

<b>Course title:</b> Economic Foundations of Infrastructure and Natural Resource Law				
<b>Course code:</b> MPL 141		<b>No. of credits:</b> 1	<b>L-T-P:</b> 14-0-0	<b>Learning hours:</b> 14
<b>Pre-requisite course code and title (if any):</b> None				
<b>Faculty:</b>		<b>Department:</b> Department of Policy Studies (Centre for Post Graduate Legal Studies)		
<b>Course coordinator:</b> Dr. Nandan Nawn		<b>Course instructor:</b> Dr Nandan Nawn		
<b>Contact details:</b> nandan.nawn@terisas.ac.in				
<b>Course type:</b> Core		<b>Course offered in:</b> Semester 1		
<b>Course description:</b> As the title suggests, this course will offer economic foundations for a select set of policies and laws related to infrastructure and natural resources. In particular, it will explore theoretical basis, conceptual foundations and principles from the discipline of economics to examine policies and laws, aided by the relevant case studies. Importance of this course arises from the very fact that policy and legal regime functions with the objective of meeting a number of economic objectives, including augmenting rate of economic growth and social net benefit. Unfortunately, the market, however efficiently it may function, fails to deliver either the public goods like infrastructure or take care of externalities like pollution/waste or efficiently allocate or assign the correct prices for natural resources—these instances of ‘market failure’ makes a strong case of intervention by the State, through appropriate policies and laws, towards achieving a socially beneficial and sustainable outcome, while considering both costs and benefits. Recent instances of the State entering into partnerships with the private players imputes additional challenges to farming of laws, for such instruments to address the matter of profitability, risk taking ability, and uncertainties faced by the private players, along with aiming at social objective.				
<b>Course objectives:</b> 1. To provide a clear understanding on the economic theories, concepts and principles relevant for laws related to infrastructure and natural resources. 2. To connect the theory, concept and principles with the appropriate case studies.				
<b>Course contents</b>				
S.No	Topic	L	T	P
1	<b>Economic Efficiency</b> Economic efficiency as a core concept in discipline of economics Variations within ‘efficiency’: technical, cost, value, material, energy	1	0	0
2	<b>Market Structures</b> Perfect competition as an ‘ideal’ for achieving economic efficiency Cases of imperfect competition: monopolistic competition, monopoly, oligopoly	1	0	0
3	<b>Market Failures</b> Cases of market failure Provision of Public Good by the state and private provision Absent markets and role of property rights Externalities and Coase Theorem	2	0	0
4	<b>Role of the State</b> Economics of Regulation Economic principles behind public policy Regulation of Natural Monopoly	2	0	0
5	<b>Instruments: Command and Control vis-à-vis Market based</b> Command and Control type: tax, subsidies Market Based types Relative efficiency of Command-and-Control and Market Based instruments	1	0	0
6	<b>Liability, loss and damages</b> Compensation Principle Efficiency of Liability Rules	1	0	0
7	<b>Case Studies:</b> Oil and Natural Gas Pricing in India Spectrum Allocation Electricity pricing models Coal pricing and bidding models	6	0	0

	National Highway Toll pricing Computation of Environmental damages and Ecological Values			
	<b>Total</b>	14	0	0
<b>Evaluation criteria:</b>				
1.	Assignments/Presentations	50%		
2.	Written Test	50%		
<b>Learning outcomes:</b>				
On completion of this course, the students would:				
1. Have acquired an understanding of the concept and theoretical background of laws related to infrastructure and natural resources.				
2. Have developed critical thinking on possibilities and challenges in balancing the interests of various stakeholders in these areas.				
<b>Pedagogical approach:</b>				
The course will be delivered through a mix of classroom lectures and discussions around case studies.				
<b>Materials:</b>				
<b>Core text for Module 1-6</b>				
1. Cento Veljanovski, 2007, 'Chapter 2: The Economic Approach' in Economic Principles of law, Cambridge University Press, pp. 19-57				
<b>Module 1</b>				
2. J Stiglitz, 'Chapter 3: Market Efficiency' in Economics of the Public Sector, Third Edition, W W Norton, pp. 55-75				
<b>Module 3 and 4</b>				
3. C T S Ragan and Richard G Lipsey, 1999, 'Chapter 16: Market Failure and Government Intervention and 'Chapter 17: The Economics of Environmental Protection' in Economics, Pearson Canada, pp. 415-445 and 449-469				
4. Richard Ipotito, 2003, 'Chapter 7: Externalities-the Coase Theorem and Rules of Law,' in Economics for Lawyers, George Mason School of Law, mimeo, 168-183				
5. J Stiglitz, 'Chapter 1: The Public Sector in a Mixed Economy', in Economics of the Public Sector, pp. 3-25				
6. J Stiglitz, 'Chapter 4: Market Failure' in Economics of the Public Sector, pp. 76-90				
7. J Stiglitz, 'Chapter 6: Public Goods and Publicly provided Private Goods', in Economics of the Public Sector, pp. 127-152				
<b>Module 4 and 5</b>				
8. Cento Veljanovski, 2006, 'Chapter 7: Regulation' in The Economics of Law, Second edition, The Institute of Economic Affairs, pp. 142-172				
9. Kenneth E Train, 1991, 'Introduction: The Economic Rationale and Task of Regulation' in Optimal Regulation: The Economic Theory of Natural Monopoly, MIT Press, pp. 1-17.				
<b>Module 7: Case Studies</b>				
<b>Oil and Natural Gas Pricing in India</b>				
10. Paranjay Guha Thakurta, Jyotirmoy Chaudhuri, 2014, 'How Reliance's Options on Natural Gas Price Hike Narrowed', EPW, XLIX (22), pp. 13-16				
11. Paranjay Guha Thakurata, 2015, 'Great Indian Gas Robbery', EPW, L (49), pp. 12-15				
Additional Reference:				
Paranjay Guha Thakurata, Subir Ghosh and Jyotirmoy Chaudhuri, 2016, Gas Wars - Crony Capitalism and the Ambanis, Authorsupfront Publishing Services Private Limited				
<b>Spectrum Allocation</b>				
12. Upendra Baxi, 2012, 'Good Law, Poor Economics', Indian Express, February 24				
13. Rohit Prasad, 2010, 'Value of 2G Spectrum in India', EPW, XLV (4), pp. 25-28				
14. Alok Kumar, 2011, '3G Spectrum Auctions in India: A Critical Appraisal', EPW, XLVI (13), pp. 121-129				
15. Arun Mehta, Robert Horvitz, 2010, 'Managing and Utilising Spectrum More Efficiently', EPW, XLV (9),				

pp. 26-28

16. Manas Bhattacharya, 2008, 'The International Experience of Auctioning Spectrum', EPW, September 13, pp. 33-38

Additional reference:

Claudio Feijóo, José Luis Gómez-Barroso and Asunción Mochón, 2009, 'Chapter III: Reforms in Spectrum Management Policy', in In Lee, eds., Handbook of research on telecommunications planning and management for business, Information Science Reference, pp. 33-47

Johannes M. Bauer, 2006, 'A Comparative Analysis of Spectrum Management Regimes', paper presented at the 30th Communications and Internet Research Conference, Alexandria, Virginia, USA. Available online at <http://www.ictregulationtoolkit.org/Documents/Document/Document/2299>

#### **Electricity pricing models**

17. Paranjoy Guha Thakurta, 2016, 'Power Tariff Scam Gets Bigger at Rs.50,000 Crore', EPW, LI (21), pp. 12-15  
Power (Coal/Nuclear) pricing and bidding models
18. Sumantra Bhattacharya, Rachit Tiwari, 2014, 'Non-Coking Coal Pricing in India', EPW, XLIX (3), pp. 20-22
19. E A S Sarma, 2013, 'Myopia on Coal', EPW, XLVIII (44), pp. 12-15
20. Suvrat Raju, M V Ramana, 2013, 'Cost of Electricity from the Jaitapur Nuclear Power Plant', EPW, XLVIII (26 & 27), pp. 51-60
21. Pranjul Bhandari, Rohit Lamba, 2013, 'The Coal Saga: The Imminent and the Feasible', EPW, XLVIII (28), pp. 19-21
22. Rahul Tongia and Rangan Banerjee, 1998, 'Price of power in India', Energy Policy, 26 (7), pp. 557-575
23. Kannan Kasturi, 2013, 'Pricing Electricity in Delhi', EPW, 58(1), pp. 20-23

#### **Liability**

24. Suvrat Raju, M V Ramana, 2010, 'The Other Side of Nuclear Liability', EPW, XLV (16), pp. 48-54
25. Michael G. Faure and Karine Fiore, 2009, An Economic Analysis Of The Nuclear Liability Subsidy, Pace Environmental Law Review, 26 (2). Available at: <http://digitalcommons.pace.edu/pelr/vol26/iss2/5>

#### **National Highway Toll pricing**

26. Ram Singh, 2010, 'A High-handed Approach to National Highways', EPW, XLV (8), pp. 19-21

#### **Environmental Damages and Ecological values**

27. L Venkatachalam, 2005, 'Damage Assessment and Compensation to Farmers: Lessons from Verdict of Loss of Ecology Authority in Tamil Nadu', EPW, April 9, pp. 1555-60
28. K. Chopra and P. Dasgupta, 2008, 'Assessing the Economic and Ecosystem Services Contribution of Forests: Issues in Modelling, and an Illustration', International Forestry Review, 10(2), pp. 376-386

#### **General additional reading: relevant judgments of the Supreme Court**

#### **Additional information (if any):**

**Student responsibilities:** Reading financial newspapers like Mint, Economic Times, Business Line, as well as magazines like Economist, for identifying the relevant topics for the assignment.

#### **Course reviewers:**

1. Prabhash Ranjan, South Asian University, New Delhi
2. Daniel Mathew, National Law University Delhi, New Delhi