Ph.D. Course Work for the Centres for Development Studies, Life Long Learning & Extension and Extension Education

Date: 18.08.2017

Venue: Geoinformatics Block

School of Health Sciences & Rural Development
The Gandhigram Rural Institute – Deemed University
Gandhigram – 624302, Dindigul District
Tamil Nadu

School of Health Sciences & Rural Development

Centres for Development Studies, Life Long Learning and Extension Ph.D Course Work

Core Courses

Semester	Paper Code	Course Title	Credits	Total
	17SRDR0101	Dimensions of Rural Development	4	
I	17SRDR0102	Planning and Management of Rural Development	4	
	17SRDR0103	Adult, Continuing Education and Extension	4	
	17APRR0101	Research Methodology	4	24
	17APRR0205	Quantitative methods	4	
II	17SRDR02SX	Specific course to be prescribed by the Doctoral Committee	4	
	Seminar (3) Term paper / To	pical Research		
III Semester	Research Credit a) Project plann finalization of	4		
onwards	b) Field / Lab St	f objectives and methodology tudies, Data collection, compilation of ical anlalysis, results and final conclusion.	32	
End of Program	c) Synopsis and	6		

List of courses that are candidate centric (17SRDR02SX)

17SRDR02S1	Corporate Social Responsibility for Rural Development
17SRDR02S2	Social Audit
17SRDR02S3	Project Monitoring and Evaluation
17SRDR02S4	Public Health and Sanitation
17SRDR02S5	NGO Management
17SRDR02S6	Financial Inclusion
17SRDR02S7	Rural Livelihood
17SRDR02S8	Training and Development
17SRDR02S9	Skill Development and Entrepreneurship

DIMENSIONS OF RURAL DEVELOPMENT

Objective:

• To expose the scholars to the various facets of Rural Development

Learning Outcome:

- The Scholars enabled to learn about the Rural Society and its Economy
- Diagnose the strategies of Rural Development followed in India and Asian countries
- Learn about the methodologies in the transfer of technologies through Extension services
- Gain knowledge about significance of local governance and local Institutions in Rural Development

Develop	COURSE: 1		
17SRDR0101	DIMENSIONS OF RURAL DEVELOPMENT	Credit 4	
	Rural Society and Economy: Demography - Social & Economi	c structure _	
	Poverty – social differentiation and stratification- leadership patter		
Unit - 1		•	
Omt - 1	a unit of production, consumption and exchange-disintegration of	•	
	system-techniques of production in the villages-functional specialization and		
	interdependence- need for Inclusive and Sustainable Development.	134 11 0	
	Rural Development: Concept, Structure, Experiments, Strategies a		
	Best practices; Rural Development in India - Historical perspecti		
Unit - 2	Post independent experiments- Nationalist Movements- Rural	-	
	during the Five Year Plan periods -PURA and Rurban Mission; F	-	
	rural development in international settings-Rural Develop	nent: Asian	
	Perspective.		
	Rural Development – Agrarian Issues – Peasant Movements durin	g pre British,	
	Colonial and post-colonial era –Agrarian struggles under Ki	san Sabhas-	
Unit - 3	Modern Indian agrarian classes- Bhoodan and Gramdan moven	nents Land	
	Reforms- Green Revolution - Agricultural Extension Systems in In	dia- Transfer	
	of Technology Models (ToT)- Para Extension Services.		
	Management of Rural Development - New public mana	gement and	
	decentralization reforms in India-Public Policy framewor	k for rural	
TT .*4 4	development Administrative Structure - Indian Model of	Rural Local	
Unit - 4	Governance-New Panchayati Raj – Idea of local governance	in history-	
	Decentralization Theorem- Decentralized Planning. Cooperati	ves – Civil	
	society organizations - Rural Credit and Financial institutions		
	Basic Services and Infrastructure for rural development: Access a	nd utilization	
	of basic services (Education, Health, Drinking Water, Sanitation, 7	Transport and	
	Communication, Energy and Housing). Transparency and Acco	ountability in	
Unit - 5	public service delivery system. Public Private Partnerships (PPP	s), GO-NGO	
	Partnership and Public Grievance Redressal system- stakeholders	•	
	Citizen's Charter, Performance Reports and Role clarity.		

References:

- 1. Katar Singh and Anil Shishodia (2016), Rural Development Principles, Policies and Management, Sage Texts, New Delhi,.
- 2. Reji D.Nair (2016), Natural resources Management and Agrarian Development, Concept Publishing House, New Delhi.
- 3. Chambers, Robert (1998): Poverty in India: Concepts Research and Reality, Discussion Paper 241. Brighton: IDS.
- 4. Lalitha N (2004), Rural Development Volume I and II Trends and Issues, Dominant Publishers, New Delhi.
- 5. Venkatta Reddy.K (2000) Rural Development in India, Himalaya Publishing House, New Delhi.
- 6. M.P.Boraian (Ed.) (2016), Best Practices in Rural Development, Shanlax, Madurai.
- 7. Suman Chandra K, Suresh Babu, V & Nath P.K: (2013), Agrarian Crisis in India The Way Out, NIRD, Hyderabad.
- 8. India Rural Development Report (2005), NIRD, Hyderabad
- 9. Rural Infrastructure and Welfare of the Poor (2001)
- 10. Infrastructure for Rural Poor (2003)
- 11. Gramsat: Utility and Effectiveness (2007)
- 12. Sri Sathya Sai Safe Drinking Water Project, Anantapur A Case Study (2000)
- 13. Management of Rural Sanitation Programme: Successful Case Studies (2000)
- 14. M.P.Boraian (Ed.) (2016), Best Practices in Rural Development, Shanlax, Madurai.

PLANNING AND MANAGEMENT OF RURAL DEVELOPMENT

Objective:

• This paper will expose the scholars to the Concepts, methods and practices of planning and Management of Rural Development

Learning Outcome:

The scholars will gain the following:

- Learn about the multi level planning and mapping of community resources
- Understand the dimensions of rural projects and project formulation
- Develop skills in project designing, monitoring and evaluation
- Acquire basic knowledge about voluntary Action and organization
- Gain basic knowledge about the significance of social audit

	COURSE: 2		
17SRDR0102	PLANNING AND MANAGEMENT OF RURAL	Credit 4	
	DEVELOPMENT		
	Rural Development: Planning – Process – stages – (Multi-level – Distric		
Unit - 1	State - National) - Grassroots Level Planning- Bottom up Approac		
	management- Local participation-Rural Research and Development-Mapping of		
	Community Resources.		
	Rural Development Projects: Dimensions Project Types: (
	Business Based & Opportunity / Issue Targeted. Concept of Project Planning,		
	Macro & Micro Planning. Project Formulation - Appraisal	(Technical,	
Unit - 2	Economic, Financial and Environmental feasibilities.		
	Concept of LFA, Stakeholder Analysis, Problem Tree and Obj	iectives Tree	
	analysis, Analysis of strategies, Fixing project output and activity,		
	and Risks - Project Implementation.	1	
		-	
	Planning & Designing a Monitoring plan, Key National &		
	Monitoring Systems. Evaluation Framework and different models, Steps of		
Unit - 3	Evaluating a Project, Types of Evaluation, Impact Assessment - Concurrent,		
	Formative & Summative- Monitoring and Evaluation indicators.		
	Community monitoring and evaluation- Participatory Techniques- l	PKA.	
	Voluntary Action in India-voluntary action before and after independent	endence- role	
Unit - 4	of Christian Missionaries. GO-Government Relations- Co	onstraints in	
Umt - 4	voluntarism, resource mobilization and funding -People's participation –		
	Community based committees - Administration – Monitoring.		
Unit - 5 Social Audit – Basis, Objectives and Advantages of		Appropriate	
Omt - 3	institutional level for social audit-Social Audit Committees-Ste	eps in social	

audit- key factors for successful social audit- Social Audit Cycle- methodology - relevance - strategies - impact. Hindrances in social audit-social accounting and audit.

References:

- 1. Katar Singh and Anil Shishodia (2016), Rural Development Principles, Policies and Management, Sage Texts, New Delhi,
- 2. Austin, Vincent: Rural Project Management: A Handbook for Students and Practitioners, Batsford Ltd, London, 1984.
- 3. Rural Development Planning and Management (IGNOU Help book), Gullybaba Publishing House Pvt. Ltd., Delhi.
- 4. <u>Pandey, Devendra Prasad,</u> Management of Rural Development Projects, New Age International, New Delhi, 2017.
- 5. Roberto Mosse & Leigh Ellen Sontheimer: Performance Monitoring Indicators Handbook (World Bank Technical Paper No. 334), World Bank, Washington, D. C., 1996.
- 6. Yamini Aiyar,Soumya Kapoor Mehta & Salimah Samji: A Guide to Conducting Social Audits: Learning from the Experience of Andhra Pradesh, Accountability Initiative Centre for Policy Research, New Delhi.

ADULT, CONTINUING EDUCATION AND EXTENSION

Objectives:

- To make the students to understand the concept, need and importance of Adult Education and Continuing Education.
- To help the students to become aware of the national policies and programmes of Adult Education in India and abroad.

Learning Outcome:

- To help the students to become aware of the national policies and programmes of Adult Education in India and abroad.
- To make the students understand the concept, phases, need and importance of training Adult and Continuing Education.
- To impart knowledge on management and information system and evaluation methods.
- To appear and pass students in National Eligibility Test conducted by University Grants Commission.

17SRDR0103	ADULT, CONTINUING EDUCATION AND EXTENSION Credit 4
	Concepts and Terminologies: Andragogy and Pedagogy - Illiteracy and it
	types, Literacy and its types - traditional, functional, mass, rapid, legal
Unit – 1	technological - Adult Education Continuing Education, Lifelong Learning
	recurrent Education - Formal education, - Non - Formal education, informa
	education – Development and its indicators. Adult education and development
	Social, economic and cultural – Extension Education
	History of Adult Education: Adult Education in pre – Independence India
	Post – Independence India from 1947 upto the Twelth Five year plans – Farmer
	Functional literacy – Gram shikshan mohim, National Adult Education
Unit – 2	programme - Mass programme for Functional literacy, centre model versu
	each-one teach – one model – Adult Education in China, Denmark, Vietnam
	Tanzania – Role of NGOs with special reference to Bengal social service league
	literacy house, seva mandir, Gandhigram Rural Institute, Sriniketan
	Curriculum methods, Techniques of material preparation for Adults
	Psychology of Adults – Characteristics of Adult learners, Theories of Adult
	learning – motivational aspects of Adult learning – Developing curriculum
Unit – 3	types of curriculum – Different teaching methods, Teaching and learning
	materials for Adults, Teaching aids. Identification and preparation of books fo
	illiterates, literates (neo), publication and marketing of materials, Developmen
	of materials – print and non - print
	Current Trends in Adult Education / Lifelong Learning: National Literacy
	Mission (NLM), Total Literacy campaign (TLC), post – literacy campaign
Unit – 4	(PLC) and other programmes of NLM. Role of NGOS, Universities and other
	Government agencies in support of the NLM – Unesco's efforts – Strategies fo
	bringing Extension as the third dimension of the university system, Role and

	functions of Department of Adult Continuing Education and Extension, models			
	for Extension work. Role of Adult Education teacher educators in the twenty -			
	first Century – open learning			
	Continuing Education, Training, field organization: Jana Shiksham Nilayam,			
	Jana Shikshan Sansthan (Shramik Vidyapeeth), Continuing Education courses,			
	Continuing Education and technology, NIOS, OBE, Continuing education and			
I I:4 5	vocational courses – planning forums, legal literacy programmes – Application			
Unit - 5	of management principles at program, project, Management - Information			
	system for programme efficiency – Educational technologies, participatory			
	communication methods - Training for functionaries in ACE, NGOs,			
	participatory approach.			

References Books:

- 1. Aggarwal, J.C., Adult & Social Education in India, Global Perspective, New Delhi, 1989.
- 2. Grover, R.P. Rita Chopra, Adult Education, The Indian Publications, Ambala Cantt, 1998.
- 3. Kundu, C.L., Adult Education, Principles, Practice and Prospects, Sterling Publishers Pvt. Ltd., New Delhi, 1984.
- 4. Madan Singh, Adult Education in 21st Century, The Associated Publishers, Ambala Cantt, 2001.
- 5. Mohanty J., Adult and Non Formal Education, Deep & Deep publications Pvt. Ltd., New Delhi, 2002.
- 6. Parashar B.P., A Text Book of Adult Education, Dominant Publishers and Distributors, New Delhi, 2005.
- 7. Rajendra Singh Yadav, Adult Education Concept Theory and Practice, The Associated Publishers, Ambala Cantt, 2002.

Journals:

- 1. Indian Journal of Adult Education: Indian Adult Education Association, 17 B Indraprastha Estate, New Delhi, 1939 2017.
- 2. Journal of Extension and Research "The Gandhigram Rural Institute Deemed University, Gandhigram", 1990 2017.
- 3. International Journal of Adult and Lifelong Education: International Institute of Adult and Lifelong Education, 17 B, I.P. Estate, New Delhi, 2006 2017.
- 4. Indian Journal of population Education, Indian Adult Education Association, 17 B, I.P. Estate, New Delhi 110 002, 1940 2017.

Websites:

- 1. www.nlm.nic.in
- 2. www.onlinecollegedegree.net

- 3. www.periodicals.com/stock_e/j/tt/12674.html
- 4. www.populationeducation.org
- 5. www.regiuniversityonline.org
- 6. www.southuniversity.online.com
- 7. www.aace.org
- 8. www.adulted.about.com

COURSE - I: RESEARCH METHODOLOGY

Course Code: 17APRR0101

Credit: 4 Contact hours: 64

Max. 100 marks

Course Objectives

- To develop scientific skills and expertise in formulating problem for research
- To evolve research designs, and use of methods and techniques in conducting research, and
- To develop professional skill in writing a research report

Learning outcomes: Upon completion of the course, the scholars will be able to:

- Identify and formulate a problem for research
- Prepare a suitable research design for carrying out the research
- Choose appropriate tools and techniques for data collection
- Professionally drawing of inferences
- Prepare research report and disseminate research findings

Unit – 1: Scientific Research – Methods of acquiring knowledge; Objectivity and Subjectivity in Research; Epistemology, Phenomenology, Positivism, Constructivism, Pragmatism- Inductive and Deductive Reasoning, Scientific Method and its applications; Research Paradigms and Ethics in Research.

Unit - 2: Research Process: Identification, Selection and Formulation of problem, Sources and criterion for selection; Review of literature and Summarizing, Conceptual Model; Objectives, Hypothesis formulation, Variables and its types.

Unit - 3: Research Designs and Methods: Experimental, explorative, descriptive and historical research; Diagnostic and Evaluation studies, Qualitative and Quantitative studies, Trend and Futuristic studies, Ethnography, Grounded Theory, Mixed Methods.

Unit - 4: Sampling Techniques and Data Collection: Sampling and Sample Designs: Census Vs Sample Methods – Laws of Sampling; Methods of Sampling. Sample Size; Sampling and Non Sampling Errors; Reliability of Samples; Data – Primary and Secondary data – Data Collection Tools, Content Analysis Psychological tests and Scaling Techniques –Pre-test, Test of Validity and Reliability.

Unit - 5: Data Interpretation and Report Writing: Data processing – Scoring, Categorization and Coding – Draw of inferences and interpretation. Research Report –Steps in writing Research Report, Types of reports, Format of a research report; Bibliography, Webliography, Style of writing; Plagiarism check–Evaluation of a research report; Dissemination of research findings- Presentation and Publication.

REFERENCES:

TEXT BOOKS

- Bridget Somekh and Cathy Lewin, Theory and Methods in Social Science Research, New Delhi:
 Sage Publication, 2012
- Creswell, John.W. Research Design: Qualitative, Quantitative, and Mixed Method Approaches (4thed). Thousand Oaks, CA: Sage, 2014.
- Debasis Chakraborthy, Research Methodology, New Delhi: Sourath Publishing House, 2012
- Deepak Chawala and Neena Sandhi, Research Methodology: Concept of Cases, New Delhi: Vikas Publication House Pvt Ltd, 2011
- Kenneth's Barden and Bruce B.Abbott, Research Design: Qualitative and Quantitative Approaches, Tata MaGrewHill Education Pvt, New Delhi, 2011.
- Kothari.C.R, Research Methodology (Methods & Techniques), New Delhi: New Age International (3rded), 2014.
- Kundra S., Reporting Methods, New Delhi: Anmol Publications Pvt. Ltd., 2005.
- 100 Questions and Answers about Research Methods, New Delhi: Sage Publication, 2012

JOURNALS

- Economic Development and Cultural Change
- Indian Journal of Social Work
- International Journal of Applied Research
- Journal for Extension and Research
- Journal of Social Science Research
- Journal of International Development
- Journal of Social Science
- Journal of Rural Development
- Journal of Social Research and Policy
- Social Change

WEBSITES

- https://www.socialresearchmethods.net/
- https://ndl.iitkgp.ac.in/
- http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291099-1328/issues
- http://shodhganga.inflibnet.ac.in/
- http://onlinelibrary.wiley.com/
- http://www.oiirj.org/
- http://journals.sagepub.com/
- https://www.ijser.org/
- http://www.ierj.in/
- https://www.aace.org/pubs/jolr/

LECTURE SCHEDULE

Unit	Lecture Number	Topics to be covered	Mechanism
	1	Methods of acquiring knowledge	L, PPT
	2	Objectivity and subjectivity in Research	L, PPT
l	3	Epistemology	L, PPT
	4	Phenomenology	L, PPT

	5	Positivism, Constructivism	L, PPT
	6	Pragmatism	L, PPT
	7	Inductive and Deductive reasoning	L, PPT
	8	Scientific Methods	L, PPT
	9	And its applications	L, PPT
	10	Research Paradigms	L, PPT
	11	Research ethics	L, PPT
	12	Research process-Identification	O, S
	13	Selection and Formulation of problem	O, L
	14	Sources and criterion for selection	O, S
	15	Review of literature	O, L
	16	Conceptual Model	O, S
	17	Conceptual Model	O, L
	18	Objectives	O, L
	19	Hypothesis formulation	O, S
	20	Variables and its types	O, L
	21	Research design and Methods	O, S
	22	Experimental design	D, L
	23	Explorative design	D, L
	24	Descriptive design	D, L
Ш	25	Historical research	D, L
	26	Diagnostic studies	D, L
	27	Evaluation studies	D, L
	28	Qualitative studies	D, L
	29	Quantitative studies	D, L
	I	1	1

	30	Case Study	D, L
	31	Trend and Futuristic studies	D, L
	32	Ethnography	D, L
	33	Ground theory	D, L
	34	Mixed Methods	IL
	35	Mixed Methods – Types	D, L
	36	Instruments for data collection	L, PPT
	37	Primary and Secondary data	A, Se
	38	Observation	A, Se
	39	Interview	A, Se
IV	40	Questionnaire	A, Se
	41	Schedule	A, Se
	42	Projective techniques	A, Se
	43	Content analysis	A, Se
	44	Focus group	FV, D
	45	Online tools	IL
	46	Survey	A, Se
	47	PRA	FV, D
	48	Psychological tests	A, Se
	49	Scaling techniques	A, Se
	50	Pre-test	A, Se
	51	Test of validity and reliability	A, Se
	52	Data processing	L, PPT
V	53	Scoring, Categorization and Coding	L, PPT
	54	Draw inferences and interpretation	L, PPT

55	Steps in writing research report	L, PPT
56	Types of reports	L, PPT
57	Format of a research report	L, PPT
58	Bibliography, Webliography	L, PPT
59	Style of writing references	L, PPT
60	Plagiarism check	L, PPT
61	Evaluation of a research report	L, PPT
62	Dissemination of research findings	L, PPT
63	Presentation	L, PPT
64	Publications	IL

A - Assignment; D - Demo; FV - Field Visit; IL - Invited Lecture; L – Lecture; PPT - Power Point; O - Online sources; Se – Seminar; S - SWAYAM

COURSE – II: QUANTITATIVE TECHNIQUES Course Code: 17APRR0202

Credit: 4 Contact hours: 64

Max. 100 marks Course

Objectives

- 1. To develop an understanding of the basic concepts and fundamental principles guiding the use of quantitative methods, acquire basic practical skills with regard to the performance of statistical analysis and develop the ability to critically examine quantitative analysis in the research process.
- 2. To enhance skills as well as the ability to independently formulate and adequately analyze quantitative research questions.
- 3. To develop the ability to independently, critically and efficiently collect and summate the most relevant quantitative research findings within a specific/defined research area.

Learning outcomes: Upon completion of the course, the doctoral scholars will be in a position to demonstrate the following:

- 1. Explain the basic concepts and principles associated with quantitative techniques;
- 2. Skill to perform basic quantitative analysis, including choosing the appropriate techniques, interpreting the outcome and reporting the results;
- 3. Summarize and critically examine the quantitative research findings in a highly knowledgeable, independent and theoretically informed way, and
- 4. Ability to incorporate quantitative research findings and qualitative research findings and/or quantitative research findings and theoretical work within a specific research area.

- UNIT 1: Descriptive Statistics: Central Measures; Variability Measures; Skewness Measures Inductive, generalization and data modeling and Working with databases; Correlation and Regression Simple problems.
- **UNIT 2:** Probability: Basic Concepts, Definitions of Probability Different approaches to probability; Binominal, Poisson and Normal Distributions Simple Problems.
- **UNIT 3:** Inferential Statistics: Basic Concepts; Type I and Type II Errors; Steps in Hypothesis Testing; Tests of Attributes, Small and Large Sample Tests Test based on Normal, t, F Mean and Variance; Chi-square Test Goodness of fit and independents; Analysis of Variance One way and Two way Analysis with illustrations; Non parametric Tests Test of Randomness Mann Whitney U Test; Kruskal Walli's Test.
- **UNIT 4:** Multivariable Analysis: Multiple Correlation and Regression with three variables, Partial Correlation and Regression Logistic Regression Analysis; Factor Analysis, Discriminant Analysis; Cluster Analysis; Demonstration with Software Packages.
- **UNIT** − **5**: Practical: Data Processing, Analysis and Interoperation Use of Statistical Softwares; R − State, SPSS, STATA

BOOKS

- Alvin.C. Rencher, William F. Christensen, **Methods of Multivariate Analysis, 3rd edition,** Wiley, (2012).
- Blalock, H.J, **Social Statistics**, New York; MC Graw Hill, (1960).
- David R. Abderson, Dennis. J. Sweeney, Thomas.A Williams, Jeffrey.S Camm, James.J.
 Cochran Statistics for Business and Economics, 13^e Revised CENGAGE Learning USA, (2017).
- Gupta, S.P., Statistical Methods, Sultan and Chand Publications New Delhi
- Johnson R.A, Wichern D.W, **Applied Multivariate** Statistical Analysis, Prentice Hall Saddle Revier, NJ, USA (1988).
- Krishnaswami, O.R and M. Renganatham, Methodology of Research in Social Sciences, Mumbai; Himalaya Publishing House (2010).
- Kenblack, Business Statistics; for Contemporary Decision Making: 8th edition; Wiley Global Education, (2013).
- Sinha, B.L, **Statistics in Psychology and Education**, New Delhi; Anmol Publications Private Limited (2006).

REFERENCES

- Ajai S. Gaurl Sanjaya S. Gaur, Statistical Methods for Practice and Research A Guide to Data Analysis Using SPSS, Response Books Business books from SAGE, B-1.I-1, Mohan Corporative Industrial Area, Madura Road, New Delhi – 110 044 India, (2010).
- Aneshensel, Carol S. **Theory-Based Data Analysis for the Social Sciences**, Thousand Oaks, Calif., Pine Forge Press. (254 pp) (2002).
- Hair Jr, Joseph F., William C. Black, et al. Multivariate Data Analysis. Upper Saddle River, New Jersey 07458, Pearson, Prentice Hall., chapters 1–5, 8, 10–12 (2006).
- Vijayalakshmi, G and C. Sivapragasam, **Research Methods: Tips and Techniques**, MJP Publishers, Chennai (2009).

WEBLIOGRAPHY:

• Resource for methods in evaluation in social research

http://gsociology.icaap.org/methods/

Extensive site providing information on how to evaluate research. This site was created by a US academic in Sociology, Dr Gene Shackman. Information about his background and credentials are available via the site.

Research methods and statistics arena

http://www.researchmethodsarena.com/resources/resources.asp

An up-to-date guide to books and journals in research methods. Includes free datasets for SPSS. This site was compiled by Psychology Press, an Informa brand. It therefore focuses on Informa products.

• Institute tutorial in research methods

http://www.vts.intute.ac.uk/he/tutorial/social-research-methods

A tutorial on using the internet as a resource on social research methods. Funded by JISC and created by academics, tutors and librarians.

Practical examples for the analysis of surveys

http://www2.napier.ac.uk/depts/fhls/peas/index.htm

In depth guide to analyzing surveys with practical examples and resources on theory. This site is produced with a collaboration between Napier University in Edinburgh and the National Centre for Social Research.

• Economic and Social Data Service guides

http://www.esds.ac.uk/support/onlineguides.asp

A series of guides on methods, using datasets, and resources for particular research themes. Researchers based in UK universities can use specially created teaching versions of datasets as examples when using some of these guides.

• Associations, programmes and research units Economic and Social Data Service: Linking International Macro and Micro Data training:

http://wwww.esds.ac.uk/international/e-learning/limited/resource

A learning resource including downloadable PDF files and videos about combining micro and macro data and making cross national data comparisons. The ESDS is a national data archive and disseminating programme for the UK, funded jointly by the Economic and Social Research Council (ESRC) and the Joint Information Systems Committee (JISC).

• Data analysis: online manuals and guides to software packages

SPSS product site http://www.spss.com/statistics the product site for SPSS a statistical data management and analysis package, Includes free demo.

Introduction to State using the UK Labour Force Survey

http://www.esds.ac.uk/government/docs/documents/StartingStata9.pdf

A training guide produced by ESDS Government. State is a statistical analysis tool. The dataset used as an example in this guide can be downloaded by researchers and students in UK Higher Education Secondary analysis of statistics and quantitative data analysiswww.data-archive.ac.uk.

LECTURE SCHEDULE

Unit	Topics to be covered	Lecture Delivery Mechanism	Lecture Hours
	1.1. Descriptive Statistics: Measures of central value, Dispersion and Skewness	L + P + SS	4
	1.2. Correlation Analysis	L + P + S.S	2
I.	1.3. Regression Analysis	L + P + S.S	2
	1.4. Association measures	L + P	2
	Total		10
	2.1. Probability –Basic Concepts, Definitions	L	2
	2.2. Approaches to Probability	L	1
II.	2.3. Simple Problems	L + P	1
	2.4. Binominal, Poisson & Normal Distribution with application in Research	L + P	6
	Total		10

	3.1. Sampling and Designs – Basic concepts	L + S.S	2
	3.2. Census Vs Sampling	L + S.S	2
	3.3. Laws of Sampling	L + S.S	2
III.	3.4. Methods of Sampling, Reliability of samples	L + S.S	4
	3.5. Merits & Demerits, Sample Size, Errors in Sampling	L + S.S	2
	Total		12
	4.1. Inferential Statistics – Basic Concepts	L	2
	4.2. Types I and Type II Errors	L	2
	4.3. Steps in Hypothesis Testing	L + S.S	2
IV.	4.4. Small and Large Sample Tests, Test of attributes - Problems	L + P	6
	4.5. Analysis of variance – One way and two way	L+P	2
	4.6. Non – Parametric Tests	L+P	2
	Total		16
	5.1 Introduction to Multivariate Analysis	L + P	2
	5.2 Multiple Correlation and Regression	L + P	2
	5.3 Factor Analysis	L+P	2
V.	5.4 Discriminate Analysis	L+P	2
	5.5. Logistic Regression Analysis, Correspondence Analysis, and Cluster analysis	L+P	8
	Total		16
	Total		64

L – Lecture;	P – Practical;	S.S – Self Study
