

ANTH 317

QUANTITATIVE METHODS IN ANTHROPOLOGICAL RESEARCH

INSTRUCTOR: Dr. Helen Kurki

COURSE DESCRIPTION AND OBJECTIVES

This course introduces students to quantitative data analysis in Anthropology. It is designed for students with little or no previous experience in this area but who wish to achieve basic statistical literacy, enabling them to perform common statistical analyses and understand statistical results reported in the literature. The course format includes lectures and computer-based labs, with a focus on the theory, application and interpretation of statistical analyses and information. The relationship between research questions and statistical design will also be examined. Data analysis applications will be based in R and RStudio.

SKILLS DEVELOPMENT

This course aims to aid students in learning to...

- explain statistical concepts such as types of quantitative data, probability, normal distributions, hypothesis testing, confidence intervals
- evaluate the appropriate use and interpretation of statistical analyses
- interpret statistical results, both numerical coefficients and graphical representations
- apply common statistical analyses and create graphical representations using R programming language and the RStudio GUI
- explain how virtual (computer-based) approaches are being applied to quantitative data analysis in Biological Anthropology and Archaeology