is shifting. Moreover, the process of creating and sustaining an economic strategy for a nation or region is a daunting challenge. The course explores not only theory and policy, but also the organizational structures, institutional structures, and change processes required for sustained improvements in competitiveness.

Harvard Course Structure and Pedagogy. At Harvard, the *Microeconomics of Competitiveness* is a University-wide course offered to graduate students from around the Harvard community, including the Harvard Business School, the Kennedy School of Government, and other Harvard and MIT graduate schools. The course provides a sufficient foundation in industry competition and competitive strategy to allow students without management training to grasp course concepts, although advanced training in economics or management is recommended.

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The course is taught using the case method, together with readings, lectures, and guests. The case method requires extensive advance preparation by students for each class, and a significant part of the course grade is based on class participation. The course also involves a major team project involving the competitive assessment of a particular country and cluster.

Professor Michael E. Porter leads the course at Harvard and teaches the great majority of the sessions, together with other faculty from the Harvard Business School and elsewhere. Postdoctoral Fellows from the Institute for Strategy and Competitiveness assist in the class sessions and provide coaching for the team project.



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How to Obtain More Information

If you wish to learn more about the Microeconomics of Competitiveness or you wish to learn how you and your school can participate, please contact Sinead Fitzmaurice at sfitzmaurice@hbs.edu.