

**Center for International Science and Technology Policy**  
The George Washington University  
**TECHNOLOGY CREATION AND DIFFUSION**

IAFF 6142  
Rome 351  
M 17:10-19:00  
Spring 2016

Nicholas S. Vonortas  
1957 E Street, 403  
Tel: (202) 378-6230  
Fax: (202) 994-1639  
E-mail: vonortas@gwu.edu

**COURSE SUMMARY:** The purpose of this course is to examine the factors that underlie the creation of new technologies, their translation into innovations, and their dissemination throughout the economy. The discussion will cover issues of interest to new technology producers and users in the private business sector, universities and government. The main focus of the discussion will be the prevailing environment in developed market economies and emerging economies. Other developing countries will be dealt with to some extent depending on class participant interest. The course will examine in some depth important global aspects of technology creation and dissemination and their historical extensions. The course will also expand on issues of technology/innovation management in industry, universities, and government. Finally the course will address the implications for policy.

**COURSE REQUIREMENTS:** The final grade will be based on a term paper and a take-home final examination. The term paper, due on April 25, will count for 50% of the final grade and the take-home final exam for the remaining 50%. The questions for the exam will be distributed the last class meeting (April 27). Your answers will be due a week later (May 3). Class attendance, preparation and participation throughout the term are essential for two reasons: (a) they will improve performance and strengthen marginal grades; and (b) they will provide a very good incentive for regular studying of the long list of required readings.

**COURSE READINGS:** There is one assigned book:  
Nicholas S. Vonortas, Phoebe C. Rouge, and Anwar Aridi (eds) *Innovation Policy: A Practical Introduction*, Springer, 2014.

In addition, we will read chapters from several other books, papers from academic journals, reports from international organizations, and a few articles from the popular press.

Needless to say, this literature review is very selective. Many more excellent sources of material exist. You can find most in Aladin, GW Library system, which has a very wide electronic collection of material directly accessible by you. This also includes the full collections of published material of organizations such as the Organization of Economic Cooperation and Development (OECD) and the World Bank. Very important other international organizations with directly related published material include the United Nations Conference on Trade and Development (UNCTAD), the United Nations Industrial Development Organization (UNIDO), and the World Intellectual Property Organization (WIPO).

The syllabus lists analytically all required and recommended readings. An unmarked reference indicates a required reading. A WB indicates a required reading available on the web (free of charge). An asterisk indicates a recommended reading.

I will post on Blackboard many of the readings, including all the required readings and as many as possible of the recommended readings with the exception of the readings marked by WB which you will locate easily on your own. Besides the OECD and the World Bank which you can find in Aladin, you should locate these and other relevant documents at the addresses:

<http://www.nsf.gov>

<http://www.unctad.org>

<http://www.unido.org>

<http://www.aaas.org>

<http://www.ostp.gov/nstc>

<http://www.wipo.int>