

International Health and Development 2009

INHL 725: Advanced Research Methods in Public Health

Learning Objectives:

By the end of the course, students will be able to:

1. Describe key sources of data in HPN and research designs for analyzing the data.
2. Describe the key assumptions that allow for unbiased and consistent parameter estimates in linear regression models and models with limited dependent variables.
3. Estimate multivariate regression models with continuous and limited dependent variables (e.g. dichotomous, ordered, unordered categorical, truncated, censored).
4. Develop structural models for analyzing health, population and nutrition (HPN) programs in developing countries.
5. Calculate basic tests for model specification, endogeneity, and sample selection.
6. Estimate models controlling for multiple/hierarchical levels and multi-stage sampling in estimations.
7. Conduct program evaluations with (propensity score) matching methods or multiple regression analysis.
8. Analyze cross-sectional or time series health, population or nutrition data, while dealing with common problems in evaluation research such as endogeneity, sample selection, measurement error, and missing data.