

G B Pant Social Science Institute

Pre PhD Course Work Outline

The Course Work is for a semester.

The programme consists of four courses forming a set of Foundation Courses as preparatory to engaging in research and thesis writing.

The four courses are as follows:-

- i) Writing research proposal and term paper on review of literature.
- ii) Research Methodology I: Techniques of Research
- iii) Research Methodology II: Perspectives of Social Science Research and Qualitative Methods
- iv) Research Methodology III: Computer based statistical training and quantitative methods

The broad course outline for each of the course is indicated below. Faculty members will give further details of their lecture topics.

1. Writing research proposal and term paper on review of literature

This course will be a self study course under the guidance of the supervisor. At the end of the semester the student is expected to submit (i) the research proposal and (ii) a term paper consisting of a preliminary review of literature to the supervisor and assessed. The review of literature should be a standard 20 page (8000-10,000 words) paper showing evidence of having read through at least 3-5 books and 20-25 articles in the chosen field of research. The student shall make a presentation of a draft review of literature.

As it is highly unlikely that any student would be flagged off for field work and data collection before the end of 12-18 months, it is expected that the preliminary survey of literature would be followed by a much more in depth review in the following semester that would lead both to problem formulation and field work preparation subsequently.

Assessment for the course.

The preliminary review of literature and the research proposal shall be assessed by the Supervisor.

2. Research Methodology I: Research Techniques

Week	Session	Topic
Week 1	Session 1	Initiation into a Doctoral Programme What is research? What is Scholarly life?
	Session 2	How do you choose a research problem? What is a hypothesis?
Week 2	Session 1	Techniques of Reading an Article.
	Session 2	Techniques of Reading a Book.
Week 3	Session 1	Bibliographic search and Preparing a Bibliography
	Session 2	What is a Thesis?
Week 4	Session 1	Training in Writing (Review of Literature tips)
	Session 2	Training in Writing (Making a persuasive argument and analysis)
Week 5	Session 1	Writing Styles (APA, Chicago, Harvard, MLA)
	Session 2	Writing Styles (contd) (APA, Chicago, Harvard, MLA)

3. Research Methodology II: Perspectives of Social Science Research and Qualitative Methods

Week	Session	Topic
Week 6	Session 1 & 2	Perspectives on Social Science Research and the nature of evidence
Week 7	Session 1	Fundamentals of Qualitative techniques- The Interview Method
	Session 2	Narrative Analysis
Week 8 & 9		Fieldwork and ethnographic methods in sociology and anthropology
Week 10	Session 1	Qualitative methods in urban/ media/ political studies
	Session 2	Qualitative methods in Cultural studies
Week 11	Session 1	Historiography and historical methods.
	Session 2	Historiography or historical methods of political theory
Week 12	Session 1	Qualitative Methods in Development Studies Studying Agrarian political economy.
	Session 2	Qualitative Methods in Rural Development PRA, FGD, strategic transformative approaches, working with stakeholders.
Week 13	Session 1	Qualitative methods in study of labour and urban economy
	Session 2	Qualitative methods in industrial/environmental/ legal studies
Week 14	Session 1	Gender studies and gender sensitivity in research methods
	Session 2	Grounded theory techniques, Mixed methods and triangulation.
Week 15	Session 1	Qualitative methods in social sector research- Education
	Session 2	Qualitative methods in social sector research- Health
Week 16	Session 1	Discourse Analysis I
	Session 2	Discourse Analysis II
Week 17		Limitations of quantitative and qualitative techniques and their complementarity.

Assessment for the course.

- 1) A Book review for graded assessment after Week 4.
- 2) A term paper wherein students will discuss how they will use some of these techniques for a problem of their choice, preferably the thesis topic.
- 3) A three hour spot examination at the end.

4. Research Methodology III: Computer based statistical training and advance quantitative methods

Week	Session	Topic
Week 1 & 2		Word, Internet, Email, Computer-based Statistical Analysis- Excel, spread sheet, Data entry, coding, SPSS, basics of correlation, regression, variance analysis.
Week 3	Session 1	Primary data collection- Sampling and survey techniques.
	Session 2	Preparation of survey schedule
Week 4	Session 1	Data coding and tabulation.
	Session 2	Data coding and tabulation.
Week 5	Session 1	Sampling techniques (random and non-random), types of data (qualitative and quantitative), types of variables (discrete and continuous), graphic techniques (bar charts, histograms, pie charts, frequency curves, etc).
	Session 2	Central tendencies (mean, mode, median, quartiles, deciles, percentiles, etc), measures of dispersion (variance and standard deviation, coefficient of variation, Gini coefficient, Lorenz curve, etc), coefficient of correlation.
Week 6	Session 1	Probability Theory and Theoretical Distributions (Binomial, Poission and normal)
	Session 2	Some Useful Results (Chebyshev's Theorem, Law of large numbers, Central Limit Theorem)
Week 7	Session 1	Introduction to Sampling distributions (z, t , chi-square and F)
	Session 2	Introduction to Statistical Inference (Estimation and Testing of Hypothesis)
Week 8 & 9		Introduction to Econometrics of cross-section (panel) data
Week 10 & 11		Introduction to Time series Econometrics
Week 12 & 13		Introduction to Optimisation techniques and Applications and Data base of Indian Economy.
Week 14 & 15		Introduction to Game Theory and applications

Assessment for the course.

- 1) Graded assessment of all students as per usual practice after Week 5.
- 2) Two hour written test after Week 6 & 7.
- 3) Two graded take home assignments for Weeks 8-14 for Economics students.
- 4) It is mandatory for Non-economics students to attend the lecture sessions for Weeks 8-14 but they are not expected to take the same assignments as economics students. Instead they will have to show evidence of a broad understanding of the logic and rationale of these techniques. Their two assignments are to be one on how they think they could use any of these techniques for chosen problem areas in their disciplines and secondly what are the limitations of these techniques from their disciplinary vantage point.