



## Introduction to Environmental Policy

Dr Moshe Terdman

1.5 hour sessions twice a week, Undergraduate, 3 credits

### OVERVIEW

The goal of this course is to introduce students to policy options for addressing environmental challenges at the local, national, regional and global scale. Such options include planning, legal tools, command and control measures, economic incentives and disincentives, and environmental impact statements, among others. We first consider how environmental problems are defined as a product of both social and environmental conditions. We delve into a range of political and economic philosophies influencing environmental policy making and consider how our own background, experiences and political opinions influence whether we define environmental conditions as problematic and how we choose policy remedies. We then open the 'tool box' of policy types, consider how they are applied and analyze their strengths and weaknesses. We will use a variety of case studies at local, regional and international scales, as well as class activities, to deepen our understanding of each. Specifically we will bring up case studies from the Middle East including many Arab countries.

### COURSE OBJECTIVES – At the conclusion of the course, the student should be able to:

- Cogently describe the environmental implications of social and economic development in general, and the environmental impact of specific development projects in particular,
- Suggest quantitative measures to assess the environmental impact of an action or trend, as well as to assess the potential social and economic impacts of a given policy,
- Integrate principles of social and economic equity to environmental policy analysis,
- Describe and provide examples for the policies included in the tool box for responding to a given environmental challenges, and articulate their strengths and weaknesses, and
- Conduct a rudimentary environmental impact statement.
- To become familiar with the environment policy of the Middle East.

### GRADING

Student's performance in class will be assessed through a short writing assignment, a small class project/presentation (both in conjunction with the Institute guided writing program), a midterm and a final exam. In particular, success will be assessed if the student has met the objectives stated above. Display of analytical, and creative thinking is important. Participation in class discussions – allowing to be skeptical, inquisitive, open-minded, courageous but humble and respectful.

Assessments are determined by several components, including:

Arava Institute for Environmental Studies (מכון הערבה ללימודי הסביבה)

[www.arava.org](http://www.arava.org) e-mail: [info@arava.org](mailto:info@arava.org)

Kibbutz Ketura D.N. Eilat 88840 Israel

Tel. 972-8-6356618 Fax. 972-8-6356634

- Assignments 50%
- Participation, attendance, and punctuality 10%
- Final exam 40%

## **COURSE TEXT AND SYLLABUS**

Required readings are listed under the lecture date. Those readings are meant to be read prior to coming to class that day. Readings marked with \*\* are required for graduate students and optional for undergraduate students.

### **Lecture 1 - Introduction to Environmental Policy (Part 1)**

#### **Introduction to Environmental Policy (Part 1)**

- Defining environmental problems
- Defining regional environmental problems
- Geographical background
- Socio-economic background
- General characteristics of Middle Eastern regimes

### **Lecture 2 - Introduction to Environmental Policy (Part 2)**

- The role of the policy maker, scientist, industry, media and public advocacy in environmental problem definition: Examples from throughout the world and the Middle East

### **Lecture 3– Environmental policy advocacy (Part 1)**

- A reassessment of the role of the scientist and the environmental NGOs
- Reformist versus radical approaches to environmental policy advocacy

### **Lecture 4 - Environmental policy advocacy (Part 2)**

- A reassessment of the role of the scientist and the environmental NGOs in the Middle East
- Environmental protest movements from around the Middle East - Reformist versus radical approaches to environmental policy advocacy

### **Lecture 5 - Environmental policy formulation (Part 1)**

- Micro and macro policy definition and formulation
- Case study in problem definition and policy formulation: Plastic
- Movie and discussion: Blue Vinyl (or Addicted to Plastic)

#### *Readings*

Carter, N. Chapter 1 (Introduction, pp. 1-9); Chapter 7 (Environment as a Policy Problem; pp. 171-205);

### **Lecture 6 - Environmental policy formulation (Part 2)**

- Examples from throughout the Middle East: How an environmental policy is formulated

### **Lecture 7 - Introduction to Environmental Planning and Land Use Policy (Part 1)**

- National land use goals and environment
- Open land management
- Managing for ecosystem services
- Prioritizing Environmental Issues in the Eilat Regional Council
- Case Study – Setting a land use policy agenda for a political party

### Readings:

- Gordon, P. and W. Richardson. 1997. Are Compact Cities a Desirable Planning Goal? *Journal of The American Planning Association*, **63**: 95-106
- Minghong Tan, Xiubin Li, Hui Xie, and Changhe Lu. 2005. Urban Land Expansion and Arable Land Loss in China – A Case Study of Beijing-Tianjin-Hebey Region, *Land Use Policy* Vol. 22 Issue 3 (July 2005): 187 – 196.
- Collins, S. L., Carpenter, S. R., Swinton, S. M., Orenstein, D. E., Childers, D. L., Gragson, T. L., et al. (2010). An Integrated conceptual framework for long-term social-ecological research. *Frontiers in Ecology and the Environment*, In press.
- \*\* Shachar, A., 1998, Reshaping the Map of Israel: A New National Planning Doctrine, *Annals of the American Academy of Political and Social Science*, **555**, 209-218
- \*\* Evans, M. 2006, Defending Territorial Sovereignty Through Civilian Settlement: The Case of Israel's Population Dispersal Policy, *Israel Affairs*, **12**, 578-596

### Recommended reading:

- Reid, W. V., Mooney, H. A., Cropper, A., Capistrano, D., Carpenter, S. R., Chopra, K., et al. (2005). Ecosystems and Human Well-Being: Synthesis. In J. Sarukhan & A. Whyte (Eds.), *Millennium Ecosystem Assessment*. Washington D.C.: World Resources Institute.

## Lecture 8 - Introduction to Environmental Planning and Land Use Policy (Part 2)

- Comparative land use policies, focus on Israel and the Middle East

## Lectures 9+10

### Environmental Health Risk Assessment (Part 1)

- Risk assessment and management
- Health, science, uncertainty and values: Seeking a rational basis for prioritization

### Readings:

- Ruckelshaus, W. 1985. "Risk Science and Democracy," *Issues in Science and Technology*.
- Hoffman, A.J. 1995. "An Uneasy Rebirth at Love Canal," *Environment*.
- \*\* Davis, D.L. and C. Muir. 1995. Estimating Avoidable Causes of Cancer, *Environmental Health Perspectives*,
- Galloway, Tamara S., "Biomarkers in Environmental and Human Health Risk Assessment", *Science Direct: Marine Pollution Bulletin* 53 (2006), pp. 606-613. See on-line at: [http://www.com.univ-mrs.fr/~boudouresque/Publications\\_FLUC\\_2007\\_2008/Galloway\\_2006\\_Mar\\_Poll\\_Bull.pdf](http://www.com.univ-mrs.fr/~boudouresque/Publications_FLUC_2007_2008/Galloway_2006_Mar_Poll_Bull.pdf)
- Briggs, David J., "A Framework for Integrated Environmental Health Impact Assessment of Systemic Risks", *Environmental Health* 2008, 7:61. See on-line at: <http://www.ehjournel.net/content/7/1/61>

### (Part 2) - Environmental Health Risk Assessment

- Risk assessment and management: Examples from throughout the Middle East
- Case study/Class activity – The Antenna on the Roof: A Community deals with a cell-phone relay antenna

## **Lecture 11 - Cost- Benefit Analysis and other economic tools for environmental policy (Part 1)**

### *Readings:*

- Binder, A. 1992. "What Wasn't On the Rio Agenda? A Little Common Sense," *Business Week*, June 29.
- Anonymous. 1991. "Adam Smith Turns Green," *Newsweek*.
- Foroohar, R. 2001. "There's Gold in that Dirty Mess," *Newsweek*, August 27.
- Carter, N. 2008.. Chapter 12 (Policy Instruments and Implementation), pp. 332-341
- \*\* Hahn, R.W. and R.N. Stavins. 1992. Economic Incentives for Environmental Protection: Integrating Theory and Practice. *American Economic Review*, 82(2):464-468
- \*\* Levin M. and B. Elman, 1990. "The Case for Environmental Incentives," *Environmental Forum* 1990
- Pearce, David, "Cost-Benefit Analysis and Environmental Policy", *Oxford Review of Economic Policy*, Vol. 14, No. 4 (1998), pp. 84 – 100. See on-line at: [http://www.landecon.cam.ac.uk/up211/PGR06/readings/pearce\\_1998b.pdf](http://www.landecon.cam.ac.uk/up211/PGR06/readings/pearce_1998b.pdf). I suggest to replace Levin M. and B. Elman's item with this one.
- Livermore, Michael A, "Can Cost-Benefit Analysis of Environmental Policy Go Global?", Discussion Paper N0. 2011/3, *Institute for Policy Integrity: New York University School of Law*. See on-line at: [http://policyintegrity.org/files/publications/Global\\_CBA.pdf](http://policyintegrity.org/files/publications/Global_CBA.pdf). This item can replace an older one.

## **Lecture 12- Cost- Benefit Analysis and other economic tools for environmental policy (Part 2)**

- Examples from throughout the Middle East

## **Lecture 13 - Introduction to Environmental Impact Statements (Part 1)**

- The policy framework for environmental impact statements
- Critique of EIS

### *Readings:*

- Jay, S., C. Jones, P. Slinn, and C. Wood. 2007. Environmental impact assessment: Retrospect and prospect. *Environmental Impact Assessment Review* 27:287–300
- \*\* El-Fadl, K. and M El-Fadel. 2004. Comparative assessment of EIA systems in MENA countries: challenges and prospects. *Environmental Impact Assessment Review*. 24:553–593

## **Lecture 14 - Introduction to Environmental Impact Statements (Part 2)**

- The policy framework for environmental impact statements in the Middle East: From theory to practice

## **Lecture 15 - Command-and-control regulation (Part 1)**

### *Readings:*

- Barry Commoner, B. 1988. "The Failure of the Environmental Effort."

- \*\* Cole, D.H. and P.Z. Grossman. 1999 When is Command-and-Control Efficient? Institutions, Technology, and the Comparative Efficiency of Alternative Regulatory Regimes for Environmental Protection; Wis. L. Rev. 887
- Harrington, Winston and Richard D. Morgenstern, "Economic Incentives versus Command and Control: What's the Best Approach for Solving Environmental Problems?" (Fall/Winter 2004). See on-line at: [http://www.rff.org/rff/Documents/RFF\\_Resources\\_152\\_ecoincentives.pdf](http://www.rff.org/rff/Documents/RFF_Resources_152_ecoincentives.pdf).

### **Lecture 16 - Command-and-control regulation (Part 2)**

- Command-and control regulation in the Middle East: From theory to practice

### **Lecture 17 - Environmental Policy in the Palestinian Authority and Jordan (Part 1)**

- Environmental policy in the Palestinian Authority
- The Oslo Talks and The Geneva Environmental Accord
- The role of the policy maker, scientist, industry, media and public advocacy in environmental problem definition

#### *Readings:*

Al Hmaid, M.S. 1998. "Palestinian Policy and Regional Environmental Cooperation," *Palestine Israel Journal*.

\*\* Schoenfeld, S. 2005. "Types of Environmental Narratives and their Utility for Understanding Israeli and Palestinian Environmentalism" Proceedings of Conference on Israeli and Palestinian Environmental Narratives. Centre for International and Security Studies, York University, Toronto.

Obeidi, Fida, *The Impact of the Palestinian-Israeli Conflict on the Environment and the Role of the Palestinian Environmental NGOs in Protecting the Environment*, Peace Research Institute in the Middle East. See on-line at: <http://vispo.com/PRIME/enviro.htm>. I suggest to replace this item with that of al-Hmaid.

### **Lecture 18 - Environmental Policy in the Palestinian Authority and Jordan (Part 2)**

- Environmental policy in Jordan
- Comparison and Contrast of Environmental Policy Priorities
- *Readings:*
- Ministry of Environment, *Environmental Policy Framework in Jordan 2006: An Overview* (March 2006). See on-line at: [http://www.eco-cities.net/static/pdf/environmental\\_policy\\_framework\\_in\\_jordan\\_2006.pdf](http://www.eco-cities.net/static/pdf/environmental_policy_framework_in_jordan_2006.pdf)
- World Bank, Sustainable Development Sector Department (MNSDD) Middle East and North Africa Region, *Hashemite Kingdom of Jordan Country Environmental Analysis: Report No. 47829-Jo* (August 18, 2009). See on-line at: <https://openknowledge.worldbank.org/bitstream/handle/10986/3198/478290ESW0JOOP1IC0disclosed09131101.pdf?sequence=1>

### **Lecture 19 – Conclusions (Part 1)**

- **Environmental policy in general** (challenges, formulation, and conduct)

**Lecture 20 – Conclusions (Part 2)**

- **Environmental policy in Israel and the Middle East** (challenges, formulation, and conduct)

**Final Exam –**