



Research Methodology Course in AIHC & Archaeology Syllabus

1. Application of the scientific method in archaeology. **(3 hours)**

2. Basic concepts in the philosophy of science used in research methodology; induction; deduction; hypothesis; understanding and explanation; and nomothetic versus idiographic controversy. **(5 hours)**

3. New or Processual archaeology and Ethnoarchaeology. The rise of post-processual archaeology. **(3 hours)**

4. Post-processual archaeology; cognitive archaeology; structuralist and interpretative trends, the impact of postmodernism, symmetrical archaeology, feminist archaeology. **(6 hours)**

5. Principal aspects of research design formulation. **(3 hours)**

6. Techniques of field data collection and analysis. **(3 hours)**

7. Place of quantitative methods in archaeological research historical perspective, the importance of quantitative methods, archaeological theory and quantitative thinking, validity and reliability of the quantitative analysis. **(4 hours)**

8. Introduction to simple statistics; Sample and population, random sampling, cluster sampling, stratified sampling, size of the sample; collection, classification and tabulation of data; frequency distribution, histograms and measures of central tendency; measures of association. **(6 hours)**

9. Data management systems: Word processors, spreadsheets and databases; Graphics, maps and images; photoshop, illustrator, Reference building software (Zotero, EndNote etc.), Geographics Information System (GIS), Remote Sensing and GPS. **(10 hours)**

10. Dissemination of archaeological information; research publications; structured excavation reports; expert systems in archaeology. **(2 hours)**

11. Concepts of Modelling: Use of computers in simulation and modelling for Archaeology. **(4 hours)**

12. Thesis/proposal writing. **(3 hours)**

The course includes classroom activities and home assignments.

Selected Readings

Aldenderfer, M.S. 1987. *Quantitative Research in Archaeology*. London and New Delhi: Sage.

Anderson, J., Madsen, T. and Scollar I. (Eds.) 1993. *Computing the Past: Computer Application and Quantitative Methods in Archaeology*. CAA 92. Aarhus: Aarhus University Press.

Binford, L.R. 1978. *Nunamuit Ethnoarchaeology*. New York: Academic Press.

Binford, L.R. 1983. *Working at Archaeology*. New York: Academic Press.

Binford, L.R. 1989. *Debating Archaeology*. New York: Academic Press.

Cohen, M.R. and E. Nagel. 1976. *An Introduction to Logic and Scientific Method*. Bombay: Allied Publishers.

David, N., Kramer, C. and D. Nicholas 2001. *Ethnoarchaeology in Action*. Cambridge: Cambridge University Press.

Drennan, R.D. 1996. *Statistic for Archaeologists: A Commonsense Approach*. New York: Plenum Press.

Goode, W.I. and P.K. Hatt. 1952. *Methods in Social Research*. Tokyo: Mcgraw-Hill Student Edition.

Hodder, Ian. (Ed). 1982 *Symbolic and Structural Archaeology*. Cambridge: Cambridge University Press.

Hodder, Ian. 1992. *Theory and Practice in Archaeology*. London: Routledge.

Hodder, Ian. 1995. *Interpreting Archaeology: Finding Meaning in the Past*. New York: Routledge.

Jones, Andrew. 2002. *Archaeological Theory and Scientific Practice*. Cambridge: Cambridge University Press.

Lock, Gary and J. Moffett (Eds.) 1992. *Computer Application and Quantitative Methods in Archaeology 1991*. London: BAR International Series.

- Lock, Garry and Zoran, Stancic (Eds.) 1995. *Archaeology and Geographical Information Systems*. London: Taylor & Francis.
- Paddayya, K. 1978. "New Research Designs and Field Techniques in the Palaeolithic Archaeology of India". *World Archaeology*: 1094-110.
- Paddayya, K. 1981. Piaget, Scientific Method and Archaeology. *Bulletin of the Deccan College Research Institute* 40: 235-264.
- Paddayya, K. 1989. The Role of Hypothesis and Tradition Archaeology. *Bulletin of the Deccan College Research Institute* 47-48: 239-247.
- Paddayya, K. 1990. *New Archaeology and Aftermath: View from Outside the Anglo-American World*. Pune: Ravish Publishers.
- Paddayya, K. 1990. Theoretical Perspectives in Indian Archaeology: An Historical Review, in P.J. Ucko (Ed.). *Theory in Archaeology: A World Perspective*, pp. 110-149. London: Routledge.
- Paddayya, K. 2002. A Review of Theoretical Perspectives in Indian Archaeology, in S. Settar and R. Korisettar (Ed.) *Indian Archaeology in Retrospect*, Vol. IV, pp. 117-157. New Delhi: ICHR and Manohar.
- Preucel, R. (Ed). 1991. *Processual and Postprocessual Archaeologies: Multiple Ways of Knowing the Past*. Carbondale (Illinois); Southern Illinois; Southern Illinois University Press.
- Reilly, P. and S. Rahtz. 1992. *Archaeology and the Information Age: A Global Perspective*. London and New York: Routledge.
- Schiffer, M.B. 1976. *Behavioral Archaeology*. New York: Academic Press.
- Schiffer, M.B. 1987. *Formation Processes of the Archaeological Record*. Albuquerque: University of New Mexico Press.
- Shennan, S. 1988. *Quantifying Archaeology*. Edinburgh: University Press.
- Snedecor, G.W. and W.G. Cochran. 1967. *Statistical Methods*. Calcutta: Oxford and IBH.
- VanPool, C.S. and Todd L. VanPool. 1999. The Scientific Nature of Post-Processualism. *American Antiquity*. Vol 64: 33-53.
- Yoffee, N and A. Sherratt (Ed.). 1993. *Archaeological Theory: Who sets the Agenda?* Cambridge: Cambridge University Press.