

Master of Arts in Population Studies

Courses of Study

**Central Department of Population Studies
Faculty of Humanities and Social Sciences
Tribhuvan University**

2070

**Central Department of Population Studies
Faculty of Humanities and Social Sciences
Tribhuvan University**

**Master of Arts in Population Studies
Courses of Study**

Tribhuvan University has recently decided to implement semester based Master Level Programme at University Campus, Kirtipur from 2070 BS. Under this decision, Faculty of Humanities and Social Sciences is also planning for the implementation of semester system based MA programme in the disciplines of humanities and social sciences through central departments at University Campus, Kirtipur this year. This semester based MA programme aims to produce globally competent quality human resource at international standard through different initiatives as other many universities in the world have semester system based MA programme.

PART I: INTRODUCTION

1.1 Central Department of Population Studies (CDPS)

The Government of Nepal has recognized that sound population policy formulation in the area of population and development, and the effective and efficient implementation of population policy depend on competent professional advice, research and analysis. The Government of Nepal has, therefore, worked with Tribhuvan University (TU) to establish a high quality research and training institution to serve the country's population and development programme. The Central Department of Population Studies (CDPS) was established in 1988 by T.U. Council. Since 1990, CDPS has been modestly funded by the United Nations Population Fund (UNFPA). It has grown and developed during the last twenty years and has made significant contributions to the nation's population dynamics sector. It is envisaged that CDPS will continue to grow, in line with the evolving needs for research and training in the country; and that it will emerge in due course as a major research and training centre in South Asia.

CDPS at the Tribhuvan University of Nepal provides challenging and innovative teaching in the field of population and development, a rapidly growing area of study concerned with the people, economy and society, and to foster high quality research on the problems of developing countries in general and Nepal in particular.

Attracting students and scholars committed to interdisciplinary theoretical and methodological approaches to the study of population and development, the Department shall promote greater public understanding, advance independent analysis, and encourage further professional competence on issues related to population and development with a view to contributing towards population and development interrelationships, the overarching goal of the country.

The Department also intends to work with, and for, a multicultural community, in a dynamic environment, stimulating open dialogue and the exchange of experience of population and development issues among students and staff who collectively represent an exceptional range of experience and theoretical interest.

Central Department of Population Studies

Faculty of Humanities and Social Sciences

Tribhuvan University, Kirtipur

Kathmandu, Nepal

Tel: 977-1-331323, 4330716

Fax: 977-1-331324

Email: info@cdps.edu.np

URL: www.cdps.edu.np

1.2 Teaching at the CDPS

The teaching at the Department provides application-oriented form of advanced education, linking teaching to applied research. This teaching combines a number of methods to achieve the learning objectives of the programmes. The two primary methods are classroom teaching, such as lectures, seminars and tutorials and assigned reading. Others include essay writing, workshops, teamwork, study visits and computer-practice. Where the subject matter is suitable, less traditional approaches such as audio-visual techniques and role simulation are used. Research work involves research seminars, bibliographic exercises, internet search exercises and reviews of research designs and drafts.

The overall goal is to provide students with the opportunity to critically compare theory and conceptual approaches on the one hand and practice on the other, and to introduce and discuss their own experience. The following programmes are offered:

- Master of Population Studies
- Master of Philosophy in Population Studies
- Doctor of Philosophy in Population Studies

PART – II: MASTER OF POPULATION STUDIES (MPS) PROGRAM

The two year Master of Population Studies with a Major (specialisation) provides solid and balanced academic and professional training in theory and methods relevant to population studies. The programme in general, and its Majors (specialisation) in particular, are designed to endow students with theoretical and methodological capabilities to conduct policy analysis and research and not just stress immediate practicability. Applied theories, techniques and tools are situated within a deeper understanding of their theoretical and methodological settings and hence Master of Population Studies teaching establishes a balance between academic depth and professional relevance.

Salient Features of MPS Program

The programme features are as follows:

Total 60 credit hours

An internship programme with dissertation

English as medium of instruction

Class hours: 10:30 AM to 4:00 PM

2.1 Admission Process and Number of Students

Admission for each batch of MPS programme will be opened once a year. A candidate shall apply in the prescribed form, obtained from the office of the Department or Dean's Office, following payment of necessary fees. In order to take an admission, Dean's office or the department will run an eligibility test/qualifying examination as entrance examination. On the basis of merit of entrance examination, name list of students to be admitted will be published. Marks obtained by the student at bachelor level could also be another basis of framing merit of admission. There will be 50 students in one section in all disciplines and number of sections will be determined on the basis of availability of teaching faculty and basic infrastructure. Student pressure, as number of students applying for admission, will also be kept in mind while determining the number of sections. However, there will be at least one section for each discipline when student number counts below 50.

Admission Criteria:

Prospective students of MA in Population Studies should have passed the bachelor's Level in any disciplines recognized by Tribhuvan University. Students are admitted by screening through an entrance examination.

2.2 Course Structure and Nature of Course:

Considering the total credit hours of 60 for four semesters overall course will be structured. Each course will be of maximum 3 credit hours. Thesis equals to the credit hour of two papers, 6 credit hours. It is expected that there will be, more or less balance, not necessarily equal, of credit hours among all four semester. Thus the two-year Master will be of 60 credits and divided into 4 semesters.

The teaching modules of the MPS programme comprises of (a) core courses, (b) specialization courses, and (c) options. The core courses are offered in the first and second semesters while the rest – core courses and specialization courses including options – are offered in the third and fourth semesters. The Master of Population Studies is structured as follows:

**Central Department of Population Studies
Faculty of Humanities and Social Studies
Tribhuvan University**

MA in Population Studies (MPS) – Course Structure

List of Courses

First Semester: 5 courses x 3 credit hours = 15 credit hours

Paper	Code No.	Subject Title	Full Marks
Compulsory Courses			
I	Pop. 551	Principles of Demography – I	50
II	Pop. 552	Applied Statistics for Population Studies	50
III	Pop. 553	Demographic Methods for Population Analysis - I	50
IV	Pop. 554	Population, Health and Development	50
V	Pop. 555	Population, Resource and Development	50

Note:

The Central Department of Population Studies has already proposed 5 courses for MA First Semester, each consisting of 3 credit hours. The duration of the programme will be of six months. The semester will be devoted to teaching 15 credit hour courses.

Second Semester: 5 courses x 3 credit hours = 15 credit hours

Paper	Code No.	Subject Title	Full Marks
Compulsory Courses			
VI	Pop. 556	Principles of Demography – II	50
VII	Pop. 557	Population Dynamics and Nepalese Society	50
VIII	Pop. 558	Demographic Methods for Population Analysis - II	50
IX	Pop. 559	Research Methods for Population Analysis	50
X	Pop. 560	Population Poverty and Human Development	50

Third Semester: 5 courses x 3 credit hours = 15 credit hours

Paper	Code No.	Subject Title	Full Marks
Compulsory Courses			
XI	Pop. 561	Computer Application in Population Studies (census and survey data analysis)	50
XII	Pop. 562	Migration and Development	50
XIII	Pop. 563	Demographic Methods for Population Analysis - III	50
XIV	Pop. 564	Population, Gender and Development	50
XV (Options)	Pop. 565.1	Population and Development Policies	50
	Pop. 565.2	Demographics of Ageing and Social Welfare	
	Pop. 565.3	Population, Environment and Development	
	Pop. 565.4	Urbanization and Urban Rural Linkage	

Fourth Semester:**3 courses x 3 credit hours = 9 credit hours and Thesis 6 credit hours = 15 credit hours**

Paper	Code No.	Subject Title	Full Marks
Compulsory Courses			
XVI	Pop. 566	Population Planning, Monitoring and Evaluation	50
XVII	Pop. 567	Demographic Methods for Population Analysis - IV	50
XVIII (Options)	Pop. 568.1	Health, Morbidity and Mortality	50
	Pop. 568.2	Reproductive Health	
	Pop. 568.3	Population and Social Justice	
	Pop. 568.4	Family and Household Demography	
	Pop. 568.5	Population and Conflict Resolution	
XVIX	Pop. 569	Thesis	100

Tribhuvan University
POPULATION STUDIES SUBJECT COMMITTEE

Master of Population Studies
Courses of Study - Semester I

PRINCIPLES OF DEMOGRAPHY

Course Code: Pop. 551

Semester: I; Paper: I
Full Marks: 50; Credit Hours: 3
Teaching Hours: 48

Objective

The objective of this course is to provide students with a broad knowledge of the concepts in population studies with related theories and models as well as the emerging issues in Demography. This is a foundation course upon which students are expected to build a background for advanced level courses.

Unit I. Fundamentals of Demography **4**

1. Definition and content of demography, population studies and demographics;
2. Demography as a scientific discipline;
3. Interrelationship between population studies and other disciplines;
4. Classification of population according to Physiological, Social, Economic, fertility, mortality, migration related as well as household characteristics
5. Development of Population Studies in Nepal

Unit II. Basic concepts in demography **8**

1. *Population dynamics related concepts*: rate, ratio, proportion, balancing equation, natural increase, cohort and period measures, young and old populations, median age, sex ratio, age dependency ratio, population pyramid, rapid, slow and zero or decreasing growth, age structure and population growth.
2. *Nuptiality and fertility related concepts* : nuptiality, currently married, separated, divorced, annulment, never married, ever married, marriage, age at marriage, fecundity, live birth, birth rate, general fertility rate, age-specific fertility rate, children ever born, total fertility rate, gross reproduction rate, net reproduction rate, length of generation, child-woman ratio, replacement level fertility, population momentum

3. *Morbidity and mortality related concepts*: incidence rate, prevalence rate, case rate, case fatality rate, stillbirth, perinatal mortality, neonatal mortality, death rate, age-specific death rate, cause-specific death rate, proportion dying of a specific cause, infant mortality rate, maternal mortality ratio, life expectancy, introduction to the life table.
4. *Migration and urbanisation related concepts*: immigration rate, emigration rate, net migration, net migration rate, gross migration, foreign citizens, foreign born population, urban, per cent urban, metropolitan area, population density in urban and rural areas

Unit III. History of World Population 2

1. World, Continents, Regions, Developed and Developing Countries

Unit IV. Population Theories 10

1. *Ancient and medieval writings on population*: Chinese (Confucius); Greek (Plato, Aristotle); Indian (Kautilya); Ancient Rome (Cicero)
2. *Towards modern theory*: Mercantilist, Physiocratic and Related views; Political Arithmeticians' views;
3. *Malthusian theory*: The basic model; Criticism of the model; Neo-Malthusian
4. *Socialist and Marxist writings*: Early socialist; Marx and Engels; Post-Marxian socialists
5. *Other theories*: Mathematical theories; Biological theories; Sociological theories; Optimum theory of population;
6. *Demographic transition theory*: The western experience; The experience of the developing countries; Criticism of the theory
7. *Development theories*: Theory of development and change; Modernisation versus technological diffusion
8. Classroom workshop/seminar: *Comparison of gist of all theories and their applicability* in the current national policy perspective

Unit V. Nuptiality and Fertility 8

1. *Nuptiality*: Levels and trends in age at marriage, celibacy, widowhood, divorce and separation in developed and developing countries; Determinants of age at marriage in developed and developing countries; Nuptiality in family life cycle
2. Fertility:
 - A: *Fertility theories*: Intermediate variable framework of Davis and Blake; Proximate determinants model of Bongaarts; Studies of Freedman, Easterlin, Lebeinsein and Caldwell
 - B: *Theories of fertility decline*: Revision of demographic transition, Threshold hypothesis of fertility decline; Differential fertility hypothesis of fertility decline; Distributive justice hypothesis of fertility decline
 - C: *Fertility levels and trends*: Levels and trends of fertility in developed and developing countries with special focus on SAARC region

D: *Fertility differentials by socio-economic status*: Cross-examination of fertility by Ethnicity, Education, Gender related and participatory variables, Morbidity and Health status, Employment, Occupation, Income, Mortality, Migration, Urbanisation, Age at marriage; sex preference, and family planning

3. *Classroom workshop/seminar*: Theoretical framework for fertility analysis - deal on how the theories are related to the contemporary transition of fertility in developed and developing countries?

Unit VI. Morbidity and Mortality

8

1. Morbidity:
 - A: Communicable versus non communicable diseases, causes of sickness, Community and Reproductive health:
 - B: Major issues of community health; Immunization, Nutrition Reproductive health and family planning, Issues of Women's health
2. Mortality:
 - A: Causes of death, Levels, trends and determinants of mortality in developed and developing countries
3. Mortality and morbidity differentials by socio-economic status:
 - A: Cross-examination of morbidity and mortality by Ethnicity, Education, Gender related and participatory variables, Nutrition, Age, Sex, Morbidity and Health status, Employment, Occupation, Income, Migration, Urbanisation, Marital status;
4. *Theories of mortality decline*: Introduction to The epidemiological transition theory; Mosley and Chen (*These are dealt in details in course 504*)
5. *Classroom workshop/seminar*: Theoretical framework for mortality analysis - deal on how the theories are related to the contemporary shift in mortality in developed and developing countries?

Unit VII. Migration and Urbanization

8

1. Migration : Basic information on:
 - A: Causes and consequences of internal and international migration in developed and developing countries
2. Theories of Migration
 - A: Raveinstein's Laws of migration
 - B: Everett S Lee's hypotheses of migration
 - C: Central Place theory
 - D: Freedman's hypotheses of migration and fertility
3. Urbanization
 - A: Definition and concepts
 - B: Levels and trends of urbanization in developed and developing countries
 - C: Distribution and growth of urban/rural population in developed and developing countries; Factors affecting rural/urban distribution of population
 - D: Urbanization policies in developed and developing countries

4. *Theoretical framework for migration analysis*: Workshop session - deal on how the theories are related to the contemporary shift in migration and urbanisation in developed and developing countries?

Required Readings

- Bhende, Asha A. and Tara Kanitkar (1982). *Principles of Population Studies*, (Bombay: Himalaya Publishing House.
- Bogue, Donald J. (1969). *Principles of Demography*, New York: John Wiley and Sons, Inc.
- Bogue, Donald J. et al., (1993). *Readings in Population Research Methodology*, Vol. 1, Basic Tools , New York: United Nations Population Fund.
- Caldwell, J.C. (1982). *Theory of Fertility Decline* , London: Academic Press.
- Davis, Kingsley and Mikhail S. Bernstam (Eds). (1991). *Resources, Environment and Population: Present Knowledge, Future Options*, A Supplement to Population and Development Review, Vol. 16, 1990.
- Enrlich, Paul E. and Anue H. Enrlich (1972). *Population, Resources, Environment: Issues on Human Ecology* , San Francisco: W.H. Freeman.
- Hauser, Philip M. and Otis D. Duncan (Eds.) (1959). *The Study of Population* , Chicago: The University of Chicago Press.
- Shryock, Henry S., and Jacob S. Siegel, and Associates (1976). *The Methods and Materials of Demography*, Condensed edition by Edward G. Stockwell , London: Academic Press, INC..
- United Nations (1973). *The Determinants and Consequences of Population Trends* , New York: United Nations.
- United Nations (2001). *Population Environment and Development: The Concise Report*, New York: United Nations, Economic and Social Affairs.

Suggested Readings

- Choucri, Nazli (1984). *Population and Conflict: New Dimensions of Population Dynamics*, Policy Development Studies Number 8 , New York: United nations Fund for Population Activities. See also <http://www.population-security.org/unfpa-84.htm>
- Demeny, Paul (2003). *Population Policy: A Concise Summary*, Policy Research Division Working Paper No. 173, Population Council.
- Kent, Mary M. Carl Haub, December (2005). "Global Demographic Divide," *Population Bulletin*, Vol. 60, No. 4, Population Reference Bureau: Washington D.C.
- McFalls, Josheh A. Jr. (1991). *Population: A Lively Introduction*, *Population Bulletin*, Vol. 46, No. 2 , New York: Population Reference Bureau.
- Population Reference Bureau (2000). *Human Population: Fundamentals of Growth and Change* , Washington D.C.: Population Reference Bureau.

The World Bank (2003). *Gender Equality and the Millennium Development Goals* , Washington D.C.: The World Bank, Gender and Development Group.

United Nations (2005). *Population Challenges and Development Goals* , New York: UN Population Division, Department of Economic and Social Affairs

United Nations (2005). *The Millennium Development Goals Report* , New York: The United Nations.

United Nations Population Division (2003). *World Urbanization Prospects 2002 Revision* , New York: UN Population Division.

United Nations Population Division (2005). *Living Arrangements of Older Persons Around the World* , New York: UN Population Division.

United Nations Population Fund , UNFPA (2005). *State of World Population 2005: The Promise of Equality, Gender Equity, Reproductive Health and Millennium Development Goals* , New York: United Nations Population Fund.

Guideline for faculties for Classroom workshop/seminar:

- Step 1: Identify issues to be discussed.
- Step 2: Divide the students into groups. A group of 4-6 students is ideal. Make a mix of gender, ethnicity and other attributes for crossbreeding of ideas and opinions.
- Step 3: Give them task of identifying the problems, differences, possible solutions and their best recommendations.
- Step 4: Organize a presentation session. Presence of many faculties is recommended. Students will present their gist of discussions. Presenters would be different in different workshops/seminar, so that each student will have opportunity to present by the end of session.
- Step 5: Evaluations could be performed with a mix method of faculty's ranking and also the students' scoring for other's presentation. Course coordinator can determine the final scoring.

APPLIED STATISTICS FOR POPULATION STUDIES

Course Code: Pop. 552

Semester: I; Paper: II
Full Marks: 50; Credit Hours: 3
Teaching Hours: 48

Objective

The objective of this course is to make students familiar with statistical methods and techniques in population studies. It provides the basic statistical knowledge as well as complex statistical application. The course includes the following specific objectives:

Course Objectives:

- To familiarize the students by reviewing the basic mathematical and descriptive statistics for the application of population studies
- To strengthen the theoretical knowledge of the students about probability theories
- To equip the students/learners for the application of probability distribution
- To provide the knowledge and application to set statistical hypothesis
- To enable students to gain appropriate knowledge and make use of correlation and regression analysis
- To develop the capacity of the students to apply appropriate complex statistical test.

Unit I. Review of Basic Mathematics and Descriptive Statistics 3 hrs

1. Basic Mathematics
2. Basic Statistics and Univariate Distribution (Mean, Median, Mode, Standard Deviation, CV)

Unit II. Probability Theory 9 hrs

1. Fundamental Theory of Counting, Permutation and Combination
2. Classical and Statistical Definition of Probability
3. Addition and Multiplication Theorems, Conditional Probability (Probability of Happening of at least One of Events)
4. Bayes's Theorem
5. *Practical* on similarities and differences among theories and their applicability to real situations

Unit III. Probability Distribution 9 hrs

1. Introduction to Probability Distribution
2. Random Variables
3. Binomial Distribution

4. Poisson Distribution
5. Normal Distribution
6. Chi-square Distribution
7. Student's t-distribution
8. F-distribution
9. *Practical* focused on selection of appropriate method for analysis according to differential nature of distribution of variables

Unit IV. Hypothesis Setting 3 hrs

1. Null Hypothesis
2. Alternative Hypothesis
3. One tailed Test
4. Two tailed Test
5. Level of Significance

Unit V. Bivariate Distribution 8 hrs

1. Linear Correlation
2. Simple Regression
3. Least Square Regression
4. Logistic Regression
5. *Practical* on applicability and selection of test in real situations; interpretation of coefficients, adjusted values, significance and confidence interval

Unit VI. Inferential Statistics 16 hrs

1. Sampling Theory
2. Sample Size Determination
3. Non-Parametric Tests: The Chi-square Test for Goodness of Fit, The Sign Test, The Wilcoxon Matched-Pairs Sign-Ranked Test, The Rank Sum Test, The Mann Whitney Test, The Kurskal Wallis Test, The Rank Correlation, Selection of an Appropriate Test.
4. Parametric test: t-test, Z-test, F-test and ANOVA: One-way Analysis of Variance, Two-way Analysis of Variance.
5. *Field Survey* for determining the sample in real situations followed by the submission and classroom presentations by students in given problems

Required Readings:

Chase, Warren and Fred Brown (1986). *General Statistics*. New York: John Wiley and Sons
 Gupta, S.P. (1986). *Statistical Methods*. Delhi: Himalayan Publishing House.

- Khatri, B. B. (2012). *Research and Statistics in Population Education*. Kathmandu: Kriti Publication.
- Nachmais, C. F. and D. Nachmais (1996). *Research Methods in the Social Sciences*. New York: St. Martin Press.
- Subedi, P. K. (2010). *Social Research Methods*. Kathmandu: Kirti Publication.
- Subedi, P. K. and L. S., Kunwar (2008). *Quantitative Techniques in Population Studies (for MA Level)*. Kathmandu: Ratna Pustak Bhandar.

Guideline for faculties for Classroom workshop/seminar:

- Step 1: Identify issues to be discussed and/or field work to be accomplished.
- Step 2: Divide the students into groups. A group of 4-6 students is ideal. Make a mix of gender, ethnicity and other attributes for crossbreeding of working style, ideas and opinions.
- Step 3: Give them task of identifying the problems, differences, findings of gathered information, conclusions, possible solutions and their best recommendations.
- Step 4: Organize a presentation session. Presence of many faculties is recommended. Students will present their gist of combined work and discussions. Presenters would be different in different workshops/seminar, so that each student will have opportunity to present by the end of session.
- Step 5: Evaluations could be performed with a mix method of faculty's ranking and also the students' scoring for other's presentation. Course coordinator can determine the final scoring.

DEMOGRAPHIC METHODS FOR POPULATION ANALYSIS - I
(BASIC COURSE)

Course Code: Pop. 553

Semester: I; Paper: III
Full Marks: 50; Credit Hours: 3
Teaching Hours: 48

The objective of this course is to make students familiar with demographic techniques for population analysis and equip them in demographic analysis. The course begins with basic methods of demographic techniques and advances to a broader knowledge on advance techniques. Advance techniques focus on indirect techniques of demographic estimation, which include indirect estimation of fertility, mortality and migration and population projection. The modality of teaching will be computer based for which available demographic software as well as other necessary software will be used. Class lectures will deal with application, data requirement, assumptions, limitations, evaluation and interpretation of the results of each method.

Students are expected to successfully complete **basic** demographic techniques in the first semester, some mid-level techniques that lead to advanced techniques in the second semester, **advanced** course in the third semester and **computer application** for each tool and technique in the fourth semester.

Unit I. Sources of Demographic Data

- | | |
|---|----|
| 1. Census, Sample Survey and Registration Systems | 6 |
| A: Concept, methods and uses | |
|
 | |
| 2. Evaluation of data | 10 |
| A: Coverage and content errors | |
| B: Sampling and non-sampling errors | |
| C: Post-enumeration survey | |
| D: Measurement of errors in age data | |
| i. Age and sex ratios | |
| ii. Whipple's and Myers' Indices | |
| iii. Inter-censal cohort analysis | |
| iv. UN Age-sex accuracy index | |
| E: Adjustment of age not reported | |
| F: Field Study of agencies collecting demographic data as, VDCs, Municipalities, DDC, Offices related to population, public health or statistical information, NGOs working in local or national level, CBS, NPC and related ministries | |

Unit II. Measurements

- | | |
|------------------------|---|
| 1. Age-Sex Analysis | 4 |
| A: Age and sex pyramid | |

- B: Summary measures of age and sex (sex ratio, dependency ratios, aging index, median age, Index of dissimilarity)
 C: *Classroom Exercise* on real data of VDC, District, Zone, Region or National level
2. Population growth 3
 A: Natural increase and balancing equation
 B: Arithmetic growth
 C: Geometric growth
 D: Exponential growth
 E: Doubling time
3. Nuptiality 4
 A: Crude and general rates
 B: Specific rates
 C: Mean/median age of marriage
 D: Singulate mean age at marriage
 E: Coales' Index of nuptiality
4. Fertility and reproduction 8
 A: Period fertility
 i. Crude rates
 ii. Specific rates
 iii. Standardized rates
 B: Cohort fertility
 i. Synthetic cohort
 1. Total fertility rate
 2. Gross reproduction rate
 3. Net reproduction rate
 ii. Real cohort
 4. Children ever born (CEB)
 5. Mean age of child bearing
 6. Mean length of generation
 7. Parity progression ratio
 C: Bongaart's fertility model
5. Mortality and Morbidity 8
 A: Morbidity
 i. Risk factors
 ii. Incidence and prevalence rate
 iii. Relative risks
 B: General mortality
 i. Crude death rates
 ii. Specific rates: age, sex, cause, case fatality
 iii. Standardized rates
 iv. Maternal mortality rate/ratio
 C: Pregnancy wastage
 i. Foetal and perinatal rates/ratios
 D: Childhood mortality

- i. Infant mortality (conventional and adjusted)
 - ii. Child mortality
 - iii. Under-five mortality
- 6. Migration and Urbanization 3
 - A: Migration
 - i. Basic concepts and terminologies
 - ii. Migration rates
 - B: Urbanization
 - i. Basic concepts
 - ii. Level and tempo of urbanization
 - iii. Lorenz curve and Gini coefficient
- 7. Analysis of Labour Force 2
 - A: Basic concepts
 - B: Measures of estimating labour force

Project Work:

- A: Exercise on the basis of real Fertility Mortality and Migration data that could be derived from census, survey or service statistics documents of country, region, district, municipality or VDC, or from an NGO/INGO.

Readings

- Barclay, G. W. (1958). *Techniques of Population Analysis*. New York: John Wiley & Sons, Inc.
- Bhende, A., & Kanitkar, T. (1993). *Principles of Population Studies*. Bombay: Himalaya Publishing House.
- Bogue, D. J. (1969). *Principles of Demography*. New York: John Wiley and Sons Inc.
- Caselli, G., Vallin, J., and Wunsch, G. (2006) . *Demography: Analysis and Synthesis. Volume I, II, III and IV*. London: Elsevier Inc.
- Demeny, P., & McNicoll, G. ed. (2003). *Encyclopedia of Population*. New York: Macmillian Reference.
- Mishra, B. D. (1995). *An Introduction to the Study of Population*. Bombay: South Asian Publishers. ed II.
- Newell, C. (1994). *Methods and Models in Demography*. Chichester: John Wiley and Sons.
- Population Reference Bureau (2004). *Population Handbook*. Washington DC: Population Reference Bureau.
- Pressat, R. (1980). *Demographic Analysis*. New York: Aldine Publishing Company.
- Pressat, R. (1985). *The Dictionary of Demography*. (C. Wilson, Ed.) New York: Basil Blackwell Inc.
- Rowland, D. T. (2003). *Demographic Methods and Concepts*. New York: Oxford University Press.
- Shryock, H. S., Siegel, J. S., & Associates. (1976). *The Methods and Materials of Demography*. San Diego, California: Academic Press, Inc.

Weeks, J. R. (1994). *Population: An Introduction to Concepts and Issues*. California: International Thomson Publishing.

Guideline for faculties for Classroom workshop/seminar:

Step 1: Identify the topics for field work to be accomplished.

Step 2: Divide the students into groups. A group of 4-6 students is ideal. Make a mix of gender, ethnicity and other attributes for crossbreeding of working style, ideas and opinions.

Step 3: Give them task of identifying the problems, differences, findings of gathered information, conclusions, possible solutions and their best recommendations.

Step 4: Organize a presentation session. Presence of many faculties is recommended. Students will present their gist of combined work and discussions. Presenters would be different in different workshops/seminar, so that each student will have opportunity to present by the end of session.

Step 5: Evaluations could be performed with a mix method of faculty's ranking and also the students' scoring for other's presentation. Course coordinator can determine the final scoring.

POPULATION, HEALTH AND DEVELOPMENT

Course Code: Pop. 554

Semester: I; Paper: IV
Full Marks: 50; Credit Hours: 3
Teaching Hours: 48

The objective of this course is to enable the students to:

- demonstrate advanced knowledge and understanding of scientific, evidence-based approaches to the study of population and health issues
- identify causes and consequences of health status of population change and to relate these to underlying population dynamics
- critically assess and apply the knowledge in population and health planning and programming

Unit I. Context of population, health and development 7

1. Concept of morbidity, mortality, good health, and development
2. Concept of health planning and rationale
3. Approaches adopted by states in health planning (public sector, public-private partnership, private sector)
4. State's responsibility in health sector
5. Determinants of morbidity and mortality in developed and developing countries

Unit II. Health in Transition and factors affecting health 10

1. Theories of epidemiological and overall health transition, linkage of demographic transition with epidemiological transition; Mosley and Chen model, The Stochastic Theory of Mortality
2. Social and related theories of health and development, shift towards non-communicable diseases,
3. Health transition in developing and developed countries, discussion on shift from communicable to non-communicable diseases
4. Understanding of interrelationship between demographic and health transition
5. Globalization and health
6. *Seminar presentation by students* on morbidity and mortality differentials by selected social, economic, participatory and demographic variables

Unit III. Measures of Diseases Frequency and Association 7

1. Measure of disease frequency
A: Prevalence and incidence

B: Crude, category-specific and adjusted (standardized) rates

2. Measure of Association

A: Relative Risk

B: Standardized Mortality Ratios

C: Attributable Risk

D: Interpretation of Measure of Association

Unit IV. Equity and access to health

5

1. Health as a basic human right
2. Access to health care, factors determining access to health care
3. Determinants of health services utilization in developing countries
4. Equity considerations in health services

Unit V. Trends and determinants of health status of Nepal's population

9

1. Trend of morbidity and mortality in Nepal
2. Infant and child health
3. Adolescent and youth health - including reproductive health
4. Women's health
5. Adult population
6. Aging population
7. Health services utilization in Nepal
8. *Classroom seminar* focused on differential health needs of population classified by ethnicity, location, age, sex, occupation, education and media awareness

Unit VI. Health policy and programs in Nepal

10

1. Current health policy – short, medium and long term; Government health delivery system
2. Sectoral health policies in Nepal: neo-natal, infant and child, adolescent and youth, maternal, aged population
3. Gender and social inclusion considerations in health policies of Nepal
4. Major health programs in Nepal; role of primary health care system
5. International organizations and health policy and programs in Nepal (eg., Who is driving health policy in the international arena, international policy networks, the role of UN organizations including WHO in health policy, planning and programming, the role of World Bank etc.)
6. *Project work* followed by field visit to one or more agencies like MoHP; NPC; NHRC; District Public Health Office; Hospital, PHC, HP; NGOs having health programmes;

DDC (public health wing); Municipality and VDC including submission and presentation of project work

Readings:

A Green: An introduction to Health Planning in Developing Countries. OUP, 1992

B. Abel Smith: An introduction to Health Policy, Planning and Finance, London: Longmans, 1994. British Medical Journal

Journal of Health Policy and Planning

A E Joseph and D R Philips (1984): Accessibility and Utilization: Geographical Perspectives on Health care Delivery. Harpar and Row publisher.

World Health Organization. The World Health Report – 2000 ACE onwards

Publications from UN, World Bank and other agencies

Nepal Demographic and Health Surveys – 2001, 2006, and 2011

Department of Health Services - Morbidity and Mortality Study – 1998 and 2008

Department of Health Services – Annual Health Statistics

Guideline for faculties for Classroom workshop/seminar:

Step 1: Identify the topics for field work or classroom seminar to be accomplished.

Step 2: Divide the students into groups. A group of 4-6 students is ideal. Make a mix of gender, ethnicity and other attributes for crossbreeding of working style, ideas and opinions.

Step 3: Give them task of identifying the problems, differences, findings of gathered information, conclusions, possible solutions and their best recommendations.

Step 4: Organize a presentation session. Presence of many faculties is recommended. Students will present their gist of combined work and discussions. Presenters would be different in different workshops/seminar, so that each student will have opportunity to present by the end of session.

Step 5: Evaluations could be performed with a mix method of faculty's ranking and also the students' scoring for other's presentation. Course coordinator can determine the final scoring.

POPULATION, RESOURCE AND DEVELOPMENT

Course Code: Pop. 555

Semester: I; Paper: V
Full Marks: 50; Credit Hours: 3
Teaching Hours: 48

Objective of the course:

The objective of this course is to provide a comprehensive policy oriented analysis of issues concerning interplay of population resource and development. This involves the introduction of concepts and tools in measuring attributes of resource availability and human welfare, interplay of population and resource in different development thinking, resource constraints for human resource development and social and economic development. Students will gain theoretical and indigenous knowledge, and policy perspective to establish synergy among population, resources and development efforts.

Instructional objectives:

- To enable students to develop a critical understanding on the issues surrounding the resource constraints and rational utilization of scarce resources for the population subsistence, rising living standard and economic development,
- To enable students to analyse the political feasibility as well as the effectiveness of development strategies that seek to formulate pragmatic population and development policies keeping resource constraints in centre.

Unit I. Understanding Population and Subsistence: Theories and Evidences 6

1. Theories of population and subsistence
2. Adjustment of households to food supplies and other resources

Unit II. Resource base and population wellbeing 10

1. Population growth and resource constraints
 - A: Population growth in economic development
 - B: Theories of resource constraints on Economic growth- from Malthus to Club of Rome, The Ricardo Model, Dual economy model,
2. Links between Population Resource and human welfare
 - A: The resource base and human welfare
 - B: Needs, stress and carrying Capacity: Land and water
 - C: Population and resources in modern theories of growth
 - D: Demography and economic stress
 - E: Population, poverty and natural resources: Local interactions (the Proletarianisation of the Poor in Nepal)

3. *Seminar presentation* on theories of economic growth and their associations with population dynamics, their differential effects in developed and underdeveloped territories in both national and international contexts

Unit III. Population Growth and Economic Development 8

1. Negative Conceptions
 - A: The Malthusian Views and growth models,
 - B: Population and Savings
 - C: Population, Inequality and Poverty,
 - D: Population growth and the Environment
2. Positive Conceptions
 - A: Boserup's Population, necessity, and innovation
 - B: Population, density, and Innovation
3. Economic Growth and Human Health
 - A: Health, Nutrition, and Economic Growth
 - B: Economic growth and secular trend in chronic malnutrition and mortality decline

Unit IV. Population, Development and Resource Interaction 8

1. The search for laws linking population and resource
2. Demographic Dividends
3. The Carrying Capacity
4. Limits to growth
5. Land and other resources
6. The euphoria of technical progress
7. The perspective of less developed countries
8. *Workshop/Seminar focused* on resources and demographic shift in the context of Nepal; consider over and under exploitation of land, water, other resources and technical progress in ecological belts and regions

Unit V. Population and resources in Development Debate 8

1. Adam Smith and Marshall on Population and development
2. Marx and Marxists on Population and Development
3. Max Weber on Population, culture and Development
4. Neo-Malthusians, neo-liberals and Neo-Marxists on Population and Development
5. Sustainable development,
6. Population in Current Development debate

Unit VI. The Supply and Determinants of Human Resources

8

1. The historical understanding of the growth of Population
2. Population growth and demand for labourers
3. Industrial training and labour supply
4. The concepts of capital and capability
 - A: Gary Becker's Human Capital,
 - B: Robert Fogel's Physiological capital and
 - C: Sen's human capability
5. *Project work* in given assignment, generally having a focus on theoretical models and their applicability in real situations of developed and developing countries followed by a classroom presentation by student(s)

Required Readings

Unit I

Nigel Crook. (1997). Principles of Population and Development (Part 1: Population and Subsistence: Theories and Evidences). Oxford University Press.

Unit II

Hayami Yujiro and Yoshihisa Godo. (2005). Population Growth and the Constraint of Natural Resources. In *Development Economics: From the Poverty to the Wealth of Nations* (Third Edition). Oxford University Press.

Partha Dasgupta (2000). Population and Resources: An Exploration of Reproductive and Environmental Externalities. *Population and Development Review*, Vol. 26, No. 4 (Dec., 2000), pp. 643-689.

Partha Dasgupta, Carl Folke and Karl-Goran Maler (nd-). The Environmental Resource Base and Human Welfare.

Idriss Jazary, Mohiuddin Alamgir and Theresa Panuccio (1992). Rural Poverty Processes (Chapter-4). The State of World Rural Poverty: An Inquiry into Its Causes and Consequences. New York University Press: International Fund for Agricultural Development (IFAD).

Unit III

Devraj Ray (1999). Population Growth and Economic Development (Chapter-9). *Development Economics*. Oxford India Paperbacks.

Ester Boserup (1976). Environment, Population, and Technology in Primitive Societies. *Population and Development Review*, Vol. 2, No. 1 (Mar., 1976), pp. 21-36.

Robert W. Fogel. (2004). Health, Nutrition, and Economic Growth. *Economic Development and Cultural Change*, Vol. 52, No. 3 (April), pp. 643-658.

Robert W. Fogel. (1994). Economic Growth, Population theory, and Physiology: The Bearing of Long-Term Process on the Making of Economic Policy. National Bureau of Economic Research (NBER), Working Paper No. 4638.

Unit IV

Andrew Mason. (2007). Demographic Dividends: The Past, the Present, and the Future (Chapter 4). *Population Change, Labor Markets, and Sustainable Growth Towards a New Economic Paradigm*, by A. Mason and M. Yamaguchi (eds.). Elsevier Books.

Kingsley Davis. (1990). Population and Resources: Fact and Interpretation. *Population and Development Review*, Vol. 16, Supplement: Resources, Environment, and Population: Present Knowledge, Future Options, pp. 1-21.

Nathan Keyfitz (1990). Toward a Theory of Population-Development Interaction. *Population and Development Review*, Vol. 16, Supplement: Resources, Environment, and Population: Present Knowledge, Future Options (1990), pp. 295-314.

Unit V

Ester Boserup (1996). Development Theory: An Analytical Framework and Selected Application. *Population and Development Review*, Vol. 22, No. 3 (Sep., 1996), pp. 505-515.

Kevin McQuillan (1979). Common Themes in Catholic and Marxist Thought on Population and Development. *Population and Development Review*, Vol. 5, No. 4 (Dec.), pp. 689-698.

Joseph J. Spengler (1976). Adam Smith on Population Growth and Economic Development. *Population and Development Review*, Vol. 2, No. 2, pp. 167-180.

Nigel Crook. (1997). Principles of Population and Development (Part 1: Population and Subsistence: Theories and Evidences). Oxford University Press.

Unit VI

Alfred Marshall. [(1920) 1979]. The Growth of Population (Chapter IV). Principles of Economics (Book IV). London: Macmillan.

Alfred Marshall. [(1920) 1979]. The Industrial Training (Chapter VI). Principles of Economics (Book IV). London: Macmillan.

Sydney H. Coontz. (1957). The Demand for Labour (Chapter VIII). *Population Theories and the Economic Interaction*. London: Routledge and Kegan Paul LTD.

Garey S. Becker. (1962). Investment in Human Capital: A theoretical Analysis. *The Journal of Political Economy*, Vol. 70, Issue 5, Part 2, pp. 9-49.

Robert W. Fogel. (2004). Health, Nutrition, and Economic Growth. *Economic Development and Cultural Change*, Vol. 52, No. 3 (April), pp. 643-658.

Ingrid Robeyns. (2005). The Capability Approach: a theoretical survey. *Journal of Human Development*, 6:1, 93-117.

Guideline for faculties for Classroom workshop/seminar:

Step 1: Identify the topics for field work or classroom seminar to be accomplished.

Step 2: Divide the students into groups. A group of 4-6 students is ideal. Make a mix of gender, ethnicity and other attributes for crossbreeding of working style, ideas and opinions.

Step 3: Give them task of identifying the problems, differences, findings of gathered information, conclusions, possible solutions and their best recommendations.

Step 4: Organize a presentation session. Presence of many faculties is recommended. Students will present their gist of combined work and discussions. Presenters would be different in different workshops/seminar, so that each student will have opportunity to present by the end of session.

Step 5: Evaluations could be performed with a mix method of faculty's ranking and also the students' scoring for other's presentation. Course coordinator can determine the final scoring.