Changes in the size, composition and distribution of population exert powerful influences on society, the environment and human well-being. This course introduces fundamental techniques used in demographic analysis and the study of population change. Participants will become familiar with significant population trends across time and world regions and the societal and global challenges associated with demographic changes, such as very low fertility and population aging, migration and urbanization. Throughout the two-day workshop, in lectures and hands-on laboratory exercises, participants will learn approaches for empirically measuring the aggregate characteristics of populations and for modelling population change. Upon completion of the course, participants will possess working knowledge of key demographic measures and methods as outlined below.

**Course Outline**
- Introduction to Demography; world population now & into the future
- Key demographic concepts, sources of data and challenges of measurement and coverage
  - Population composition, distribution and change
  - Age-period-cohort
  - Population doubling time, demographic inertia
- Fundamentals in Demographic Analysis
  - Demographic balancing equation & sources of population change
  - Population age & sex structure, population pyramids, sex ratios, dependency ratios
- Fertility and fertility change — fertility measurement from the CBR to the TFR; an introduction to the proximate determinants of fertility framework
- Mortality, morbidity and life expectancy —
  - Measuring mortality — age- and cause-specific mortality rates
  - The life table and estimating life expectancy
- Internal and international migration — estimates & influence on population change (i.e., natural increase vs in-migration in population growth; migration and urbanization)
- Population projections — introduction to basic methods

**Who Should Attend**
This course is designed for researchers, practitioners and policy makers with a desire to learn more about demographic study, measures and methods, including issues pertaining to fertility, mortality, migration, and family formation and structure.

Participants are required to bring a laptop computer with Microsoft Excel software installed, an external mouse and a power cord or sufficient battery power laptop.

**Enquiries**
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Dr. Kriti Vikram is an Assistant Professor in the Department of Sociology at the National University of Singapore and a Research Associate at the Centre for Family and Population Research. At NUS, Dr. Vikram has taught courses on Population and Society, and Social Determinants of Health and Mortality. Her research focuses on social determinants of health and well-being of children and families as well as fertility preferences and contraceptive use. She received her Ph.D. and M.A in Sociology with specializations in Demography and Life Course from the University of Maryland, College Park in 2015. As a graduate student, she was on the project team for the India Human Development Survey, a longitudinal study of Indian households. She received the 2014 Robert W. Janes Commemorative Award that recognizes excellence in Sociology at the University of Maryland. Dr. Vikram has published in *Demography* and in *Social Science & Medicine*. 