

**Course Code** : ECNDSE103  
**Title of the Course** : Basic Demography  
**Type of the Course** : Discipline Specific Elective Course  
**Number of Credits** : 4  
**Marks** : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of lecture hours
I	<b>Basics of demography and Sources of demographic data:</b> Meaning and subject matter of demography; Linkage between economics and demography; Sources of demographic data –Population census, Vital registration system, Sample Registration System, Sample surveys- features, advantages and problems, Population register.	10
II	<b>Theories of population:</b> Pre-Malthusian view, Malthusian theory of population, Optimum theory of population, Demographic transition theory, Marx's theory.	12
III	<b>Components of population change</b> Fertility: Basic concepts of fertility; Fertility Theories: Social Capillarity theory, Theory of change and response, Theory of diffusion; Economic Theories of fertility - Cost-benefit theory, Theory of micro-consumption, Easterlin Hypothesis; Biological theories of Spencer, Sadler and Doubleday, Basic measures of fertility: Crude birth rate, General fertility rate, Age-specific fertility rate, Total fertility rate.  Mortality – Basic concepts, Mortality variables, Basic measures of mortality: Crude death rate, Infant mortality rate, Maternal mortality rate; Health outcomes and their relationship with economic performance.  Migration – Basic concepts, Theories of migration: The Push-pull hypothesis, Lee's theory, Petersen's typology, Ravenstein's laws of migration, Stouffer's theory of intervening opportunities, Zipf's Gravity Model, Harris-Todaro model, Sjaastad's human capital model of migration.	20
IV	<b>Population Growth and projection:</b> Population, Development and environment linkages; Population growth rates – inter-censual, arithmetic, geometric and exponential growth rates; Concepts of population projections; Population estimates, forecasts and projection; Uses of population projection, Economic importance of projection; methods of population projections; Methods of rural-urban and sub-national population projections; ; Population policy-meaning and importance.	10
V	<b>Population Composition and Distribution</b> Age structure, Factors affecting age structure, Aging of population; Measures of age structure; Sex structure - Factors affecting sex structure, Measures of sex structure, Population pyramid; Economic characteristics-LFPRs; Marital and educational characteristics; Meaning of population distribution; Population density, Factors affecting population density.	12
<b>Total</b>		<b>64</b>

**Course Code** : ECNDSE201  
**Title of the Course** : Demographic Analysis  
**Type of the Course** : Discipline Specific Elective Course  
**Number of Credits** : 4  
**Marks** : 100 (In-Semester: 40 +End-Semester: 60)

Unit	Topics	No. of lecture hours
I	<b>Fertility:</b> Basic concepts of fertility, Intermediate variables, Proximate determinants of fertility, Socio-economic determinants of proximate variables; Importance of fertility studies; Measures of fertility – Crude Birth Rate, General Fertility Rate, Age-specific Fertility Rate, Total Fertility Rate, Gross Reproduction Rate, Net Reproduction Rate, Order Specific Fertility Rate, Marital Fertility Rate, Child Woman Ratio, Standardized Birth Rate, Completed fertility rate; Coale's fertility indices.	16
II	<b>Mortality:</b> Mortality – Basic concepts, Need and importance of mortality study; Measures of mortality – Crude Death Rate, Age-specific Death Rate, Infant Mortality Rate, Neo natal Mortality Rate, Post Neo Natal Mortality Rate, Cause Specific Death Rate, Maternal Mortality Rate, Monthly Death Rate, Fetal wastage-Fetal death rate, Perinatal Mortality Rate; Standardized death rate - Direct and indirect standardization; Life table – types of life tables, uses of life table and its construction.	16
III	<b>Migration and Urbanization:</b> Basic concepts, Problems of measuring migration, Factors affecting migration, Push-pull hypothesis, Consequences of migration on both places; Migration rates and ratios; Estimation of migration – Direct estimation of migration, Indirect measures of migration – Vital statistics method, National growth rate method, Survival ratio method; Urbanization – Definition of an urban area, Measures of urbanization, Concentration and dispersion in urban area.	16
IV	<b>Quality of demographic data</b> Sources of demographic data; Errors and omissions in demographic data, Sources of errors, Post-enumeration surveys, Dual Record System, Techniques of evaluation of age data - Whipple's index, Myers' Blended index, Digit preference Quotients for birth intervals, UN Joint Score or Accuracy index.	16
Total		64

**Reading List:**

1. Thompson, W.S. and Lewis, D.T.: Population Problems, McGraw Hill Book, New York
2. Thomlinson, R.: Population Dynamics, Random House, New York
3. Srinivasan, K. : Basic Demographic Techniques and Application, Sage Publications, New Delhi
4. Bhende, A.A. and Kanitkar, T.: Principles of Population Studies, Himalaya Publishing House, Bombay
5. Sinha, V.C. and Zacharia, E.: Elements of Demography, Allied Publishers Private Limited, New Delhi
6. Shryock, H.S. et. al : Methods and Materials of Demography, Academic Press, New York
7. Hinde, Andrew: Demographic Methods, Routledge
8. Preston, S. H., Heuvenile, P. & Guillot, M.: Demography, Wiley
9. Cox, P. R.: Demography, Cambridge University Press
10. Jay Weinstein & V. K. Pillai: Demography – The Science of Population, Pearson