COURSE OVERVIEW AND OBJECTIVES
This course provides students an empirical and theoretically grounded understanding of the concept of regional innovation systems (RIS), how and why they emerge, and conversely, why they might not. The RIS concept has become one of the primary models in regions and countries for understanding and promoting economic growth, in part as a response to globalization and the increased economic competition that local and regional communities face. This has led to a plethora of policies and programs focused on building regional capabilities that support and enhance an “innovation ecosystem.”

Throughout the course, we will examine the strengths and weaknesses of this approach. What role do regions play in fostering innovation – how do we think about regions relative to entrepreneurs, firms and universities? Does the model apply to all regions, and who benefits from such an approach from within the regional community? RIS suggests there is something systemic at work that can be acted upon and shaped through public and private intervention. We will examine whether we see signs of a system at work and if so, what this suggests for public policy.

This course will examine the topic of regional innovation systems through three dimensions. The first section of the course will review the theoretical underpinnings and key concepts that define regional innovation systems drawing upon literature from economics, planning, sociology and management to build a foundation for the rest of the course. In the second section of the course, we will examine in detail several components that constitute a regional innovation system such as networks, institutions including universities, entrepreneurship and industrial clusters. Third, the class will turn toward practical applications of the systems approach and study case studies from particular regions and from specific industries that lend themselves to regional innovation systems’ analysis. This section will delve more deeply into policies and strategies that have emerged over the past several decades to promote innovation systems, as well as look at some of the broader challenges for RIS including increasing income inequality.

Several guest speakers will be invited to join the class throughout the course and discuss their research or experience with regional innovation systems.
CLASS REQUIREMENTS

Students are expected to keep up with the weekly reading and to actively participate in class. This is not a lecture course but a seminar in which critical reading is intended to serve as a basis of weekly discussion.

Students will write three five-page memos based on class readings and one 10-20 page paper based on a case study of their choosing (a particular regional economy or aspect of the innovation economy within a region, or comparison across regions). Students will also lead one class discussion, and do a brief final presentation on their research paper at the end of the course. Grades will be based on the following: 20% class participation; 10% for each of the five-page memos, and 50% for the final paper.

OVERVIEW OF COURSE SECTIONS AND READINGS

September 3: Initial Session
The initial class session will provide an introduction and review the course objectives, content, readings, and assignments. Students can sign up to lead particular class discussions.

Part 1. Theoretical Foundations

September 10: Introduction and Context


September 17: Agglomeration Economies: Industrial Districts, Cities and Regions


September 24: Economic Growth and Regional Economies


October 1: The Nature of Knowledge


October 8: Introduction to Innovation


October 15: Systems of Innovation


Part II. Key Elements Within Regional Innovation Systems

October 22: Networks and Social Capital


October 29: Clusters and Ecosystems


Guest Speaker: Karen Mills, HBS Fellow and Former head of the U.S. Small Business Administration;

November 5: Entrepreneurship


Guest Speaker: TBC

November 12: Research and The Role of Universities


Guest Speaker: Professor Richard Lester, Chair, Department of Nuclear Science and Engineering; Founder and Faculty Director: MIT Industrial Performance Center

Part III. Regional Innovation Systems at Work

November 19: Policy Options and Approaches: The Case of Massachusetts


Guest Speaker: Dr. Carlos Martinez, Cambridge Innovation Center (TBC)

**November 26: Manufacturing and the Industrial Ecosystem**


**December 3: Energy/ Final Presentations**


**December 10: Final Presentations and Wrap Up**