

2021

Pre-Ph. D COURSE WORK CURRICULUM

(Revised)



DEPARTMENT OF ECONOMICS

NAGALAND UNIVERSITY

HEADQUARTERS: LUMAMI

Total no of Papers	: 04
Total Marks	: 400
Duration	: 6 months
Total Credit	: 16

The following 4 (four) papers are to be taught at the Ph.D. Course Work to the students during the six months:

COURSE NO	COURSE TITLE	CREDIT POINTS (C)
ECO-CW-01	RESEARCH METHODOLOGY	4
ECO-CW-02	METHODS OF DATA ANALYSIS	4
ECO-CW-03	RESEARCH AND PUBLICATION ETHICS	4
ECO-CW-04	COMPUTER APPLICATIONS AND TERM PAPER	4

Note:

1. Each paper has 5 units; and each unit is assigned 20 marks for courses ECO-CW-01, ECO-CW-02 and ECO-CW-03. Whereas, for Course ECO-CW-04, 20 marks is allotted for computer practical and 80 marks for report writing and presentation.
2. Maximum marks for each paper is 100. For internal it is 20 and external is 80 marks.
3. Minimum qualifying marks for each paper (in both internal and external exam) is 55%.

ECO-CW-01: RESEARCH METHODOLOGY

UNIT I: MODE OF SOCIAL SCIENCE RESEARCH

8 hrs

Meaning, objectives and significance of social science research; types and approaches to social science research; defining, selection and formulation of research problems.

UNIT II: RESEARCH DESIGN

8 hrs

Research design: meaning and needs, features of a good design, concepts of research design, types of research design; Objectives and Hypothesis framing and significance.

UNIT III: LITERATURE REVIEW

8 hrs

Literature review-purpose, procedures, sources and planning of review work.

UNIT IV: DATA AND METHOD OF DATA COLLECTION

8 hrs

Meaning and Importance of data, sources of data, merits and demerits of using secondary data. Methods of data collections –questionnaires schedules, and other methods of data collection.

UNIT V: SAMPLE DESIGN

8 hrs

Meaning and importance of sample design, criteria of selecting a sampling procedure, characteristics of a good sample design. Types of sample design.

Suggestion Reading:

- Ahuja, Ram(2009), Research Methods; Rawat Publications, Jaipur.
- Bailey, Kenneth D (1978), Methods of Social Research; The Free Press, New York.
- Bateile, A&T.N.Madan(1975);Encounter and Experience; Personal Accounts of Fieldwork; Vikas Publishing House, New Delhi.
- Blalock, H(1960);Social Statistics; Mcgraw Hill, New York.
- Bose, Pradip kumar(1995); Research Methodology; ICSSR, New DELHI.
- Bryman, Alan (1988); Quality and Quantity in Social Research; Unwin Hyman, London.
- Burton, Dawn(Ed 2000); Research Training for Social Scientists; Sage Publication, New Delhi.
- Dooley, David (2007), Social Research Methods (Fourth Edition); Prentice Hall of India Pvt Ltd.New Delhi.
- Goode, W&P.Hatt(1987) ;Method in Social Research; Mcgraw Hill, New Delhi.
- Kothari, C.R (2011); Research Methodology; Methods and Techniques; New Age International (P) New Delhi.

ECO-CW-02: METHODS OF DATA ANALYSIS

UNIT I: STATISTICAL TOOLS

8 hrs

Measure of central tendency, dispersion, correlation, regression.

UNIT II: TESTING OF HYPOTHESIS

8hrs Estimation error, T-test, X^2 -test, F-test, Non parametric test.

UNIT III: APPLIED ECONOMETRICS

8 hrs

ANOVA, ANOCOVA, Time Series Analysis and Principal component Analysis, Discriminant Analysis.

UNIT IV: APPLIED MATHEMATICS

8 hrs

Set theory, Determinants, Matrix, Eigen values, Eigen vector, Linear programming, Input-output analysis.

UNIT V: MEASURING ECONOMIC PARAMETERS

8 hrs

Measures of Economic Growth and Development; Human Development Index; Gender Development Index; Poverty and inequalities; Employment and unemployment; Cost-Benefit Analysis price Index, Compound Annual Growth Rates(CAGR), Linear Growth Rates.

Suggested Readings.

- Huang D.S; Regression and Econometrics Method.
- Goldberger A.S; Topics in Regression Analysis.
- Shymala S, Kaur Navdeep, Arul Pragasam T; A Textbook on Econometrics, Vishal Publishing Co.Jalandhar.
- Bridge, J T; Applied Econometrics; North Holland Publishing Co, Amsterdam
- Allen R.G.D. Mathematical; Economics.
- Higgins, B (1959); Economic Development; W.W Norton, New York.
- Torado, M.P.(1996); Economic Development; Longman, London
- Meier, G.M (1995); Leading Issues in Economic Development(Sixth Edition); Oxford University Press.

ECO-CW-03: RESEARCH AND PUBLICATION ETHICS

THEORY

Unit I: PHILOSOPHY AND ETHICS

8hrs

- 1.1: Introduction to philosophy: definition, nature and scope, concept, branches.
- 1.2: Ethics: definition, moral philosophy, nature of moral judgements and reactions.

UNIT II: SCIENTIFIC CONDUCT.

8 hrs

- 2.1: Ethics with respect to science and research.
- 2.2: Intellectual honesty and research integrity.
- 2.3: Selective reporting and misrepresentation of data.

UNIT III: RESEARCH AND PUBLICATION ETHICS

8hrs

- 3.1: Publication ethics: definition, introduction and importance.
- 3.2: Best practices / standards setting initiatives and guidelines: COPE, WAME, etc.
- 3.3: Predatory publishers and journals.

Unit IV: PUBLICATION MISCONDUCT.

8hrs

- 4.1: Data manipulation and research Fraud: falsification, fabrication and plagiarism (FFP).
- 4.2: Simultaneous submission.
- 4.3: Salami Slicing.
- 4.4: Complaints and appeals.

Unit V: DATABASES AND SOFTWARE

8hrs

- 5.1: Anti-plagiarism software tools: Ouriginal, Turnitin
- 5.2: Software to identify predatory journals: SPPU, UGC-Care list.
- 5.3: Reference management tools: Mendeley, End notes.
- 5.4: Citation databases: Web of Science, Scopus, etc.
- 5.5: Impact Factor.

References

Bird, A. (2006). *Philosophy of Science*. Routledge.

MacIntyre, Alasdair (1967) *A Short History of Ethics*. London.

P. Chaddah, (2018) *Ethics in Competitive Research: Do not get scooped; do not get plagiarized*, ISBN:978-9387480865

National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). *On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition*. National Academies Press.

Resnik, D. B. (2011). What is ethics in research & why is it important. *National Institute of Environmental Health Sciences*, 1-10. Retrieved from <https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>

Beall, J. (2012). Predatory publishers are corrupting open access. *Nature*, 489(7415), 179-179. <https://doi.org/10.1038/489179a>

Indian National Science Academy (INSA), *Ethics in Science Education, Research and Governance*(2019), ISBN:978-81-939482-1-7. <http://www.insaindiaxes.in/pdf/EthicsBook.pdf>

UNIT I: INTRODUCTION TO COMPUTER AND DATA**8 hrs**

Importance of computer in research, Computer Components, Application of MS-office (MS-Word and Word Processing) in research, concept of data; types and structure of data.

UNIT II: DATA PROCESSING AND FORMULATIONS AND PRESENTATION**8 hrs**

Functions and features of MS-Excel, Data Processing and formulations, formulas and operations, creation of charts and graphics in worksheet. Power point Basis; creating presentation; working with graphic in power point; sound effect and animation effect.

UNIT-III: HANDLING STATISTICAL PACKAGE FOR SOCIAL SCIENCES (SPSS)**8 hrs**

Statistical package handling and command description for descriptive statistics, frequencies, coding and recoding, t-test, Correlation, Regression, One way ANOVA, auto regression, covariance and auto covariance.

UNIT-IV: FIELD WORK**UNIT-V: TERM PAPER**

(EACH STUDENT WILL WORK UNDER A FACULTY AS SUPERVISOR, ASSIGNED BY THE DEPARTMENT)

Literature Review (Specific to the interest of the student)

Report Writing

Presentation of report

Suggested readings:

- Sanders, D.M.(1998), Computers Today ; McGraw Hill (3rd Edition), New York
- Sinha, P.K (1992); Computer Fundamentals; BPB Publications, New Delhi.
- Rajaraman, V.(1996), Fundamentals of Computers, Prentic Hall of India , New Delhi.
- Lip Schultz M.M and S.Lip, Schultz (1982), Theory and Problems of Data Processing, Schum's Outline Series, McGraw Hill, New York.
- Levin, R.I, and C.A Kirkpatrick (1975), Quantitative Approaches to management, McGraw hill.
- Intrilligator, M.D (1978), Econometric Models, Techniques and Applications, Prentic Hall, Englewood Cliffs NJ.