

ICFAI Business School (IBS)
Doctor of Philosophy (Ph. D.)
Course work (Full-Time and Part-Time Scholars)

Course: Advanced Strategic Management			Semester: I
Course Code: PHDASM-101	L T P	3 0 0	Credits: 3

Objective

To introduce the fundamentals of Strategic Management and to explain the complexity involved in developing and implementing business strategies.

Syllabus

Introduction to Strategy

5

Definition of strategy, characteristics of strategic decisions, levels of strategy, vocabulary of strategy. Strategic management – the strategic position – strategic choices – strategy into action. Contributions of leading management gurus (Igor Ansoff, Michael E. Porter, Sumantra Ghoshal, Gary Hamel, C.K. Prahalad).

Industry Analysis, Market Structure & Competition

8

Macro Environment (PESTEL Framework), Industry Analysis (Porter's Five Forces Model), Firm Analysis (SWOT), Strategic Gaps, Critical Success Factor, Experience Curve

Capability, Competency & Resource Based View

8

Critical success factors. The strategic importance of resources, available resources, threshold resources, unique resources. Competencies, core competencies, where core competencies reside. Competition View of Strategy Vs Resource Based View (RBV).

Strategic Development Process

8

Strategy Development Process in organizations, Intended & Emergent Strategies, Strategic planning systems.

Strategy Implementation

5

Organizing for success, Structural types – simple structure, functional structure, multidivisional structure, holding company structure, matrix structure, team based structure, project based structure and intermediate structure. Internal development– mergers and acquisitions – joint developments and strategic alliances. Success criteria – suitability, acceptability, feasibility.

Strategies in Emerging Markets

4

Strategy in emerging economies, Strategies that fit emerging markets, Estimating the performance effects of business groups in emerging markets.

Contemporary Concepts

4

The Competitive Advantage of Nations, Blue Ocean Strategy, Using Balanced Scorecard as a strategic management system, Business Model Innovation.

Suggested Readings (Books):

1. Strategy Safari by Henry Mintzberg, Bruce Ahlstrand and Joseph Lampel, 2000.
2. The concept of corporate Strategy by Kenneth R Andrews, Dow Jones-Irwin, 1971.
3. Corporate Strategy: An analytical approach to business policy for growth and Expansion by Igor Ansoff, Mc-Graw Hill, NY, 1965.
4. Chandler, A D. Jr. (1962). Strategy and Structure, MIT Press, MA, Cambridge.
5. Competitive Advantage: Creating and Sustaining Superior Performance by Michael Porter, Free Press, 1980.

Suggested Readings(Research Papers):

Introduction to Strategy

- Henderson, BD (1989). The origin of strategy. Harvard Business Review, 139-143.
- Porter, ME (1991). Towards a dynamic theory of strategy. Strategic Management Journal, 12(Winter), 95-117.
- Porter, ME (1996). What is strategy?. Harvard Business Review, (November-December).
- Ghemawat, P (2002). Competition and business strategy in historical perspective. The Business History Review, 76(1), 37-74.

Industry Analysis, Market Structure & Competition

- Gulati, R, Nihoria, N and Zaheer, A (2000). Strategic networks. Strategic Management Journal, 21(3), 203-215.
- Weerawardena, J, O’Cass, A and Julian, C (2006). Does industry matter? Examining the role of industry structure and organizational learning in innovation and brand performance. Journal of Business Research, 59(10), 37-45.
- Porter, ME (2008). The five competitive forces that shape strategy. Harvard Business Review, January.

Capability, Competency & Resource Based View

- Warnerfelt, B (1984 & 1995). Strategic Management Journal.
- Prahalad, CK and Hamel, G (1990). The core competence of the corporation. Harvard Business Review, May-June, 79-90.
- Oliver, C (1997). Sustainable competitive advantage: Combining institutional and resource- based views. Strategic Management Journal, 18(9), 697-713.

- Eisenhardt, KM and Martin, JA (2000). Dynamic capabilities: What are they?. *Strategic Management Journal*, 21(10/11), 1105-1121.

Strategic Development Process

- Mintzberg, H and Waters, JA (1985). Of strategies, deliberate and emergent. *Strategic Management Journal*, 6(3), 257-272.
- Lieberman, MB and Montgomery, DB (1988 & 1998). *Strategic Management Journal*.
- Montgomery, CA (1994). Corporate diversification. *Journal of Economic Perspectives*, 8(3), 163-178
- Elbanna, S. (2006). Strategic decision making: Process perspectives. *International Journal of Management Reviews*, 8(1), 1-20.
- Holmberg, SR and Cummings, JA (2009). Building successful strategic alliances: Strategic process and analytical tool for selecting partner industries and firms. *Long Range Planning*, 42(2), 164-193.

Strategy Implementation

- Hill, CL and Hoskinsson, RE (1987). Strategy and structure in multiproduct firm. *Academy of Management Review*, 12(2), 331-341.

Strategies in Emerging Markets

- Hoskinson, RE, Eden, L, Lau, CM and Wright, M (2000). Strategy in emerging economies. *Academy of Management Journal*, 43(3), 249-267.
- Khanna, T and Rivkin, JW (2001). Estimating the performance effects of business groups in emerging markets. *Strategic Management Journal*, 22(1), 45-74.
- London, T and Hart, SL (2004). Reinventing strategies for emerging markets: Beyond the transnational model. *Journal of International Business Studies*, 35(5), 350-370.
- Khanna, T, Palepu, KG and Sinha, J (2005). Strategies that fit emerging markets. *Harvard Business Review*, 4-18.

Contemporary Concepts

- Porter, ME (1990). The competitive advantage of nations. *Harvard Business Review*, 73-93
- Kim, WC and Mauborgne, R (2004). Blue Ocean Strategy. *Harvard Business Review*, 71-80.
- Kaplan, RS and Norton, DP (2007). Using Balanced Scorecard as a strategic management system. *Harvard Business Review*, 97-709.
- Johnson, MW, Christensen, CM and Kagermann, H (2008). Reinventing your business model. *Harvard Business Review*, 59-68.

ICFAI Business School (IBS)
Doctor of Philosophy (Ph. D.)
Course work (Full-Time and Part-Time Scholars)

Course: Research Methodology-I			Semester: I
Course Code:PHDRMM-101	L T P	3 0 0	Credits: 3

Objective

To impart the students with the fundamentals of research methodology to enable the students to plan and conduct research study.

Syllabus

Research Design

5

The meaning and characteristics of good research design. Classifications of the research design: exploratory, descriptive & causal studies, Research process.

Sample Design

6

Census and sample survey, Population & sample, Meaning and types of sampling: probability and non-probability sampling techniques, Sampling and non sampling errors, Sample size determination.

Measurement Concept in Business Research

10

Identifying and deciding on the variables to be measured- development of measurements scales; nominal scale, ordinal scale, interval scale, ratio scale; criteria for good measurement, reliability test. Attitude scales: Definition and types of attitude scales; single item scales, multiple items scales; Likert's scale, Semantic Differential scale.

Questionnaire Design, Survey Research and Data Preparation

11

Nature of questionnaire, questionnaire design process, Response format: open-ended questions close ended questions, reliability and validity of questionnaire. Classification of method of data collection; personal interview, telephonic interview, mail interview and electronic interview. Data collection in qualitative research: focus group technique, depth interview technique and projective technique Editing, coding, classification and tabulation of data; methods of data presentation.

Descriptive Statistics and Probability Distributions

10

Measures of central tendency, Measures of dispersion: Range, quartile deviation, mean deviation, standard deviation, coefficient of variation, Probability, Probability distributions: discrete and continuous distribution, Expected value, Binomial distribution, Poisson distribution, Normal distribution.

Suggested Readings

1. William G Zikmund, Barry J Babin, Jon C.Carr, Atanu Adhikari,Mitch Griffin, Business Research methods, A South Asian Perspective, 8th Edition, Cengage Learning, New Delhi, 2012.
2. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research methods, Tata Mc Graw Hill, New Delhi, 2012.
3. Bryman, A. and Bell, E. (2007). *Business Research Methods*, Oxford University Press.
4. Levin, Richard, I and David S Rubin: *Statistics for Management*, Pearson

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ICFAI Business School (IBS)
Doctor of Philosophy (Ph. D.)
Course work (Full-Time and Part-Time Scholars)

Course: Research Methodology-II			Semester: II
Course Code:PHDRMM-102	L T P	3 0 0	Credits: 3

Objective

To impart the students to statistical tools and software like SPSS for analysis of data for quality research.

Syllabus

Inferential Statistics

10

Estimation theory: point and interval estimation, Testing of hypothesis, One sample test, Hypothesis Testing of Means when Population Standard Deviation is known and unknown, p-value approach, Independent t-test, paired t-test, Analysis of variance, Correlation analysis and introduction to regression analysis.

Nonparametric Tests

5

Chi square goodness of fit and indecency tests, Kruskal-Wallis test, Wilcoxon test, Mann-Whitney test.

Multivariate Techniques

14

Introduction to Multivariate analysis, classifications of multivariate, Multiple regression analysis, Time series analysis, Discriminant analysis, Logistic regression, Factor analysis, Cluster analysis, Multidimensional scaling, Conjoint analysis, Structural equation modeling (SEM), Qualitative research methods; content analysis.

Computer Applications and Statistical Software

10

Introduction to computer system, MS word, MS power point, Applications of Microsoft Excel Introduction to SPSS, data entry, editing, transformation and cleaning. Advanced data handling in SPSS: sorting cases, merging files, selecting cases, recoding values, computing new variable. Statistical analysis using SPSS.

Research Proposal and Report Writing

3

Structure and scope of research proposal, Elements of research proposal, Significance, steps and structure of research report; presentation of the research report and Ph. D. Thesis; footnotes, end notes referencing and bibliography,.

Suggested Readings

1. William G Zikmund, Barry J Babin, Jon C.Carr, Atanu Adhikari,Mitch Griffin, Business Research methods, A South Asian Perspective, 8th Edition, Cengage Learning, New Delhi, 2012.
2. Donald R. Cooper, Pamela S. Schindler and J K Sharma, Business Research methods, Tata Mc Graw Hill, New Delhi, 2012.
3. Bryman, A. and Bell, E. (2007). *Business Research Methods*, Oxford University Press.
4. Levin, Richard, I and David S Rubin: *Statistics for Management*, Pearson
5. Joseph F. Hair: Bill Black: Barry Babin; Rolph E. Anderson; and Ronald L. Tatham, (2006). *Multivariate Data Analysis*, Prentice Hall.
6. Lattin, James M.; Carroll, Douglas J. and Green, Paul E. (2002). *Analyzing Multivariate Data*, Belmont, CA: Duxbury Press.
7. Susan B. Gerber, Kristin Voelkl Finn, (2005) *Using SPSS for Windows: Data Analysis and Graphics*, Springer.

ICFAI Law School (ILS)
Doctor of Philosophy (Ph.D.)
Course Work (Full-Time and Part-Time Scholars)

Course: Advanced Legal Studies			Semester: I
Course Code:	LTP	300	Credits: 3

Objective

To familiarize the student to advanced studies of law, morality, justice, and the like, including the recent trends in the studies of legal theories.

Syllabus

Law and Social Transformation	9
Relationship between law and society; law as an instrument for social change; recent development in the law.	
Ethics, Morality and Law	6
Concepts of morality in law with reference to Prof Hart, Devlin, Fuller, Dworkin, Joseph Raj and Finnis; interrelationship among ethics, morality and law.	
The concept of Justice	9
Modern theories of justice with specific reference to Rawls, Nozick, Dworkin and Finnis; social justice—concepts and their application in India.	
Economic Approach of Law	3
Relationship between law and economics; economic analysis of specific laws of crime, torts, contract, property and environment.	
Modern Challenges to Legal Formalism and Recent Legal Theories	6
Modernism; postmodernism; feminism and critical legal Studies	
New Perspectives on Legal Theories:	9
Human rights; sustainable development; liberalization and globalization; GATT and WTO.	

Suggested Readings

1. Lloyd, L., *Introduction to Jurisprudence*, London: Stevens & Sons, 1985
2. Friedmann, W., *Law and Social Change*, University of California Press, 1959
3. Morrison, W., *Jurisprudence: From Greeks to post modernism*
4. R. Posner, R., *The Economics of Justice*, Harward University Press, London
5. Wacks, R, *Understanding jurisprudence*, Lawman (India) Private Limited, New Delhi 1997
6. Mclaid, Jan, *Legal Theory*, Macmillan Publication, 2007

7. Singh, Yogendra, *Modernization of Indian Tradition*, Jaipur: Rawat Publications, Reprint, 1994
8. Giddens, Anthony, *The constitution of Modernity*, Cambridge: Polity Press, 1990
9. Ann C. Scales, *Toward Feminist Jurisprudence*, Indiana Law Journal
10. Weber, Max, *The theory of social and Economic organization*
11. Best., S. and D. Kellner, *Postmodern Theory: Critical interrogation*, New oiok: Guilford, 1991
12. Hutchinson, Allan C. *Critical Legal Studies*. Totowa: Rowman & Littlefield Publishers, Inc., 1989. Prin
13. Ritzer, George, *Postmodern social theory*, New York: Mcgraw Hill, 1997
14. Sengupta, Chandran, *Conceptualizing Globalization*
15. Vanessa E. Munro, *Legal Feminism and Foucault: A Critique of the Expulsion of Law*, *Journal of Law and Society*, Vol. 28, No. 4 (Dec., 2001), pp. 546-567
16. Ward, Gleen, *Postmodernism*, London: Teach Yourself Books, 1997

Doctor of Philosophy (Ph.D.)
Course Work (Full-Time and Part-Time Scholars)

Course: Indian Constitutional Law			Semester: II
Course Code:	LTP	300	Credits: 3

Objectives: To develop necessary understanding in the research scholars about Indian Constitution, its nature, philosophy, some important working principles, challenges and desirability to adapt it to present circumstances.

Syllabus

Constitutionalism

4

Constitution, Constitutional Law and Constitutionalism; Concept of limited government and limitations on government power.

Separation of Power and Rule of Law

5

Concept and new horizons; Separation of powers, Concept of rule of law and separation of power; its applicability in England, USA and India, Judicial Review.

Indian Federalism

4

Conceptual position of federalism; federal nature of the Indian Constitution; federalism versus state autonomy; cooperative federalism; relationship of trust and faith between center and state; challenges before the Indian federalism.

Distribution of Legislative Powers

4

A comparative study of scheme of the distribution of legislative powers in US, Australia and India; judicial approach and the present position; recommendation of Sarkaria Commission & Venkatachaliah Commission

The Judiciary

5

The Judicial system in England; Crown Proceeding Act 1947; Judicial Review and Constitutionalism in India; Prerogative writs.

Right to Equality

4

General principles; protective discrimination with special references to emerging judicial response to the problems of group inequalities; comparative study of the decisions of the Indian and American courts.

Freedom of Speech and Expression**4**

The area of freedom and its limitation; freedom of press and challenges of new scientific development

Rights to Life and Personal Liberty**4**

Judicial determination of the scope of the term “personal liberty”, “procedure established by law” and the American expressions “liberty” and “due process”. Radical changes in judicial thinking in this area.

Right to Freedom of Religion**4**

The scope of the freedom and the state control; secularism and religious fanaticism.

Working of the Constitution**4**

Achievements and failures; areas of concern and challenges before the Constitution; the perception of National Commission to review the working of the Constitution.

Suggested Readings:

1. Basu, Durga Das, *Commentary on the Constitution of India*, Lexis Nexis
2. Jain, M.P., *Indian Constitutional Law*, New Delhi: Wadhwa and Company Nagpur, 2003.
3. Singh, M.P., Shukla's V.N, *Constitution of India*, Eastern Book Company, 2017.
4. Bhat, Ishwara *Inter-relationship between Fundamental Rights*, Eastern Law House
5. De, D. J., *The Constitution of India*, Asia Law House, 2002.
6. Seervai, H. M., *Constitutional Law of India*, Tripathy, 1983.
7. Bakshi, P.M, *The Constitution of India*, Universal Law Publishing, 2002.
8. Singhvi, Laxmi Mall& Swarup, Jagadish, *Constitution of India*, Thomson Reuters, 2013.
9. Gajendragadkar,P.B., *Law, Liberty and Social Justice*, Asia Publishing House

Doctor of Philosophy (Ph.D.)
Course Work (Full-Time and Part-Time Scholars)

Course: Criminal Law			Semester: II
Course Code:	LTP	300	Credits: 3

Objective

To develop necessary understanding in the research scholars about basics of criminal law, and its application addressing some specific crime, some emerging trends and some of its inter-disciplinary approach.

Introduction

8

Meaning of Crime; essential elements of crime; individual liability and group liability; stages of crime; theories of punishment; general defenses under IPC; strict liability and its dimensions in specific crimes.

Drug Addiction and Criminal Justice

9

Analysis of the background, text and operation of the Single Convention on Narcotic Drugs, 1961, 1972; Analysis of the Convention on Psychotropic Substances, 1972; International collaboration in combating drug addiction; the penal provisions (under the IPC and the Customs Act); judicial approaches to sentencing in drug trafficking and abuse; The Narcotic Drugs and Psychotropic Substances Act, 1985, patterns of resource investment in India— policing adjudication, treatment, aftercare and rehabilitation.

Privileged Class Deviance and response of Indian legal order

9

Conceptions of white-collar crimes; Indian approaches to socio-economic offences; notions of privileged class deviance as providing a wider categorization of understanding Indian development; typical forms of such deviance— official deviance (deviance by legislators, judges, bureaucrats); professional deviance—journalists, teachers, doctors, lawyers, engineers, architects and publishers; trade union deviance including teachers, doctors and lawyers; police deviance; gender-based aggression by socially, economically and politically powerful; response of Indian legal order to the deviance of privileged classes—vigilance commission, public accounts committee, ombudsman, commissions of enquiry, Prevention of Corruption Act, 1947, The Antulay Case.

Emerging Criminal Jurisprudence

9

Compensatory jurisprudence; state liability; the concept of human rights and law of crimes in India; extension of protection to foreigners; prison reforms and prisoners' rights.

Inter Disciplinary Horizons

7

Forensic medicine and forensic science; media laws; cyber-crimes.

Suggested readings:

- Ratan Lal and Dhiraj Lal, *Indian Penal Code*, Wadhwa & Co., 2000
- Achutan Pillai, *Criminal Law*, Butterworth Co., 2000.
- Gour, H.S, *Indian Penal code*, Allahabad: Law Publisher, 2013

- Gour K.D, *Criminal Law, Cases and Materials*, Butterworth Co., 1999.
- Kenny's: *Outlines of Criminal Law*, (1998 Edition).
- Srivastava, O.P. *General Principles of Criminal Law*

ICFAI Law School (ILS)
Doctor of Philosophy (Ph.D.)
Course Work (Full-Time and Part-Time Scholars)

Course: Legal Research Methodology—I			Semester: I
Course Code: PHDRML-101	LTP	300	Credits: 3

Objectives

To develop necessary understanding in the research scholars about nature, techniques and tools of legal research and preparing them for producing a high quality of legal research.

Syllabus

Introduction to Research

9

Meaning, nature and kinds of research; objective of research; importance of research; characteristic of good research; motivating factors for research; research and scientific methods, research process.

Legal Research

9

Meaning, nature, significance, and objectives of legal research; types of legal research for Doctrinal and Non-Doctrinal researches (Descriptive research; Explanatory research; Historical research; Comparative research; Fundamental & Applied research; Analytical & Critical research); merits & demerits of above mentioned doctrinal and non-doctrinal researches; global trends in Legal Research.

Research Techniques

6

Use of deductive and inductive methods in Legal Research; tools of doctrinal Legal Research; tools of non-doctrinal Legal Research.

Formulation of Research Problem and Hypothesis

9

Meaning, identification and selection of research problem; criterion of research problem; steps involved in the formulation of research problem; Hypothesis: its meaning and significance; types of hypothesis; characteristic of valid hypothesis; stages in formulation of hypothesis; testing of hypothesis

Research Design

9

Meaning and definition of research design; need for research design; aspects to be considered in research design; components of research design; formulation of research design; types of research design (Exploratory; Descriptive; Diagnostic; Historical and Experimental); characteristics of workable design.

Suggested Readings:

1. Kothari C.R., *Research Methodology* (New Age International, 2004)
2. S.K. Verma and M. Afzal Wani (Eds.) *Legal Research and Methodology*, (ILI , New Delhi, 2nd Edo., 2001)

3. Pauline V. Young, *Scientific Social Surveys and Research, methods, and An Introduction to methods and Analysis of Social Studies* (New York: Prentice Hall, Rev Ed. 1949)
4. Rattan Singh, *Legal Research Methodology* (Lexis Nexis, 2013)
5. Myneni, S. R., *Legal Research methodology* (Allahabad Law Agency, 2015)
6. Bruce L. Berg, *Qualitative Research Methods for the Social Science* (London: Allyn and Bacon, 2001)
7. Cohen L. Morris, *Legal Research in Nutshell*, (Minnesota West Publishing Co., 1996)
8. Ghosh B.N., *Scientific Methods and Social Research*, (Sterling, New Delhi, 2003)
9. John W. Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, (Sage Publications, 2002)
10. Kalven, Hans H. *Social Science Research and the Law: A symposium in Honor of Hans Zeisel*, University of Chicago Law Review 41 (1974) Winter 20995
11. Miller, Delbert. C, *Handbook of Research Design and Social measurement*, (New York: DS. Mckay, 1977)

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Course: Legal Research Methodology—II			Semester: II
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Objectives

To develop in students understanding of Research data, various types of tools in collection of data; selection of size of sample of sample, use of sample collected, data analysis, preparation of research report and production of quality legal writings.

Syllabus

Research Data

3

Meaning, nature and importance of data; types of data; sources of data (Primary, Secondary, Vertical and Horizontal); limitations of data collections; selection of appropriate method for data collection.

Sampling Techniques

6

Meaning of population and sampling; significance of sampling method; methods of sampling; types of sampling (Probability sampling—Simple random sampling, Stratified random sampling, Cluster sampling, and Multi stage sampling; Non probability sampling—Purposive sampling, Quota sampling, Area sampling); errors in sampling.

Devising Tools and Techniques for Collection of Data

9

Methods for the collection of statutory and case materials and juristic literature; various tools of collecting primary data (observation, sampling, questionnaire, interviews, case study and content analysis)

Data Analysis

9

Stages of data procession (edition, coding, classification, tabulation); types of analysis (descriptive, casual, co-relation and inferential); hypothesis testing; interpretation and generalization.

Preparation of Research Report

9

Legal research report; essentials and significance of legal research report; different stages of report writings (logical analysis of the subject-matter, preparation of the final outline, preparation of the rough draft, rewriting and polishing, preparation of the final bibliography, writing the final draft); types of legal research reports (thesis, monograph, research article); modes of citation; styles of citations (APA, MLA, Chicago; Blue books); illustration and tables; bibliography.

Role of Information Technology in the Field of Legal Research

3

Meaning of information and communication technology; importance of information technology in legal research; legal data base and digital library; digital tools of data analysis (SPSS, spread sheet, Email and web-based forms).

Research Ethics

3

Meaning and objectives of research ethics; freedom of research and society; respects for individual and regards for groups and institutions; scientific integrity, plagiarism, good reference practice; verification and subsequent use of research material; professional opinions; obligations in respect of colleagues and student-supervisor relationship; contractual research and rights to publish.

Suggested Readings:

1. Kothari C.R., *Research Methodology* (New Age International, 2004)
2. S.K. Verma and M. Afzal Wani (Eds.) *Legal Research and Methodology*, (ILI , New Delhi, 2nd Edo., 2001)
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11. Miller, Delbert. C, *Handbook of Research Design and Social measurement*, (New York: DS. Mckay, 1977)
12. Dworkin, R, *Legal Resarch*, *Daedalus*, (Spring 1973), pp. 53-64
13. Kalven, Hans H. *Social Science Research and the Law: A symposium in Honor of Hans Zeisel*, *University of Chicago Law Review* 41 (1974) Winter 20995
14. Grade J Williams and Hatt K Paul, *Methods in Social Research*, Mc Gaw-Hill Book Company, London- Singapore (1985) reprint
15. Horrington, William G. *Computer and Legal Research*, *American Bar Association Journal*, 56 (Dec., 1970) 1145-8

Doctor of Philosophy (Ph.D.)
Course Work (Full-Time and Part-Time Scholars)

Course: Human Rights and Humanitarian law			Semester: II
Course Code:	LTP	300	Credits: 3

Objectives: To develop necessary understanding in the research scholars about Human rights, its philosophy, history, nature, sources, importance, it's utility in making humanitarian law and some contemporary issues.

Syllabus

Introduction

8

Human rights: Concept, Nature, Origin and Development, Importance, International Movements for Protection of Human Rights, U. N. and regional organizations, European Commission and Courts on human Rights; U. N. declaration on human Rights; civil and political rights and social and economic rights—international instruments; violence against women in public and private life as human rights issue; international regime of enforcement of human rights—machinery and procedure.

Human Rights in Indian Perspective

8

Conceptual dimensions of human rights with special reference to India; fundamental rights under the Constitution; Derogation of Fundamental rights; Directive Principles of State Policy; Statutory Enforcement; Human Rights and enforcement agencies like the police and excise-prevention of abuse of rights; Human Rights and Preventive laws like TADA and NDPs and POTA Act.

Rights of Vulnerable Groups

7

Defining vulnerability; women and children; disabled persons; minorities; refugees, migrants, displaced persons and indigenous persons, Rights of LGBT.

Science-Technology and Human Rights

7

Scientific and technological researches; impact on ethics, morality and human rights; development vis-à-vis human rights, conflicts, confrontation and resolution; freedom of information, freedom for scientific research, controls and constraints; intellectual property rights—international dimensions, protection of economic and social rights of indigenous people; role of judiciary in the dialogue among science, technology, human rights and law; limitations on the right to information under information technology laws, the approach of the judiciary.

Humanitarian Law

7

International humanitarian law: An overview; history, scope and conceptual background; Conduct of Hostilities; Treatment of victims, Prisoners of War; International Institutions; State and Individual accountability; enforcement of humanitarian law; human rights and humanitarian law.

Human Rights and Contemporary Issues

5

Cultural relativism; religious fundamentalism and its impact on human rights; self-determination; increasing role of NGOs & press-role of International Criminal Court.

Suggested readings:

1. Saksena, K. P human rights fifty years of independence, New Delhi: Gyan publication house, 1999).
2. Baxi, Upender, human rights in a post human world: critical essays (2010)
3. Iyer, v. Krishna the dialectics and dynamics of human rights in India: yesterday, today and tomorrow (2000)
4. Ishay, Micheline R. The history of human rights: from ancient times to the globalization era (new delhi: orient Longman, 2004).
5. Jois, M.Rama seeds of modern public law in ancient Indian jurisprudence and human rights-bharatiya values (lucknow: eastern book company, second edition,2000).
6. Chowdhury, Rahman Azizur, (el ed) issues in human rights (2010)
7. Jois, m. Rama legal and constitutional history of India: ancient legal, judicial and constitutional system, (Delhi: universal law publishing co. Pvt. Ltd. Reprint 2004).
8. Patel, N Bimal, a comprehensive guide of laws of human rights in common wealth countries (2007)
9. Anand, A. S. Justice for women (third edition 2008).
10. Koenig, Mattnias and Paul de Guchteneire (ed) democracy and human rights in multicultural societies (2007)
11. Addicott, F Jeffrey, (el ed), Globalization, international law and human rights (2012)
12. Bhat, P. Ishwara fundamental rights: a study of their interrelationship (2004).
13. Chakrabarti, Nirmal Kanti Dr. (ed), law and child (2011)
14. Clapham, Andrew, human right: a very short introduction (new york: oxford university press, 2007)
15. Lohoti, justice R.C., preamble: the spirit and backbone of the constitution of India Llucknw: Eastern book company, first edition, 2004)
16. Mohanty, Jagannath, Human rights education (2000)
17. N S sreenivasulu Dr. Human rights: many sides to a coin (2004)
18. Naikar, N Lohit, the law relating to human rights (2004)
19. Ness, peter van debating human rights: critical essays from United States and Asia, (London: Rutledge, first edition, 1999).
20. Nirmal, J Human rights in India: historical, social and political perspective, (New Delhi: oxford university press, 1999)
21. R K Narasimham, Human Rights and social Justice (1999)
22. Saksena, K. P human rights and the constitution; vision and reality, (New Delhi: Gyan publication house, 2003).
23. Scolnicor, Snat the right to religious freedom in international law: between group rights and individual rights (2011)
24. Shami, Nayyar (ed.) Human rights in the New Millennium (2003)

25. Sircar, V K, Protection of Human Rights in India (2005)
26. Stone, julius social dimensions of law and justice, (new delhi: universal law publishing co. Pvt. Ltd)
27. Symonides, janusz (ed), human rights: concept and standard (2002)
28. Vijapur, p abdulrahim and suresh kumar (ed) perspectives on human rights (2003)
29. Handbook of human rights and criminal justice in india: the system and procedure (2007)

ICFAI Law School (ILS)
Doctor of Philosophy (Ph.D.)
Course Work (Full-Time and Part-Time Scholars)

Course: International law			Semester: II
Course Code:	LTP	300	Credits: 3

Objectives: To know basic principles of international law, its institutions, and conventions, and modern development.

Syllabus

Introduction	6
Evolution of international Law; Sources of international law (Treaties, Customs, General Principles of Law, Judicial Decisions and Opinion of the Jurist and Writers, other sources of law, law making through international organization); Codification and Progressive Development; Role of International Law Commission.	
Individual as a subject of International Law	6
Nationality; extradition; asylum—territorial and extra-territorial; UNO & Human Rights—UDHR, Covenant on Civil Political Rights, 1966, Covenant on Economic Social and Cultural Rights, 1966.	
Law of Treaties	5
Concept of treaty in international law; nature, scope and importance of treaty; Vienna Convention on Law of treaties, historical background of the law of treaty; capacity, conclusion and entry into force; reservation and problem of unequal treaty; interpretation, jus cogens, amendment, invalidity, termination and suspension, Pacta Sunt Servanda, Rebus Sic Stantibus and succession.	
Law of Sea	5
Evolution and recent developments; territorial sea and contiguous zone; continental shelf; exclusive economic zone (EEZ); high seas; landlocked states; exploration, exploitation and management of the resources of the international sea-bed area; protection and preservation of marine environment.	
Air Space and International Law	5
Aircraft hijacking; important conventions relating to airspace – Paris, Havana, Warsaw and Chicago conventions; five freedoms of air; legal regime of outer space; important conventions such as outer space treaty.	
Jurisdiction of State	5
Nationality, its acquisition, loss and proof; double nationality and statelessness; criminal jurisdiction; basis of criminal jurisdiction; international criminal law and international criminal tribunals; aliens—acquired rights of aliens and responsibility of state for injuries to aliens; sovereign immunity—immunity of States; immunity of state organs and property.	

International Institutions**5**

Legal personality; League of Nations; United Nations – origin and purposes; agencies of United Nations; specialized agencies of United Nations- ILO, WHO, UNESCO.

Settlement of Disputes and Role of International Court of Justice**5**

International adjudication in a historical perspective; International Court of Justice-a principal organ and principal judicial organ of the United Nations; Organization and Structure of the ICJ; Peaceful Methods and Coercive Methods of Settlement of Disputes.

Suggested Readings:

1. Stark J G, *Introduction to International law*, Butterworths, 1996
2. Brierly J L, *The Law of nations*, Fourth edition
3. Brownlie, I, *Principles of Public International law*, oxford, Fourth ed, 1990
4. Kapoor, Shyam Kishore. *A text book of international law*. No. 341. Central Law Agency, 1982.
5. Akehurst M, *A Modern Introduction to International law*, sixth ed, 1987
6. Jarros D J, *Cases and Materials on International law*, fifth ed, 1998
7. Oppenheim, *International law*, ninth ed, 1992, by h Lauterpacht (ed.)
8. Wallace RMM, *International law*, Sweet & Maxwell, London, second ed, 1992

ICFAI Tech School (ITS)
Doctor of Philosophy (Ph. D.)
Course work (Full-Time and Part-Time Scholars)

Course: Advanced Database Management System			Semester I
Course Code:PHDADMS-101	L T P	3 0 0	Credits: 3

Objective

To educate students about advanced developments pertaining to databases and database management systems. Course covers review of DBMS concepts, deadlock handling, homogenous and heterogeneous database, data mining query language.

Syllabus

Basic Database Concepts and Transaction Management **9**

Review of DBMS concepts, relational database systems and applications of DBMS
Concurrent executions, serializability view and conflict serializability and recoverability

Concurrency Control and Recovery System

12

Lock based protocols, timestamp based protocols, validation based protocols, deadlock handling, insert and delete operations.

Failure classification, recovery and atomicity, log based recovery, shadow paging, buffer management and remote backup systems

Distributed Database and Advanced Data Types **11**

Homogeneous and heterogeneous databases, distributed transactions, commit protocols and concurrency control in distributed databases.

Time in databases, spatial and geographic databases and multimedia databases

Advanced Applications **10**

Knowledge discovery and data mining, data mining functionalities, classification of data mining systems, data warehousing concepts, slicing, dicing, schemas, data warehouse architecture, introduction to Data Mining Query Language (DMQL), Study of typical DBMS packages.

Suggested Readings

1. Silberchatz, A., Korth, H. F. and Sudarshan, S., *Database System Concepts*, 6th Ed., Tata-McGraw Hill, 2010.
2. Han, J. and Kamber, M., *Data Mining: Concepts and Techniques*, 2nd Ed., Morgan Kaufmann, 2006.
3. Ray Chhanda, *Distributed Database Systems*, Pearson, 2009.
4. Date, C. J., *An Introduction to Database Systems*, 8th Ed., Pearson, 2008

ICFAI Tech School (ITS)
Doctor of Philosophy (Ph. D.)
Course work (Full-Time and Part-Time Scholars)

Course: Communication System Design			Semester: I
Course Code: PHDECE-101	L T P	3 0 0	Credits: 3

Objective:

To familiarize students with communication theory, algorithms and implementation architectures for essential blocks in modern physical-layer communication systems (coders and decoders, filters, multi-tone modulation, synchronization sub-systems). The course is hands-on, with a project component serving as a vehicle for study of different communication techniques, architectures and implementations.

Syllabus

Course Overview**8**

CppSim, Introduction to practical digital communications, Multi-tone systems, Verilog® review, 802.11a transceiver architecture, ASIC design, 802.11a PHY standard, Micro-architecture and transformations, 802.11 transceiver systems.

Design Flow**8**

Bluespec™ overview, Bluespec™, Synthesis, Design Flow, Bluespec™ Simulator, Bluespec™ Compiler

Fast Fourier Transform**8**

Theory and algorithms, Fast Fourier transform practical aspects and basic architectures, Design flow, Fast Fourier transform- advanced VLSI architecture.

Coding and Error Control**10**

Convolutional codes, Design flow, Trellis codes, Viterbi algorithm, Design flow, Block Codes- introduction, Block codes: code classes and Reed-Solomon codes, Block Codes implementations.

OFDM Techniques**8**

Synchronization introduction, Synchronization OFDM, Orthogonality, Synchronization: implementations, Wireless Channels, Channel estimation.

Suggested Readings

1. Stephen B. Wicker, “*Error control systems for Digital communication and storage*”, Prentice Hall, Upper Saddle River, NJ, 1995..
2. Bernard Sklar, “*Digital Communications, Fundamentals and Applications*”, Second Edition, Pearson Education, 2001.

3. Leon Garcia and Widjaja, “ *Communication networks: Fundamental concepts and key architectures*”, McGraw Hill, Inc., NY, USA, 2006

Doctor of Philosophy (Ph.D)
Full-Time and part-Time Course work
Faculty of Science & Technology

Course: Research Methodology-II			Semester: I
Course Code: PHDRMM-102	L T P	3 0 0	Credits: 3

Objective

To familiarize the students with the execution of research it covers literature survey, research gap, objective and scope of research, fabrication methods, structure and components of scientific reports and use of computers in research.

Syllabus

Execution of the Research

12

Literature survey, Research gap, Objective and scope of research, Timeline graph, Methodologies, Processes for the fabrication/preparation of materials/devices.

Scientific Report Writing

13

Types of report, Technical reports and thesis, Scientific writing: Scientific Document; Organization and writing of research paper, Writing review articles, Presentation of research: Oral and Written (abstracts/synopsis).

The Computer: Its Role in Research

14

Introduction, The computer and computer technology, Computer system, important characteristics, Computer applications, Computers and researchers, MS-Office-Power point, Word, Excel. Uses of Microsoft Excel and power point.

Code of Ethics on Research and Publications

3

Research ethics, publication ethics and good practice guidelines.

Suggested Readings:

1. Garg, B.L., Karadia, R., Agarwal, F. and Agarwal, U.K., 2002. *An introduction to Research Methodology*, RBSA Publishers.
2. Kothari, C.R., 1990. *Research Methodology: Methods and Techniques*. New Age International.
3. Kumar R, *Research Methodology: A step by step guide for beginners, 3rd Edition*, Imprint: SAGE Texts

ICFAI Tech School (ITS)
Doctor of Philosophy (Ph. D.)
Course work (Full-Time and Part-Time Scholars)

Course: Research Methodology-I			Semester: I
Course Code:PHDRMM-101	L T P	3 0 0	Credits: 3

Objective

To impart the student with the principles of research methodology which are used in research studies.

Syllabus

Introduction

7

Meaning, objectives and significance of research, Objectives of research, Motivation in research, Types of research, Research approaches, Significance of research, Research methods versus methodology, Research and scientific method, Research process, Features of good research, Problems encountered by researchers in India

Defining the Research Problem

7

Nature of research problem, Selecting the problem, Necessity of defining the problem, Techniques of defining a problem, Illustration for defining the research problem.

Research Design

7

Meaning of research design, Need for research design, Features of a good design, Major concepts relating to research design, Different research designs.

Sampling Design

7

Implications of a sample design, Steps in sampling design, Selecting a sampling procedure, Characteristics of a good sample design, Types of sample designs.

Measurement and Scaling Techniques

7

Measurement in research, Measurement scales, Sources of error in measurement, Tests of sound measurement, Technique of developing measurement tools, Scaling, Meaning of scaling, Scale classification bases, Major scaling techniques, Scale construction techniques.

Data analysis

7

Data processing and analysis strategies, Data analysis with statistical packages, Hypothesis-testing, Generalization and interpretation. Statistical modeling and analysis, Probability distributions.

Suggested Readings

1. Garg, B.L., Karadia, R., Agarwal, F. and Agarwal, U.K., 2002. *An introduction to Research Methodology*, RBSA Publishers.

2. Kothari, C.R., 1990. *Research Methodology: Methods and Techniques*. New Age International. 418p.
3. Kumar R, *Research Methodology: A step by step guide for beginners, 3rd Edition*, Imprint: SAGE Texts

Course: Research Methodology-II	Credit: 3
Course Code: PHDRMT-102	No of Sessions: 36, Duration: 1 hour

Course Objective: To impart the students with research tools specific to science and engineering disciplines. It covers fabrication methods, softwares and scientific instruments, structure and components of scientific reports.

Methods of sample preparation and fabrication

Processes for the fabrication materials used in design of machines, structures, tools and for the application in science and technology.

Software design and instrumentation

Matlab, ANSYS Application, ProE and ORIGIN softwares, XRD, SEM, TEM, FTIR, CNC, ASS, Testing analysis

Scientific Report Writing

Types of report, Technical reports and thesis, Scientific writing: Scientific Document; Organization and writing of research paper, Writing review articles, Presentation of research: Oral and Written (abstracts/synopsis).

Suggested Readings:

1. Garg, B.L., Karadia, R., Agarwal, F. and Agarwal, U.K., 2002. *An introduction to Research Methodology*.
2. T. Stolarski, Y. Nakasone and S. Yoshimoto, Engineering analysis with ANSYS software, Elsevier Butterworth-Heinemann

ICFAI Tech School (ITS)
Doctor of Philosophy (Ph. D.)
Course work (Full-Time and Part-Time Scholars)

Course: Structure and Bonding in Materials			Semester: I
Course Code: PHDSBM-101	L T P	3 0 0	Credits: 3

Objective

To familiarize the students with the role of bonding in the structure formation of materials. The study with this course shows how the property of a material reflects on its applications. The course imparts the structures of crystalline solids, ceramics, polymers, nanomaterials, biomaterials and some of the important characterization techniques.

Syllabus**Atomic Structure and Some General Chemical Properties** **7**

Fundamental concept of atomic structure, electrons in atoms, atomic spectra, Schrödinger equation, electron orbitals, Aufbau principle, Pauli exclusion principle and Hund's rules. bonding forces and energies, electronegativity, ionization potential, polarization.

Chemical Bonding **7**

Ionic bonding, covalent bonding, metallic bonding, hydrogen bonding, van der Waals bonding, bond theory, VSEPR theory, Hybridisation

Structures of Crystalline Solids **6**

Crystal structures (crystal systems, crystallographic points, directions and planes), FCC, BCC and HCP crystal structures of metals, density computations of metals, atomic arrangements, linear and planar densities

Ceramic and Polymer Structures **8**

Crystal structures of ceramic, Imperfection in ceramics, stress and strain behavior, glass ceramics, clay products, refractories, abrasives, advanced ceramics, chemistry of polymers, molecular weight, molecular structure, copolymers.

Structure of Materials of Importance **8**

Nanomaterials, biomaterials, smart materials, semiconducting materials, optoelectric material, superconducting material.

Structure Characterization **6**

X-ray diffraction microscopy, scanning electron microscopy, transmission electron microscopy, atomic force microscopy, scanning tunneling microscopy.

Suggested Readings

1. Lee, J. D., *Concise Inorganic Chemistry*, Blackwell Science, OUP.
2. Atkins, P. W., *Elements of Physical Chemistry*.
3. Balasubramaniam, R., *Callister's Materials Science and Engineering*, Wiley publication
4. Cullity, B. D., *Elements of X-ray Diffraction*, Addison-Wesley Publishing Co.
5. Flewitt, P. E. J. and Wild R. K., *Physical Methods for Material Characterisation*, Institute of Physics Publishing.