

Course Title:	Intellectual Property Rights: A Foundation Course
Course No & Type:	(M. Phil/Pre-PhD/ Ph. D) Optional
Credits:	4 (four)
Instruction Method:	Lecture-Seminar presentation
Mode of Evaluation:	Term Paper (2 credits) Class Seminar Presentation (1 credit) Case Study (1 credit)
Course Coordinator:	Saradindu Bhaduri
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Introduction:

Intellectual property rights (IPR) have, in recent years, emerged as perhaps the most important S&T policy instrument. With its growing presence, however, it has also been subjected to intense criticism. Moreover, the structure of the institution itself has undergone periodic changes with incorporations of newer subject matters into its ambit.

This course intends to provide an analytical overview of the content and structure of the institution of IPR along with its evolutionary trajectory. In a nutshell, the course will cover the philosophy of intellectual property rights, various technical and legal dimensions of IPR, and implications of IPR for growth and development of science, along with the various socio-economic and ethico-legal consequences of IPR on economic development. The intricacies and effectiveness of the contemporary IPRs will be examined in the backdrop of its historical evolution, integration of the world economy, and technological complexity. Several case studies will be undertaken in the context of India.

This course is a unique attempt to reach out to a large number of students pursuing their doctoral research in JNU (M.Phil/Pre-PhD/PhD) in both social and natural science disciplines. The course would be covered under **six modules/themes:**

Course Outline

Module 1

Knowledge, Innovation and Intellectual Property Rights: An Introduction

This theme will expose the students to the basic understanding of the political, social and economic concepts that had played a major role in articulation and justification of IPRs.

- Knowledge – characteristics and role in economic growth

- Tacit and codified knowledge
- Knowledge as public good and ‘market failure’
- Market for knowledge
 - Incentives for creation of new knowledge
 - Appropriation of knowledge: knowledge monopoly and its consequences
- Pre-IPR system of protection: Secrecy/Trade guilds/Cartels
- IPR: Consequentialist, right based justification and economic justification
- Basic forms of IPRs: – Patent, copyright, trademark, industrial design,

Module 2

Evolution of IP Statutes – Origin and Internationalisation

Under this theme, we examine the major statutes (their forms and various factors that were instrumental in their enactment); international interventions that had shaped the present understanding of IPRs and had led to the contemporary IP statutes.

- First IP Statutes: English Statute of Monopolies (1624); United States Patent Act (1836), German Patent Act (1877), Copyright law of Italy, English Statute of Anne (1710)
- International organizations and Treaties (pre- TRIPs era): Paris Convention, Berne Convention, Rome convention, IPIC Treaty, Budapest Treaty. CBD, UPOV convention. WIPO, GATT, FAO, UNCTAD

Module 3

Contemporary IP Statutes: Unification of IP rights

Under this theme, we will look at how the past two decades can be distinguished by the tremendous changes in the IPR internationally; mainly in the direction of expanding and strengthening the scope of protection, and progressive harmonization in rules & regulations.

- WTO Framework and the TRIPs Agreement
 - Unification of IP rights
 - Extension of protect able subject matter
 - New forms of IPRs
 - Scope of Sui-generis systems
- Role of Patent Cooperation Treaty

Module 4

IPR and New Technologies: Biotechnology and ICT

This theme will discuss the various emerging issues surrounding IPR (mainly patents) in biotechnology and information communication technology. First a scientists’ perspectives will be presented to understand the basic nuances of these technologies. This discussion will be followed by a multidisciplinary discussion of adequateness and suitability of the conventional statutes of patents to cover these modern technologies.

- Science of Biotechnology, Genetic engineering and ICT.
- Patentability criteria in Biotechnology/ICT inventions.
- Distinction between discovery and innovation in Biotechnology.

- Reexamining the standards of novelty and non-obviousness, reproducibility in the contexts of biotechnology/ICT.
- Inter-country differences in patenting of life forms/ICT

Module 5

IPR in India

This theme will trace the IP rights in India in the pre-independence era and the motivations that led to the enactment of first patent act by the Government of India. The Patent Act of 1970 and the present act, Patent (Amendment) Act 2005 will be examined. The impact of the patent act of 1970 and implications of the new stringent provisions in the amended act will be discussed using case studies.

- The Patent Act of India 1911 and the Indian Patent Act of 1970.
- IP rights in India and progressive harmonization with international standards; Patent Amendment Act (2005)
- Some case studies giving examples of patents and technology transfer, access and affordability of medicines in India.
- Deliberations of the National Working Group on Patent laws

Module 6

Debates on IPR and Development

The theme will introduce the students to various debates concerning IPRs and development. Implications for India will be especially discussed in the debates.

- IPRs and technology transfer
- IPRs vis-à-vis access & affordability of medicines
- Bayh-Dole Act and issues of academic entrepreneurship, advancement of science and commercialization of university research
- Traditional knowledge, IPR and Benefit sharing
 - Indigenous knowledge and its appropriation
 - IPR & Traditional Medicine, Private vis-à-vis community based ownership,
 - Biopiracy, Breeders vis-à-vis Farmers rights
- Life form patenting (technical and ethical issues)

Essential Reading List

- Abbot, Fredrick, Gurry, Francis and Cottier, Thomas (1999). *The International Intellectual Property System: Commentary and Materials*. Kluwer Law International, The Hague.
- Background Discussion Papers and Occasional Papers by Quaker United Nations Office, Geneva.* (www.uno.org/economicissues/intellectual-Property/intellectualLinks.htm)
- Background Study Papers of the Commission on Genetic Resources for Food and Agriculture* (1999). FAO April (<http://www.fao.org>)
- Bagchi, A.K. and Bhattacharya, U.K. (1995). Indian patents as competitive instruments: Dream and reality. *Economic and Political Weekly*.
- Berman, Bruce and Woods, D. James (2002). *From Ideas to Assets- Investing Wisely in*

- Intellectual Property*. Willy Intellectual Property Series. New York: John Wiley & Sons Inc.
- Bhattacharya, S., Garg, K.C., Sharma, S.C. and Dutt, B. (2005). *Indian Patenting Activity in International and Domestic Patent System*. NISTADS and Office of Principal Scientific Advisor (accessible via <http://www.nistads.res.in>)
- Biotechnology and IPR Regime: In the context of India and Developing countries (2005). *Asian Biotechnology and Development Review*. 7(2). (Complete Issue)
- Correa, Carlos M. and Abdulqawi A. Yusuf (eds) (1998). *Intellectual Property and International Trade: The Trade Agreement*. Kluwer Law International, London.
- Cottier, Thomas and Mavroidis, C. Petros (2003). *Intellectual Property: Trade, Competition, and Sustainable Development*. World Trade Forum, Volume 3. The University of Michigan Press.
- Choudhuri, S. (2003). *The WTO and India's Pharmaceutical Industry*. Oxford University Press: New Delhi.
- Commission on Intellectual Property Rights, Innovation and Public Health (CIPIH): Publications & Study Materials* (<http://www.who.int/intellectualproperty/en/>)
- Dasgupta, B. (1999). Patent lies and latent danger: A study of the political economy of patent in India. *Economic and Political Weekly*., April 17-24, 979-993.
- Desai, P.N. (2007). *Traditional Knowledge and Intellectual Property Protection: Past and Future*. *Science and Public Policy*, 185-197.
- Evenson, E. R. and Westphal, J. L.(1995). *Technological Change and Technology Strategy In: Handbook of Development Economics* (Jere Behrman and T.N. Srinivasan). Elsevier.
- Ganguli,P. (2003). *Indian Path towards TRIPs Compliance*. World Patent Information.
- Ginarte, J. C. and Park, W.G. (1997). *Determination of Patent Rights: A Cross National Study*. *Research Policy*, Vo. 26.
- Hellar, A. Michael and Eisenberg, S. Rebecca (1998). *Can Patents Deter Innovation? The Anticommons in Biomedical Research*. *Science*, Vol 280.
- Kamil Idris *Intellectual Property: A Powerful Tool for Economic Growth*. World Intellectual Property Organisation.
- Kumar, Nagesh (2003). *Intellectual Property Rights, Technology and Economic Development: Experiences of Asian Countries*. *Economic and Political Weekly*, January 18.
- Lanjouw, J. O. (1998). *The Introduction of Pharmaceutical Product Patents in India: Heartless Exploitation of the Poor and the Suffering?*. NBER Working Paper Series No 6366, National Bureau of Economic Research, January.
- Levin, R., Klevorick, A., Nelson, R. and Winter, S. (1987). *Appropriating the Returns from Industrial Research and Development*. *Brookings Papers on Economic Activity*, Vol. 3.
- Mansfield, Edwin (1986). *Patents and Innovation: An Empirical Study*. *Management Science*, Vol. 32 No. 2, February.
- Maskus, Keith (2000). *Intellectual Property Rights in the Global Economy*. *Institute of International Economics*. Washington DC.
- Mashelker, R.A. (2002). *Intellectual Property Rights and the Third World*. *Journal of Intellectual Property Rights*. Vol. 7, pp. 308-323.
- Mazzoleni, R. and Nelson, R.R. (1998). *The Benefits and Costs of Strong Patent*

- Protection: A Contribution to the Current Debate*. Research Policy 27 (1998) 273-284.
- Mowery, D.D. and Sampat. B.N. (2001) *Patenting and Licensing University Inventions: Lessons from the history of the research corporation*. Oxford University Press 2001.
- NAPAG (1995). *Intellectual Property and the Academic Community*. National Academics Policy Advisory Group. London, UK
<http://www.royalsoc.ac.uk/templates/statements/statementDetails.cfm?statement=217>)
- National Working Group on Patent Laws. Papers and Reports. CSSP Library
- Nuffield(2002). *The Ethics of Patenting DNA*. Nuffield Council of Bioethics, London, UK.
- Occasional Paper Series of Trade Related Agenda, Development and Equity (T.R.A.D.E.) – The South Centre.
http://www.southcentre.org/publications/publist_category_OccasionalPapers_index.htm)
- Ramanna, A (2005). Bt Cotton and India's Policy on IPRs, *Asian Biotechnology and Development Review*. 7(2), pp. 43-51
- Rao, C.N. (2002). Patents for Biotechnology Inventions in TRIPs. *Economic and Political Weekly*. 2126-2129.
- Royal Society (2003). *Keeping Science Open: The Effects of Intellectual Policy on the Conduct of Science*. Prepared by the Royal Society Working Group on Intellectual Property, London: Royal Society, accessed from www.royalsoc.ac.uk
- Wiley & Sons Inc.
- Smith, G and Parr, R.L. (1989). *Valuation of Intangible Assets*. New York: John Wiley & Sons Inc.
- Stephen, A. Merrill, Richard, C. Levine and Mark B. Myes (2004). *A Patent System for the 21st Century*. The National Academic Press, Washington, DC.
- Stiglitz, J (2006). *Making Globalisation Work* Penguin Books Ltd.: England. page 103-132.
- Swaminathan, M.S (2002). *The Protection of Plant Varieties and Farmers' Rights Act: From Legislation to Implementation*. Journal of Intellectual Property Rights. 7, pp. 324-329.
- Vivien Irish (2000). *How to Read a Patent Specification*. Engineering Management Journal. April, pp. 71-73.
- Vasudeva, P.K. (2000). Patenting biotech products: Complex issues. *Economic and Political Weekly*. 3726- 3729.
- Wesley, M. Cohen and Stephen, A. Merrill (2004). *Patents in the Knowledge Based Economy*. The National Academic Press, Washington, DC.
- Watal, Jayshree (2001). *Intellectual Property Rights in the WTO and Developing Countries*. Oxford University Press: New Delhi.

Supplementary Reading List

- Arrow, Kenneth J. (1962). *Economic Welfare and the Allocation of Resources for Invention* In: *The Rate and Direction of Inventive Activity: Economic and Social Factors*. A report of the National Bureau of Economic Research, New York, Princeton: Princeton University Press
- Bhattacharya, S. and Nath, P (2002). *Using Patent Statistics as a Measure of 'Technological Assertiveness': A China-India Comparison*. *Current Science* 83(1), 23-29.
- Choudhury, N. (2004). *Patents Bill: Protecting Indigenous Knowledge*. EPW. November 20.
- Correa Carlos M. (2000a). *Intellectual Property Rights, the WTO and Developing Countries: The TRIPS Agreement and Policy Options*. Zed books: Third World Network, Penang, Malaysia.
- Correa Carlos M.(2000b). *Integrating Public Health Concerns into Patent Legislation in Developing Countries*. Geneva: South Centre.
- Correa Carlos M. and Sisule F. Musungu (2002). *The WIPO Patent Agenda: The Risks for Developing Countries*. Geneva: South Centre.
- Correa Carlos M. (1995). *Intellectual Property Rights and Foreign Direct Investment*. *International Journal of Technology Management*, Vol. 10, Nos 2-3
- Cullet, Phillipe (2002). *Amended Patents Act and Access to Medicines after Doha*. *Economic and Political Weekly*, 15 June
- Ganguli, P. (2001). *Intellectual Property Rights: Unleashing the Knowledge Economy*. Tata McGraw-Hill Publishing Company Limited, New Delhi.
- Gopakumar, K.M and Amin, T (2005). *Patents (Amendment) Bill 2005: A Critique*. EPW, April 9.
- Gupta, A.K. (2002). *Value Addition to Local Kani Tribal Knowledge: Patenting, Licensing and Benefit Sharing*. Geneva: World Intellectual Property Organization, WP No 2002-08-02.
- Hokeman, Bernard M. and Michel M. Kostecki (1995). *The Political Economy of the World Trading System: From GATT to WTO*. Oxford: Oxford University Press
- Integrating Intellectual Property Rights and Development Policy* (2002). Commission on Intellectual Property Rights, DFID UK (Background Papers)
- Katrak, Homi and Roger Strange (eds) (2004). *The WTO and Developing Countries*. Houndmills: Palgrave Macmillan.
- Kumar, Nagesh (1996). *Intellectual Property Protection, Market Orientation and Location of Overseas R&D Activities by Multinational Corporations*. *World Development*, 24(4), 673-688
- Manual of Patent Practice and Procedure (2001). Patent Office India.
- Montenegro, C. (2003). *Promoting Innovation through Intellectual Property Protective Systems*. *International Journal of Entrepreneurship and Innovation Management*, Vol. 3 No. ½, pp. 126- 138 (www.inderscience.com/filter.php?aid=2224)
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- WIPO (2006). *Intellectual Property and Genetic Resources, Traditional Knowledge and Traditional Cultural Expressions/Folklore*. (<http://www.wipo.int/tk/en/index.html>)
- WTO, World Trade Organisation (2006). *Doha Work Programme: the Outstanding Implementation Issue on the Relationship between the Trips Agreement and the Convention on Biological Diversity*. WT/GC/W/564/REV2, TN/C/W/41/REV.2/IP/C/W/474

Full Documents of Treaties

- Agreement for the establishment of the WTO
- The TRIPs Agreement
- PCT Agreement
- Patent Law Treaty; Substantive Patent Law Treaty
- Convention on Biological Diversity
- The International Union for the Protection of New Varieties of Plants (UPOV)
- International Treaty on Plant Genetic Resources for Food and Agriculture (Seed Treaty)
- Indian Patent Act, Design Act, Trademark Act and Geographical Indications (Department of Industrial Policy and promotion, Government of India)
- Plant Patents and Farmer's Right Act
- Indian Biodiversity Act