# POPS 601: SOURCES, EVALUATION AND ADJUSTMENT OF DEMOGRAPHIC DATA - 2 Credit Hours

# **Introduction/Subject Overview or Course Description**

The course is designed to introduce students first to the scope of Demography as a discipline vis-à-vis Population Studies and to show how sub-Saharan Africa varies demographically from the rest of the world. It further discusses the main sources of demographic data for analysis and provides students with the basic understanding of the importance of generating high level quality data for demographic analysis. It also introduces students to the main sources of demographic data including population censuses, demographic sample surveys and civil registration systems and the processes involved in the conduct of each one as well as the factors that contribute to the errors that may be found to be inherent in them, their relevance, strengths and weaknesses in demographic analysis. The course is also intended to train students on the techniques of data evaluation, interpolation and adjustment to minimize data errors and improve on data quality for demographic analysis.

# **Course Objective/Goals:**

The main objective of the course is to equip students with an excellent knowledge on the major sources of demographic data and how to ensure that high quality data are collected for demographic analysis in order to ensure confidence in the results produced from using these data. It has the following specific objectives:

- 1. Introduce students to the main sources of demographic data and the errors associated with each of them
- 2. Equip students with the knowledge and skills to minimize data errors in the field and during analysis
- 3. Provide students with excellent knowledge in techniques of data evaluation and adjustment to ensure that data errors are minimized as far as possible.

- 1. Newell, C. 1968. 'Methods and Models in Demography'. John Wiley & Sons. Chichester, New York, Brisbone, Toronto, Singapore.
- 2. Kpedekpo, G.M.K. (1982). Essentials of Demographic Analysis for Africa. (Edited by I. Livingstone). Heinemann Educational Books Inc., New Hampshire, USA.
- Kwankye, S.O. (1999). "The Vital Registration System in Ghana: A Relegated Option for Demographic Data Collection". The African Population in the 21<sup>st</sup> Century, Vol. 1. UAPS, Durban, 1999. pp. 429-443.
- 4. Regional Institute for Population Studies (RIPS). (1992). *Techniques of Demographic Data Analysis With Special Reference To Sub-Saharan Africa*. RIPS Monograph Series No. 6., RIPS, University of Ghana, Legon.
- 5. Pollard A.H., F. Yusuf and G.N. Pollard. (1991). 'Demographic Techniques' Third Edition, Pergamon Press, Australia.
- 6. Sembajwe, I.S.L. (1993). "Evaluation of Demographic Data: Some Selected Procedures". *RIPS Monograph Series*. No. 8, RIPS, Legon.

- 7. Siegel, J.S., and Swanson, D.A. (eds.) (2004). *The Methods and Materials of Demography*. Elsevier Academic Press, San Diego, USA.
- 8. United Nations. (1973). The Determinants and Consequences of Population Trends. New Summary of Findings on Interaction of Demographic, Economic and Social Factors. Vol 1. United Nations. New York.
- 9. van de Walle Etienne: Multilingual Demographic Dictionary English Section.

#### POPS 602: POPULATION VARIABLES AND DEVELOPMENT PLANNING - 2 Credits

# **Course Description**

This course aims at achieving the following objectives: Introduce students to the conceptual/theoretical frameworks of the interrelationships between population and development; Development of skills and techniques of integrating population variables into sustainable development plans and programmes at both the macro economic, sectoral and subsectoral levels; Examine how government and private sector consider population in their programmes as a way of achieving sustainable development; and Show how the sectors and institutions of state can practically integrate population variables into planning.

- Aniceto C. Orbeta, Jr., Edith Lavina and Mildred Belizario. 1999. Population and Development Planning (PDP) Model: The 1998 Update. <a href="http://dirp4.pids.gov.ph/ris/pidsdps9928.pdf">http://dirp4.pids.gov.ph/ris/pidsdps9928.pdf</a>
- 2. Gaisie, S. K. 2008. "Functional Integration of Population and Development Planning: A Viable Planning Tool". *The New Legon Observer*, Vol. 2 No. 9, May, pp. 22-24.
- 3. Rifat Atun, Kelechi Ohiri and Olusoji Adeyi. 2008. Integration of Health Systems and Priority Health, Nutrition and Population Interventions: *A Framework for Analysis and Policy Choices.* Health, Nutrition and Population (HNP) Discussion Paper <a href="http://siteresoureces.worldbank.org/HEALTHNUTITIONANDPOPULATION/">http://siteresoureces.worldbank.org/HEALTHNUTITIONANDPOPULATION/</a>
- 4. United Nations (1973). The determinants and Consequences of Population Trends. New Summary of Findings on Interaction of Demographic, Economic and Social Factors. Vol. 1. United Nations. New York.
- 5. United Nations. 1990. *Projection Methods for Integrating Population Variables into Development Planning. Volume I.* United Nations, New York.
- 6. United Nations (1994). Proceedings of the 1994 International Conference on Population and Development. United Nations, New York.
- 7. Cassen, R (Ed.), 1994. Population and development: Old debates, New Conclusions (U.S. Third World Policy Perspectives: No. 19). Transaction Publishers, New Brunswick (USA) and Oxford (UK).
- 8. Lassonde, L. 1997. Coping with population challenges. Earthscan Publications Ltd, London.
- 9. Meadows, D. H., Meadows D. L. and Randers, J. 1992. Beyond the limits. Earthscan Publications Ltd, London.
- 10. Kile, M. 1995. No Room at Nature's Mighty Feast. Reflections on the growth of humankind. Demos Press
- 11. Weeks, J. R. 2011. Population: An Introduction to Concepts and Issues

#### POPS 603: POPULATION AND DEVELOPMENT THEORIES AND POLICIES - 3 Credits

#### **Course Description**

The aim of this course is to demonstrate to the student that population and development are interrelated and that the nature of the complexity of the relationship between the two phenomena in a specific context depends on both quantified and unquantified factors. This course also covers the overview of world population growth, theories and models of population change, fertility, mortality and migration.

# **Course Objective**

By the end of this course, students should be able to have a strong understanding of population theories and must be able to apply their knowledge of theory in the formulation of policies and understand the policy implications of population processes.

# Reading List

- 1. Agyei-Mensah, S., & Aikins, A. D. G. 2010. "Epidemiological transition and the double burden of disease in Accra, Ghana." *Journal of urban health*, 87(5), 879-897.
- 2. Bawah A., Houle B., Alam N., Razzaque A., Streatfield P.K., Debpuur C., et al. 2016. "The Evolving Demographic and Health Transition in Four Low- and Middle-Income Countries: Evidence from Four Sites in the INDEPTH Network of Longitudinal Health and Demographic Surveillance Systems." *PLoS ONE* 11(6):
- 3. Hagopian, Amy, Matthew J. Thompson, Meredith Fordyce, Karin E. Johnson and L. G. Hart. 2004. "The migration of physicians from sub-Saharan Africa to the United States of America: measures of the African brain drain." *Human Resources for Health* 2(1):1-10.
- 4. Henry, S., Boyle, P., and Lambin, E. F. 2003. Modelling inter-provincial migration in Burkina Faso, West Africa: the role of socio-demographic and environmental factors. Applied Geography, 23(2), 115-136.
- 5. Horne, C., Dodoo, F. N. A., & Dodoo, N. D. (2013). The shadow of indebtedness: Bridewealth and norms constraining female reproductive autonomy. *American Sociological Review*, 78(3), 503–520
- 6. Lee, Ronald. 2003. "The Demographic Transition: Three Centuries of Fundamental Change." The Journal of Economic Perspectives 17(4):167-190.
- 7. Lee, Ronald and Andrew Mason. 2006. "What is the demographic dividend?" Finance and Development 43(3):16.
- 8. Marmot, Michael. 2005. "Social determinants of health inequalities." *The Lancet* 365(9464):1099-1104.
- 9. Smith, Suzanne M. and George A. Mensah. 2003. "Population aging and implications for epidemic cardiovascular disease in Sub-Saharan Africa." *Ethnicity and Disease* 13(2; SUPP/2):S2-77.
- 10. Zuberi, T., Sibanda, A., Bawah, A., & Noumbissi, A. 2003. "Population and African society." *Annual Review of Sociology*, *29*(2003), 465-486.

#### POPS 604: SOCIAL DEMOGRAPHY - 2 Credit Hours

#### Introduction

This course examines the interrelationship among demographic, social and cultural variables in different settings- global, regional, national and local. It also discusses how socio-cultural factors in population processes influence population policy formulation, implementation and population programmes.

# **Course Objective**

Students coming from different socio-cultural backgrounds already have some knowledge about the social determinants of population processes. The objective of the course is to deepen their understanding of the socio-cultural determinants and consequences of population patterns, processes and trends in relation to different socio-cultural environments or settings.

# **Learning Outcomes**

By the end of this course, students should be able to have a deeper understanding of the association of social and cultural variables with population and its process. They should also be able to comprehend the interrelationships among socio-cultural variables and population patterns and trends at global, regional and other levels, paying special attention to the Sub-Saharan African and Ghanaian contexts. It is further expected that students will have a clear understanding of developments in the international environment and social reproduction and population management and migration movements in traditional and contemporary contexts. Students should also have critical viewpoints on debatable issues in population processes with respect to gender.

- 1. Weeks, John. R. 2010. Population: An Introduction to Concepts and Issues. 10<sup>th</sup> Edition. Thomson Wadsworth, New York, U.S.A.
- 2. Bachrach, C. 2014. Culture and Demography: From Reluctant Bedfellows to Committed Partners. Demography. 51:1: 3-25
- 3. Lockwood, M. 1995. Structure and behaviour in the social demography of Africa. *Population and Development Review*, 21:1-32.
- 4. Bawah, A. A. (2002). Spousal Communication and Family Planning Behavior in Navrongo: A Longitudinal Assessment. *Studies in Family Planning*, *33*(2) 185-194.
- 5. Emina, J. B., Chirwa, T., & Kandala, N. B. (2014). Trends in the use of modern contraception in sub-Saharan Africa: does women's education matter? *Contraception*, *90*. 154 61
- 6. Horne, C., Dodoo, F. N. A., & Dodoo, N. D. (2013). The shadow of indebtedness: Bridewealth and norms constraining female reproductive autonomy. *American Sociological Review*, 78(3), 503–520
- 7. Agyemang, C., Owusu-Dabo, E., de Jonge, A., Martins, D., Ogedegbe, G., & Stronks, K. (2009). Overweight and obesity among Ghanaian residents in The Netherlands: how do they weigh against their urban and rural counterparts in Ghana? *Public Health Nutrition*, *12*(07), 909-916.
- 8. de-Graft Aikins, A (2005). Healer-shopping in Africa: new evidence from a rural-urban qualitative study of Ghanaian diabetes experiences. *British Medical Journal*, 331,737.
- 9. Mberu, B. U. (2007). Household Structure and Living Conditions in Nigeria. *Journal of Marriage and Family*, 69(2), 513-527.
- 10. Oppong, C. 2004. Social Capital and Systems of Care. *African Studies Research Review*, Research Review Supplement 16: 17- 37.

- 11. Takyi, B. K. (2001). Marital instability in an African society: Exploring the factors that influence divorce processes in Ghana. *Sociological focus*, *34*(1), 77-96.
- 12. Wong, M. (2006). "The Gendered Politics of Remittances in Ghanaian Transnational Families. *Economic Geography* 82 (4): 355 381.

#### POPS 605 – BASIC POPULATION ANALYSIS – 3 Credit Hours

# **Course Description**

Demography is the scientific study of human population. When it is studied in relation to other disciplines it is called population studies, the main preoccupation of which is to explain the changes that take place in the population itself and the components of such change which are fertility, mortality and migration. A number of rates, ratios, replacement quotients, standardized indexes and the like have been devised with the view to making more precise, detailed and systematic statements of the components of population change. The course attempts to describe, illustrate and explain the fundamental procedures and methods demographers use to help achieve their aim. The course is designed to be interactive consisting of lectures, assignments, tutorials and students will be assessed continuously and at the end of the semester.

# **Course Objective/Goals:**

- 1. To be able to delimit the scope and object of demography and how to source data for population analysis
- 2. Develop skills in using census data and other forms of population information and analysis to explain the behavior of the components of population change
- 3. To be able to describe, illustrate and explain the fundamental procedures and methods demographers use to help achieve their aims

## **Learning Outcomes**

It is expected that at the end of the semester students will be able to use demographic terminologies correctly, analyse basic measurement of demographic processes, namely, fertility, mortality, migration and nuptiality, as well as use these basic statistical measures in their dissertation writing. Finally, it is expected that students will be able to identify their areas of interest and specialization.

- 1. Siegel, J. S. and D. A. Swanson 2004. The Methods and Materials of Demography. Second edition, Academic Press, USA.
- 2. Pollard, A. H., F. Yusuf and G. N. Pollard 1991. Demographic Techniques. Third edition, Pergamon Press, Australia
- 3. Hinde, A. 1998. Demographic Methods. Arnold Publishers, Great Britain.
- 4. Kpedekpo, G. M. K. 1982. Essentials of Demographic Analysis for Africa. Fakenham Press Limited, Great Britain.
- 5. Van de walle Etienne: Multilingual Demographic Dictionary English Edition
- 6. United Nations Demographic Yearbook, Economic and Social Affairs
- 7. UNFPA, 1993. Readings in Population Research Methodology (Edited by Bogue, D. J., Arriaga, E. E. and Anderton, D. L.). Volumes 1-7.

#### POPS 606: ADVANCED POPULATION ANALYSIS - 3 Credit Hours

#### **Course Description**

This course is expected to help students understand the relevance of demographic models, describe some demographic models, apply demographic models to available data and appreciate their importance in the overall socio-economic development of a nation. This course will also give priority to hands on exercises with real demographic data and provide students the opportunity to explore various demographic data and the techniques appropriate per data.

# **Course Objective/Goals:**

The goal of this course is to help students develop the skill in modeling and interpreting demographic analysis using real data.

The objective of the course is to equip students with:

- 1. skills for modeling demographic issues
- 2. skills for interpreting demographic models
- 3. skills for applying direct and indirect techniques of estimating fertility, mortality and nuptiality indicators to real data

#### **Learning Outcomes**

At the end of this course, students are expected to able to:

- 1. Explain demographic models and their uses
- 2. Understand the concept of stable and stationary population
- 3. Apply direct techniques of estimating fertility, mortality and nuptiality to real data
- 4. Apply indirect techniques of estimating fertility, mortality and nuptiality to real data

- 1. Siegel, J.S. and Swanson, D.A. (eds.) 2004. *The methods and Materials of Demography*. Second Edition. Washington, D.C., U.S. Census Bureau.
- 2. Preston, H. S., Heuveline, P. and Guillot, M. 2001. *Demography. Measuring and Modeling Demographic Processes*. Blackwell Publishers Ltd. UK.
- 3. United Nations 1983. *Indirect Techniques for Demographic Estimation. Manual X.* Department of International Economic and Social Affairs. Population Studies, No. 81. UN, New York.
- 4. United Nations 1982. *Model Life Tables for Developing Countries*. Department of International Economic and Social Affairs. Population Studies, No. 77. UN, New York.
- 5. Pollard A.H., Yusuf, F and Pollard G. N. 1991. *Demographic Techniques*. Third Edition, Pergamon Press, Australia.
- 6. Hinde, A. 1998. Demographic Methods. Arnold Publishers, Great Britain.
- 7. Kpedekpo G.M.K. 1982. Essentials of Demographic Analysis for Africa. Fakenham Press Limited, Great Britain.
- 8. Newell, C. 1994. Methods and Models in Demography. John Wiley & Sons Ltd, England.
- 9. Coale, A. J. and Demeny, P. 1983. *Regional Model Life Tables and Stable Populations*. Second Edition. Academic Press Inc. New York.
- 10. Bongaart, J. 1978. A framework for analyzing the proximate determinants of fertility. Population and Development Review, Vol 4, No.1, pp. 105-132.
- 11. Stover, J. 1997. Revising the proximate determinants of fertility framework: What have we learned in the past twenty years? PAA, Washington, DC.

- 12. Moultrie TA, RE Dorrington, AG Hill, K Hill, IM Timæus and B Zaba (eds). 2013. *Tools for Demographic Estimation*. Paris: International Union for the Scientific Study of Population. demographic estimation.iussp.org
- 13. Bawah, Ayaga A., and Fred N. Binka. "How many years of life could be saved if malaria were eliminated from a hyperendemic area of northern Ghana?." *The American journal of tropical medicine and hygiene* 77.6 Suppl (2007): 145-152.
- 14. Bawah, Ayaga, et al. "The Evolving Demographic and Health Transition in Four Low-and Middle-Income Countries: Evidence from Four Sites in the INDEPTH Network of Longitudinal Health and Demographic Surveillance Systems." *PloS one* 11.6 (2016): e0157281.

# POPS 607: INTRODUCTION TO STATISTICAL AND COMPUTING TECHNIQUES – 3 Credit Hours

# **Introduction/ Course Description**

The course is to introduce social scientist to basic statistical concepts and computation skills. As the course name implies this is basic and no attempt is made to treat this as a pure statistics class. Emphasis will be placed on the interpretation of basic statistical procedures, use of computational techniques in the manipulation of data to generate the required results. The course will introduce students to different types of data, methods of summarizing and presenting these. The course will cover the basic techniques of statistical inferences and procedures for assessing relationships between variables; examine the underlying assumptions and the possible limitations of each method.

Statistics is a vital component of the research process, from the planning stages of a study to the final presentation of the results. Often researchers allow their personal pre-conceived notions to cloud objectivity. Statistical principles provide an objective and orderly approach to collecting and interpreting research data. To make correct decisions based on data, the researcher must know the source of that data, how they were obtained and assess whether the conclusions drawn based on the data are statistically valid.

# **Course Objective/Goals:**

The objective of the course is to equip students with:

- 1. The basic skills for statistical analysis and interpretation of quantitative data using appropriate statistical methods;
- 2. Some relevant skills in computing and the use of statistical software for analysis; and
- 3. The skills of detecting, querying and explaining how statistics can be used and misused.

## **Learning Outcomes**

It is expected that at the end of the semester students will develop sufficient understanding, and be conversant with the basic concepts and vocabulary of statistical techniques and computation research skills to improve their research activities. Students will be well equipped to appraise and interpret the statistics commonly used in research papers in their fields and to facilitate collaborative work with other researchers.

#### Reading List

1. Agresti, A. & Finlay, B. (2009). Statistical Methods for the Social Sciences. 4th Edition. New Jersey, Pearson International Edition.

- 2. Bluman, A.G. (2012). Elementary Statistics: step by step approach. 8th Edition. United States of America.
- 3. Cook, A., Netuveli, G. & Shiekh, A. (2004). Basic Skills in Statistics: a guide for healthcare professionals. Great Britain, Class Publishing.
- 4. Dunn O.L. & Clark V.A. (2009). Basic Statistics: A Primer for the Biomedical Sciences. 4th Edition.
- 5. Everitt, B.S. & Skrondal, A. (2010). The Cambridge Dictionary of Statistics. 4th Edition. United States of America, Cambridge University Press.
- 6. Field, A. (2009). Discovering Statistics Using SPSS. 3rd Edition. United Kingdom, SAGE Publications.
- 7. Griffiths, D., Stirling, D.W. & Weldon, L.K (1998). Understanding Data: principles and practice of statistics.
- 8. Stephens, L.J. (2006). Schaum's Oultine of Beginning Statistics, 2nd Edition. New York, McGraw Hill Publications.
- 9. Any good basic Statistics book of your choice.

### POPS 608: ADVANCED QUANTITATIVE ANALYSIS - 2 Credit Hours

# **Introduction/ Course Description**

The Advanced Quantitative Analysis Course is designed to help students' relate various theories to empirical evidence using statistical methods and models where appropriate. This course is not aimed at the complete beginner in statistics and quantitative analysis; but a follow up to POPS 607 – (Introduction to Statistical and Computing Techniques). However, there may be the need for some of these ideas refreshed and stressed to set the tone for this semester's work. In Lectures 1 and 2 therefore we will discuss quite selective overviews of some central themes and terminologies relevant to basic statistics course. We will rarely go into any technical detail and the presentation will be mainly on ideas supported by concrete examples. The focus is on key topics that will help to contextualise the ultimate task of learning about advanced quantitative analytical methods.

Statistics is used with two purposes in mind: first, to summarize data so that it is readily comprehensible and second to draw conclusions that can be applied to other cases. **POPS 608** Advanced Quantitative Analysis focuses on statistical methods have been developed to help in understanding data and to assist in making decisions when uncertainty exists. Advanced quantitative analytical techniques are useful for researchers who will be undertaking research in areas that affect the human population.

# **Course Objective/Goals:**

The objective of the course is to equip students with:

- 1. Skills for statistical analyses and interpretation of quantitative data using appropriate statistical methods;
- 2. Some relevant skills in the use of statistical software for analysis; and
- 3. Skills of detecting, querying and explaining how statistics can be used and misused.

# **Learning Outcomes**

It is expected that at the end of the semester students will develop sufficient understanding, and be conversant with statistical techniques and computation research skills to improve their research activities. Students will be well equipped to appraise and interpret the statistics commonly used in research papers in their fields and to facilitate collaborative work with other researchers.

# Reading List

- 1. Agresti, A. (2007). An Introduction to Categorical Data Analysis. 2<sup>nd</sup> Edition, United States of America, Wiley & Sons.
- 2. Agresti, A. (2010). Analysis of Ordinal Categorical Data. 2<sup>nd</sup> Edition, United States of America, Wiley & Sons.
- 3. Agresti, A. & Finlay, B. (2009). Statistical Methods for the Social Sciences. 4th Edition. New Jersey, Pearson International Edition.
- 4. Bickel, R. (2007). Multilevel Analysis for Applied Research. United States of America, The Guilford Press.
- 5. Bluman, A.G. (2012). Elementary Statistics: step by step approach. 8<sup>th</sup> Edition. United States of America.
- 6. Doncaster, P.C. & Davey, A.J.H. (2007). Analysis of Variance and Covariance: How to choose and construct models for the life sciences. United Kingdom, Cambridge University Press.
- 7. Dunn O.L. & Clark V.A. (2009). Basic Statistics: A Primer for the Biomedical Sciences. 4<sup>th</sup> Edition.
- 8. Everitt, B.S. & Skrondal, A. (2010). The Cambridge Dictionary of Statistics. 4<sup>th</sup> Edition. United States of America, Cambridge University Press.
- 9. Field, A. (2009). Discovering Statistics Using SPSS. 3<sup>rd</sup> Edition. United Kingdom, SAGE Publications.
- 10. Hilbe, J.M. (2009). Logistic Regression Models. United States of America, CRC Press.
- 11. Hosmer, D.W. & Lemeshow, S. (2000). Applied Logistic Regression. 2<sup>nd</sup> Edition. United States of America, John Wiley & Sons.
- 12. Snijders, T.A.B. & Bosker, R.J. (2012) Multilevel Analysis: An introduction to Basic and Advanced Multilevel Modeling. 2<sup>nd</sup> Edition. United Kingdom, SAGE Publications.
- 13. Stephens, L.J. (2006). Schaum's Outline of Beginning Statistics, 2<sup>nd</sup> Edition. New York, McGraw Hill Publications.

## POPS 609: METHODS OF SOCIAL RESEARCH - 2 Credit Hours

### **Course Description**

This course seeks to teach students how to critically assess information they come across in their daily work, and how to conduct research that yields valid and reliable answers to the questions they engage.

# **Course Objective/Goals:**

- 1. Students will become familiar with the fundamental considerations one must concern themselves with in the design and conduct of high-quality research
- 2. Students become acquainted with a spectrum of methodologies for conducting research to make good judgments about the appropriateness of the various research designs available for answering different questions
- 3. Students should become critical consumers of research
- 4. Students will be able to discern high quality work at the same time that they acquire the requisite tools for designing useful projects

# **Learning Outcomes:** At the end of the course students will be able to:

- 1. Describe the different methods of social science research
- 2. Describe the main purposes of social surveys
- 3. Understand the logic of survey sampling
- 4. Undertake research using probability and non-probability sampling techniques
- 5. Know how to design a research proposal
- 6. Undertake univariate, bivariate and multivariate analysis and appropriately interpret them
- 7. Design a research survey questionnaire
- 8. Know how to write a scientific text
- 9. Familiarise themselves with social research ethics and presentation

## Reading List:

- 1. Babbie, E. (2004). The Practice of Social Research. Wadsworth, Belmont, California.
- 2. Babbie, E. (1990). Survey Research Methods. Wadsworth, Belmont, California.
- 3. Baker, T. (1998). Doing Social Research. McGraw-Hill. New York
- 4. King, G., R. Keohane and S. Verba (1994). Designing Social Inquiry. Princeton University Press.
- 5. Kumekpor, T. (2002). Research Methods and Techniques of Social Research. Sonlife Printing Press and Services, Adenta, Accra.
- 6. Pelosi, M. and T. Sandifer (2003). Elementary Statistics: From Discovery to Decision. John Wiley and Sons. New Jersey.
- 7. Ragin, C. (1989). The Comparative Method. University of California Press, California.
- 8. Twumasi, P.A. (2001). Social Research in Rural Communities. Ghana Universities Press, Accra.

#### POPS 610: SEMINAR I

#### POPS 611: QUALITATIVE RESEARCH METHODOLOGY - 2 Credit Hours

#### **Objective of the Qualitative Research Methodology Course**

This qualitative research methodology course is structured around 5 questions:

1. Why do we do qualitative research?

- 2. What are the key methods in qualitative research and what are their strengths and weaknesses?
- 3. How do we design qualitative research?
- 4. How do we do qualitative research?
- 5. How do we analyse qualitative data and write up qualitative research?

These questions will be addressed through theory and practice. The theoretical section covers epistemological issues in social science research, key methods in qualitative research, qualitative research design, fieldwork and qualitative data analysis and reporting. This section should equip students with critical tools for thinking through, carrying out and evaluating qualitative research. The practical section enables students to conduct small-scale qualitative research projects. Students will be given a research topic on which they will conduct a mixed methods study at the RIPS Research Site in Ga Mashie. The data will be analysed through group discussion and individual practice and the studies will be written up in short structured reports. Assessment will consist of two course assignments (a critical appraisal essay and the practical project) and an examination.

# Reading List

Core texts

- 1. M. Bauer and G. Gaskell (eds) (2000). *Qualitative researching with text, image and sound: a practical handbook for social research.* London: Sage.
- 2. Silverman, D. (2006). *Interpreting Qualitative Data. Methods for analysing talk, text and interaction*. London: Sage.
- 3. Stephens, D. (2009). Qualitative research in international settings. Oxon: Routledge.

#### Case Studies

- 1. Adinkrah, M. (2004). Witchcraft Accusations and Female Homicide Victimization in Contemporary Ghana. *Violence Against Women*, 10 (4), 325-356.
- 2. Anarfi, J.K and Kwankye,S.O. (Eds) (2009). *Independent migration of children in Ghana*. Legon: Institute of Statistical, Social & Economic Research (ISSER).
- 3. Avotri J.Y. and Walters V. (1999). "You just look at our work and see if you have any freedom on earth": Ghanaian women's accounts of their work and their health. *Social Science and Medicine*, 48(9): 1123-33.
- 4. Awah, P.K, Unwin, N and Phillimore, P (2008) Cure or control: complying with biomedical regime of diabetes in Cameroon *BMC Health Services Research*, *8,43*.
- 5. Campbell, C. (2000). Selling sex in the time of AIDS: the psycho-social context of condom use by sex workers on a Southern African mine. *Social Science and Medicine*, 50, 479 494.
- 6. de-Graft Aikins, A (2005). Healer-shopping in Africa: new evidence from a rural-urban qualitative study of Ghanaian diabetes experiences. *British Medical Journal*, 331, 737.
- 7. de-Graft Aikins, A. & Ofori-Atta, A. (2007) Homelessness and mental health in Ghana: everyday experiences of Accra's migrant squatters. *Journal of Health Psychology, 12(5)*, 761-778.
- 8. Dzokoto, V.A and Adams, G. (2005). Understanding Genital-Shrinking Epidemics in West Africa: Koro, Juju or Mass Psychogenic Illness? *Culture, Medicine and Psychiatry*, 29(1), 53 78.
- 9. Joffe, H. & Haarhoff, G. (2002). Representations of far-flung illnesses: the case of Ebola in Britain. *Social Science and Medicine*, 54: 955-69.

- 10. Kolling M, Winkley K, von Deden M (2010). "For someone who's rich, it's not a problem". Insights from Tanzania on diabetes health-seeking and medical pluralism among Dar es Salaam's urban poor *Globalization and Health*.
- 11. Read, U.M., Adiibokah, E., Nyame, S., (2009). Local suffering and the global discourse of mental health and human rights: An ethnographic study of responses to mental illness in rural Ghana. *Globalization and Health* 2009, 5:13
- 12. Skovdal, M and Ogutu, V.O. (2009). "I washed and fed my mother before going to school": Understanding the psychosocial well-being of children providing chronic care for adults affected by HIV/AIDS in Western Kenya. *Globalization and Health*, 5.
- 13. Van der Geest, S. (2006). "It is a tiresome work" Love and sex in the life of an elderly Kwahu woman. In C. Oppong, M.Y.P.A. Oppong, and I.K. Odotei, (Eds), Sex and Gender in an Era of AIDS. Ghana at the turn of the millenium. Sub-Saharan Publishers. (pp.211 232)

#### POPS 612: POPULATION ESTIMATION AND PROJECTIONS – 2 CREDIT HOURS

# **Course Description**

The course is designed to introduce students to the importance of estimation and projection of population for the purpose of development planning. It discusses the differences between population estimation and projections and provides students with the tools for undertaking population estimation and projections as students of population studies. The course offers students the opportunity to appreciate the different methods of population estimation and projections, their respective strengths and weaknesses as well as their underlying assumptions for application. It further trains and equips students with the knowledge about how to make realistic assumptions when undertaking population projections in their demographic analysis. This is in the areas of the three key components of population change made up of fertility, mortality and migration.

## **Course Objective/Goals:**

The main objective of the course is to equip students with an in-depth and practical knowledge and skills for making population projections and estimations and the conditions under which each method of population projection can be adopted. It has the following specific objectives:

- Introduce students to the similarities and differences between population estimation and projections
- Provide students with an understanding of the different methodologies for making population estimation and projections, their respective data requirements, strengths and weaknesses
- Equip students with the knowledge and skills regarding how to make realistic assumptions for population projections
- Train students to be able to make population projections on their own using the different methods of their choice bearing in mind their respective strengths and weaknesses.

# **Learning Outcomes**

At the end of the course, students would be able to:

• Appreciate the importance and uses of population estimation and projections for development planning purposes

- Differentiate between the similarities and differences between population estimation and projections
- Make realistic assumptions that will inform population projections any time it becomes necessary
- Have an excellent knowledge about the different methods of population projections and appreciate their strengths and weaknesses and be able to make decisions as to which of them would be appropriate under different circumstances.
- Practically undertake population projections based on realistic assumptions.

# Reading List

- 1. Smith S.K., J. Tayman and D.A. Swanson (2002); State and Local Population Projections: Methodology and Analysis. Kluwer Academic Publishers.
- 2. Andrew Hinde (1998); Demographic Methods; Arnold Publishers and Co-published Oxford University Press.
- 3. Colin Newell (reprinted in 1995); Methods and Models in Demography. Pubishers John Wiley and Sons Ltd. Pollard A.H., F. Yusuf and G.N. Pollard.(1991) Demographic Techniques Third Edition. Publishers- Pergamon Press.
- 4. Kpedekpo G.M.K. (1982). Essentials of Demographic Analysis for Africa. Publishers-Heinemann Educational Book Ltd.
- 5. Ghana Statistical Service (2013). 2010 Population & Housing Census Report: Children, Adolescents & Young People in Ghana. Ghana Statistical Service, Accra, July, pp. 114-129.
- 6. Ghana Statistical Service (2014). 2010 Population & Housing Census Report: Population Projections/Prospects. Ghana Statistical Service, Accra.
- 7. M.V. George, Stanley K. Smith, David A. Swanson, and Jeff Tayman. 2004. "Population Projections". <u>The Methods and Materials of Demography</u>. Second edition (Edited by Jacob S. Siegel and David A. Swanson). Elsevier Academic Press. Amsterdam, Boston, Heidelberg, London, New York, Oxford, Paris, San Diego, San Francisco, Singapore, Sydney, Tokyo. pp. 567-570.

### POPS 613: POPULATION AND FAMILY HEALTH - 2 Credit Hours

#### **Course Description and Objective**

The main aim of this course is to introduce students to societal, economic, and environmental issues in population and family health, highlighting particular subgroups (for example, urban, rural, poor, adolescents, women, men, children, and the elderly). Emphasis is placed on the factors that affect the health status of populations and families, and the effects of secular changes in the various groups' roles and status on their health, especially reproductive health. Further, students will gain knowledge on how population growth and efforts to address population growth (for example, the promotion of contraception) impact on the health of the family. Finally, family planning policies of different countries, especially those in sub-Saharan Africa will be discussed.

# Reading List

- 1. Ahiadeke, C., 2005. Induced abortion in the context of reproductive change in Ghana. In: S. Agyei-Mensah, J.B. Casterline, and D.K. Agyeman, eds. *Reproductive change in Ghana: Recent patterns and future prospects*. Accra: A.P. Stylish Press Ltd, pp. 178-192.
- 2. Amankwa, A.A., Bavon and P.T. Nkansah 2003. Rural-Urban Migration and Child Mortality in Ghana. African Population Studies 18 (2): 1-26.
- 3. Anarfi, J.K., 2005. Underreaction to sexual behavioural change among the youth in Ghana in the era of AIDS. In: S. Agyei-Mensah, J.B. Casterline, and D.K. Agyeman, eds. *Reproductive change in Ghana: Recent patterns and future prospects*. Accra: A.P. Stylish Press Ltd, pp. 225-242.
- 4. Badasu, D.M. 2004. Child care Among Ewe Migrants in Accra: Cases of Crisis. *African Studies Research Review*, Research Review Supplement 16: 17-37.
- 5. Bawah, A. A. (2002). Spousal Communication and Family Planning Behavior in Navrongo: A Longitudinal Assessment. *Studies in Family Planning*, *33*(2) 185-194.
- 6. Kwankye, S.O., 2007. Adolescent sexual and reproductive health in Ghana: Some results from a survey of Cape Coast and Mankrong. In: C.J. Mba and S.O. Kwankye, eds. *Population, health and development in Ghana: attaining the millennium development goals.* Accra: Sub-Saharan Publishers, pp. 53-90.
- 7. McFarlane, Deborah. 2015. Global Population and Reproductive Health. Jones and Bartlett, Burlington, MA.
- 8. Oppong, C. 2004 Social Capital and Systems of Care. *African Studies Research Review*, Research Review Supplement 16: 17- 37.
- 9. Rifat, Atun, Thyra de Jongh, Federica V. Secca, Kelechi Ohiri, Olusoji Adeyi. 2009. Clearing the Global Health Fog: A Systematic Review of the Evidence on Integration of Health Systems and Targeted Interventions. The World Bank, Washington, DC.
- Seltzer, Judith R. 2002. The Origins and Evolution of Family Planning Programs in Developing Countries. Rand, Santa Monica, CA. <a href="http://www.rand.org/publications/MR/MR1276/">http://www.rand.org/publications/MR/MR1276/</a>
- 11. White, A.C., Merrick, T.W., Yazbeck, A. 2006. Reproductive Health: The Missing Millennium Development Goal. The World Bank, Washington, DC.

# POPS 614: Gender and Reproductive Health - 2 Credit Hours

### **Course Description**

Gender as a concept has gained prominence in discussions on population and related areas. It has however been contested and characterized by debate at many levels. Even though 'gender' is not about women, it has, more often than not, been applied to women because of their more disadvantaged position in society. Gender is a major determinant of both general health and

reproductive health. Reproductive and sexual behaviours are conditioned by social and cultural factors that can be summed up as gender stereotypes or behaviours that are masculine and feminine. These are determined at various levels- individual, community, national, international and global. Delivery and accessing of reproductive health services are also associated with elements of gender.

# Objective

This course examines gender and its influence on reproductive health. Its objective is to examine the effect of gender on the various components of reproductive health. It also seeks to examine the implications of gender on the delivery of reproductive health services.

# Learning outcomes

- 1. To be able to explain the concept of gender and its effect on health
- 2. To be able to discuss the components of reproductive health and the implication of the reproductive health concept on health service delivery
- 3. To be able to identify specific areas of reproductive health and discuss how gender affects them
- 4. To be able to design reproductive health programmes that are fully considerate of gender issues

- 1. Singh, S., Darroch, J.E., Vlassoff, M., & Nadeau, J., 2003. Adding it up: The benefits of investing in sexual and reproductive health care. New York: The Alan Guttmacher Institute.
- 2. Greig, A., Kimmel, M., and Lang, J., 2000. Men, masculinities and development: Broadening our work towards gender equality. *Gender in Development Monograph Series*, 10.
- 3. S. Agyei-Mensah, J.B. Casterline, and D.K. Agyeman, eds. (2005). Reproductive change in Ghana: Recent patterns and future prospects. Accra: A.P. Stylish Press Ltd, pp. 142-160, 178-192 and 225- 242.
- 4. C.J. Mba and S.O. Kwankye, eds. (2007). *Population, health and development in Ghana: attaining the millennium development goals.* Accra: Sub-Saharan Publishers, pp. 53-90 and 161-170.
- 5. Hollos M, Larsen U, Obono O, et al. 2009. The problem of infertility in high fertility populations: Meanings, consequences and coping mechanisms in two Nigerian communities. Soc Sci. & Med. 68: 2061–2068.
- 6. Isiugo-Abanihe, U.C., and Oke, O.A., 2011. Maternal and environmental factors influencing infant birth weight in Ibadan, Nigeria. *African Population Studies*, 25(2), pp. 250-266.
- 7. Madise, N., Zulu, E.M., and Ciera, J., 2007. Is poverty a driver for risky sexual behaviour? Evidence from national surveys of adolescents in four African countries. *African Journal of Reproductive Health*, 11(3), pp. 83-98.
- 8. Moore, A.M., Awusabo-Asare, K., Madise, N., John-Langba, J., and Kumi-Kyereme, A., 2007. Coerced first sex among adolescent girls in Sub-Saharan Africa: Prevalence and context. *African Journal of Reproductive Health*, 11(3), pp. 62-82.

- 9. Nwokocha, E.E., 2007. Maternal crises and the role of African men: The case of a Nigerian community. *Africa Population Studies*, 22(1), pp. 39-62.
- 10. Omwago, M., and Khasakhala, A.A., 2007. Factors influencing couples unmet need for contraception. *Africa Population Studies*, 21(2), pp. 75-94.
- 11. Smith, D.J., 2011. Rural-to-urban migration, kinship networks and fertility among the Igbo in Nigeria. *African Population Studies*, 25(2), pp. 320-336.
- 12. Sundaram A et al. 2012. Factors associated with abortion-seeking and obtaining a safe abortion in Ghana, *Studies in Family Planning*, 2012, 43(4):273–286.

# POPS 615: POPULATION, AGEING AND DEVELOPMENT - 2 Credit Hours

# **Course Description.**

The age structure of a population is determined largely by the interplay between the two major demographic processes of fertility and mortality. With the on-going world wide shift to declining fertility and mortality, many nations are experiencing ever increasing proportions of the elderly or aged in their populations.

Whether a population is "young" or "old" has wide-ranging implications for national development especially in the areas of education, employment, size of the labour force, health needs and social welfare. As the aged population increases therefore, many nations are forced to reexamine the adequacy of their laws, policies and programmes relating to migration, budgetary requirements for pensions, health care and social welfare.

Ageing is therefore gradually emerging as one of the most important challenges in society

## **Course Objectives/Goals**

The course examines how under different conditions or situations and at different stages of societal development changes occur in the mean or median ages of the population leading to steady declines in the proportion of young people (under 15) and a corresponding increase in the proportion of the elderly or older people (over 60 or 65).

The course also examines in detail why the proportions of the elderly in developed societies differ substantially from those in developing countries and the conditions under which transitions occur from one stage to the other.

The course further reviews the complex interrelationship between ageing and other aspects of the social system particularly the labour force, economic growth, education, health and development generally.

As increases in the proportion of the elderly impose critical demands on a country's resources in terms of health care, pensions and social welfare benefits, the course also examines the existence, range and adequacy of such laws, policies and programmes worldwide with particular emphasis on developing countries whose development needs are complex and multifaceted.

#### **Learning Outcomes**

Students at the end of the course, would understand:

- 1. Importance of age structure in demographic and development analysis
- 2. Methodological and conceptual issues relating to collection of data on age in Africa.
- 3. Distinction between young and "old" populations and the factors leading to gradual ageing of the populations in developing societies

- 4. The dividends and "costs" of specific age regimes and how these affect development and vice-versa.
- 5. Range of policies, programmes and laws being implemented (or discussed) world-wide to cope with the challenges of ageing.
- 6. The disintegration of traditional welfare systems in Africa and the looming challenge posed by the increasing proportion of the elderly population.

# **Reading List**

- 1. Abodering, I., (2006) Intergenerational Support and old age in Africa, New Brunswich, N.N., Transaction Publishers.
- 2. Dyson, T., (2010) Population and Development: The Demographic Transition, London, Zed Books.
- 3. Harper, S. (2006), Aging Societies: Myths, Challenges and Opportunities, London, Hodder Arnold.
- 4. Chuks, J., 92010), Population ageing in Ghana: Research Gaps and the way forward, *Journal of ageing Research*, July.
- 5. L.Loyd-Sherlock, P., (2000), Population aging in developed and developing regions: Implications for health policy, **Social Science and medicine**, 51, 887 895.
- 6. Uhlenberg, P. (ed) (2009), International Handbook of the Demography of ageing, New York, Springer Vertag.

#### POPS 616: POPULATION AND HOUSING AND DEVELOPMENT - 2 Credit hours

# **Course description**

All human populations (or more simply people) have certain basic needs such as water, food and shelter (or housing). The quality and quantity of housing stock available at any particular time is therefore not only an important determinant of the quality of life but even more significantly of the level of development of that population.

A "house" may be a single unit or a combination of several units and is considered incomplete without attachments such as amenities, facilities, space either near or within a reasonable reach of the housing unit. All these are important determinants of the quality of housing and therefore of the quality of life.

As a population increases in size, there is a corresponding demand for quality housing. A mismatch between supply and demand fosters the creation of slums, shanty towns and unplanned settlements. Demography provides some of the basic tools for understanding and addressing this challenge.

#### **Course Objective/Goals**

The course critically examines the complex interrelationship between key demographic variables such as population size, growth rate, urbanization and migration and the changing housing needs of the population.

Firstly, it examines the conceptual and methodological problems in data collection as a basis for understanding the complex relationship between population demand and housing supply. On the one hand, a clear understanding is needed of the demographic variables such as population size, growth rate, family or household while on the other hand, there is the need to distinguish between structures (temporary or permanent), dwelling unit, house, materials used etc.

A clear understanding of these concepts provides the basis for assessing the housing stock available and deficits if any. An important component of this particular section is the acquisition of the basic demographic skills for projecting housing needs. The course will also examine the relevance and adequacy of housing and fiscal policies and programmes for tackling the problem of growing housing needs especially in urban poor areas or slums.

# **Learning Outcomes**

At the end of the course, students would be able to:

- Design a questionnaire and other instruments for collecting data on housing.
- Understand the nature of the challenges confronting the housing industry.
- Project the housing needs of a selected population.

Describe examples of laws, policies and programmes to tackle the problem of housing shortage, slum development and associated social problems.

Contribute to the housing debate by suggesting pragmatic policies or programmes.

# Reading list

- 1. Ghana Statistical Service, 2010, Ghana Population and Housing Census. (Series)
- 2. National Development Planning Commission, 2010, Medium-term National Development Policy Framework: Ghana Shared Growth and Development Agenda, (GSGDA-2010-2013), NDPC., Accra.
- 3. U.N., (2008), Principles and Recommendations for Population and Housing Census, N.Y.
- 4. U.N. Human Settlements Programme (UN-HABITAT), 2011, *Ghana Housing Profile*, Nairobi, Kenya.

# Reading list for Course on Projections.

- 1. Ministry of Works and Housing, 1993, National Shelter Strategy, Accra.
- 2. Arku, Godwin, 2009, Housing Policy Changes in Ghana in the 1990s, in *Housing Studies*, Vol. 24. No. 2
- 3. Yeboah, I.E.A, 2005, Housing the Urban Poor in 21<sup>st</sup> Century Sub-Saharan Africa: PolicyMismatch and way forward for Ghana in *Geo Journal*, Springer.

#### POPS 617: POPULATION, HUMAN RESOURCES AND DEVELOPMENT - 2 Credit Hours

#### **Course Overview**

This course will focus on the interplay among population, human resource and development. The topics include the concept of human resources, human resource planning and labour force, principles of human resource planning, labour force surveys, patterns of labour force replacement, approaches to the projection of labour force participation rates by sex and age and projection of the labour force replacement.

#### **Course Objectives**

By the end of the course, students must be able to

- Develop comprehensive knowledge of human resource planning.
- Understand how human resource planning and labour force patterns influence population change and economic development.
- Analyze labour force patterns and make projections based on their analyses.

#### Reading List

1. Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *The journal of political economy*, 9-49.

- 2. Benhabib, J., & Spiegel, M. M. (1994). The role of human capital in economic development evidence from aggregate cross-country data. *Journal of Monetary economics*, *34*(2), 143-173.
- 3. Billari, F. C., & Dalla-Zuanna, G. (2011). Is replacement migration actually taking place in low fertility countries. *Genus*, *67*(3), 105-123.
- 4. Hanushek, E. A. (2013). Economic growth in developing countries: The role of human capital. *Economics of Education Review*, 37, 204-212.
- 5. Hanushek, E. A., Schwerdt, G., Woessmann, L., & Zhang, L. (2016). General education, vocational education, and labor-market outcomes over the life-cycle. *Journal of Human Resources*.
- 6. Kaitelidou, D., Mladovsky, P., Leone, T., Kouli, E., & Siskou, O. (2012). Understanding the oversupply of physicians in Greece: the role of human resources planning, financing policy, and physician power. *International Journal of Health Services*, *42*(4), 719-738.
- 7. Lee, Ronald and Andrew Mason. 2006. "What is the demographic dividend?" Finance and Development 43(3):16.
- 8. Opini, B. M. (2010). A review of the participation of disabled persons in the labour force: the Kenyan context. *Disability & Society*, *25*(3), 271-287.
- 9. Schady, N., Behrman, J., Araujo, M. C., Azuero, R., Bernal, R., Bravo, D., ... & Vakis, R. (2015). Wealth gradients in early childhood cognitive development in five Latin American countries. *Journal of Human Resources*, *50*(2), 446-463.
- 10. Schultz, T. W. (1961). Investment in human capital. The American economic review, 1-17.
- 11. Sehgal, J. M. (1986). An introduction to techniques of population and labour force projections.
- 12. Torabi, F., & Abbasi-Shavazi, M. J. (2015). Women's human capital and economic growth in the Middle East and North Africa. *Journal of International Women's Studies*, *16*(3), 237.

## POPS 618: MATHEMATICAL DEMOGRAPHY - 2 Credit Hours

#### Course description:

Demography is the study of population processes and how these interact to affect the structure and wellbeing of populations. Demographers apply various tools to study population dynamics including the application of mathematical methods to gain insights into the demographic forces that shape the structure and shape of populations. This course aims to introduce students to application of statistical and mathematical methods to develop a deeper understanding of the internal logic of demography, including an understanding of the relationship between demographic variables and other social processes. The course starts with an introduction of students to the concept of mathematical demography, showing how basic statistical concepts such as rates, ratios and proportions are used to estimate demographic events and phenomena. Methods for evaluating the quality of data are reviewed. With that background, the course proceeds to an application of mathematical methods to understand the basic tool of the demographer -- the Life Table. It examines the basic life table and then uses that understanding to examine extensions of a single decrement life table, to multiple decrement processes and their extensions - cause-deleted and associated single-decrement life tables. The course introduces students to standardization and decomposition of rates, including extensive illustrations using data conduct standardization and decomposition analysis. Subsequently, the course then examines stable and stationary population theories and an application of these theories to understand population changes and structure. The course ends with the introduction of students to population mathematical and statistical methods of projections and forecasting.

The course is given in the form of lectures and assignments based on materials thought in the course.

# **Course Objective/Goals:**

This course aims to introduce students to application of statistical and mathematical methods to develop a deeper understanding of the internal logic of demography, including an understanding of the relationship between demographic variables and other social processes.

# **Learning Outcomes**

At the end of this course, students are expected to able to:

- Understand and apply mathematical and statistical concepts to solve demographic problems
- ii. Easily interpret demographic data
- iii. Apply the techniques learned to estimate demographic phenomenon including fertility, mortality and migration events
- iv. Interpret demographic models and apply them appropriately

# Reading list

- 1. Preston et al. 2003. *Demography: Measuring and Modelling Population Processes*, Blackwell Publishers
- 2. Andre Hinde. 2004. Demographic Methods, Arnold
- 3. Prithwis Das Gupta. Standardization and Decomposition of Rates: A User's Manual, Special Studies, US Department of Commerce, Economics and Statistical Administration
- 4. Kenneth W. Wachter and Hervé Le Bras (Eds). 2013. *Mathematical Demography*, Demographic Research Monographs A Series of the Max Planck Institute for Demographic Research, *Springer*: DOI 10.1007/978-3-642-35858-6
- 5. Keyfitz Nathan & Hal Caswell. 2005. Applied Mathematical Demography, Springer
- 6. Smith, Dp & N. Keyfitz. 2013. Mathematical Demography, Springer
- 7. Juha. Alho. 2005. Statistical Demography and Forecasting, Springer

### POPS 619: POPULATION, ENVIRONMENT AND DEVELOPMENT - 2 Credit Hours

### **Introduction/Subject Overview or Course Description**

This course will broadly focus on the relationship between population, environment and development. Student will be coached to critically understand ecology and space science, theories of population and environment, the relationship between population and environment, climate change and its effects on human population. This course will also give priority to review of current literature in population, environment and development and in-depth analyses of the various approaches that are used in conducting research in this area.

#### **Course Objective/Goals:**

The goal of this course is to help students develop the skill in conceptualizing and executing research in population, environment and development.

- 1. The objective of the course is to:
- 2. Introduce students to the concepts and theories in ecology and space science
- 3. Introduce students to theories in population, environment and development debate

- 4. Demonstrate research methods appropriate for understanding human dimensions of natural hazards
- 5. Equip students with the skill to conduct research in population and climate change impacts

# **Learning Outcomes**

At the end of this course, students are expected to able to:

- 1. Explain the components of the ecosystem and its benefit to human population
- 2. Understand and apply theories of population and agriculture
- 3. Understand global conventions on population and development
- 4. Understand concepts and frameworks in population and climate change studies
- 5. Critically examine the changing balance between population, resource and technology

# **Reading List / Required Text**

Text books, reference materials, journals etc.

- 1. Codjoe, S.N.A and Owusu, G. 2011. Climate change/variability and food systems: Evidence from Afram Pains, Ghana. Regional Environmental Change. Springer. DOI19.1007/s10113-011-0211-3.
- 2. Codjoe, S.N.A., and Bilsborrow, R.E. 2011. Population, agricultural intensification in the dry and derived savannah zones of Ghana. Population and Environment. Springer.
- 3. Bilsborrow, R. 1992. Population growth, internal migration and environmental degradation in rural areas of developing countries. European Journal of Population, vol.8, pp. 125-148.
- 4. Blaikie, P. and Brookfield, H. (eds). 1987. Land Degradation and Society. New York: Metheun and Company, Ltd.
- 5. Boserup, E. 1965. The conditions of agricultural growth. London: Allen and Union
- 6. Brown, L. et al. 1976. Twenty-Two Dimensions of the Population Problem. World Watch Paper, No. 5. Worlqwatch Institute, Washington, D.C. Clarke, J., ed. (1992). Population and Environment. Paris: CICRED.
- 7. Boughey, A.S. 1973. Ecology of Population. Macmillan, New York.
- 8. Carr, D.L, Lopez, A.C. and Bilsborrow, R.E. 2009. The population, agriculture and environment nexus in Latin America: country-level evidence from the latter half of the twentieth century. Population and Environment, 30: 222-246.
- 9. Codjoe, S.N.A. 2004. Population and land use/land cover dynamics in the Volta River basin of Ghana, 1960-2010. Ecology and Development Series, No.15, Cuvillier Verlag.
- 10. Codjoe, S.N.A. 2007. Integrating Remote Sensing, GIS, Census and Socio-economic data in studying the Population-land use/cover nexus in Ghana. Africa Development, Vol. 32(2): 195-210.
- 11. Ehrlich P and Holdren J. 1971. The impact of population growth. Science, Vol. 171, pp. 1212-1217.
- 12. Malthus T (1978 and 1803, republished 1960) On Population (First Essay on Population, 1978, and Second Essay on Population, 1803). New York: Modern Library and Random House.
- 13. Marquette, C. and Bilsborrow, R. 1977. Population and Environment Relationships in Developing Countries: A Select Review of Approaches and Methods. In The Population, Environment, Security Equation. Bandot, B. and Moomaw, W. (eds). New York: Macmillan.
- 14. Mertens, B., Sunderlin, W.D., Ousseynou N. and Lambin E.F. 2000. Impact of macroeconomic change on deforestation in South Cameroon: Integration of household survey and remotely-sensed data. World Development, Vol. 28, No. 6, pp. 983-999.
- 15. Rindfuss R and Stern P. 1998. Linking remote sensing and social science: The need and the challenges. In Liverman, D., Moran, E.F., Rindfuss, R.R. and Stern, P.C (eds). People and Pixels. Linking remote sensing and social science, pp. 1-27.

- 16. Singer, S.F (ed.) 1971. Is there an optimum level of population? Mc. Braw Hill Book Company.
- 17. Keller, E.A., and DeVecchio, D.E. 2012. Earth's Processes as Natural Hazards, Disasters and Catastrophes. Pearson Education, Inc.
- 18. Kump, L.R., Kasting, J.E., and Crane, R.G. 2010. The Earth System. Third Edition. Pearson Education, Inc.
- 19. Weeks, J.R. 2008. Population: An Introduction to Concepts and Issues, Tenth Edition. Thomson Wadsworth.

#### POPS 621: POPULATION, HEALTH AND DEVELOPMENT - 2 Credit Hours

# **Course Description**

The concept of population, health and development is an important topic because the health status of a population is a measure of it level of development. The course will try to examine the linkages between population and health and how population-level concepts and measures of fertility, morbidity and mortality, and migration, relate to health conditions. Relating population and public health epidemiology allows for the measurement and assessment of aggregate-level structure of, and variation in health risks by age, sex, or other major factors and across the human life span. Students will be introduced to local and global health issues and the social, environmental, biological and historical factors that influence the health of populations. In this regard, it will examine the social and economic determinants of health at the individual and community level, relating these to the environmental context and how these impact on social and economic development. The focus of the course is therefore on health differentials rather than risks and clinical factors related to particular diseases.

# **Course Objective/Goals:**

This course aims to introduce students to the basic concepts and social determinants of health and how it relates to development.

#### **Learning Outcomes**

At the end of this course, students are expected to able to:

- Develop a deeper understanding of basic concepts of health and the social determinants of health
- 2. Be able to understand the relationship between the key concepts of fertility, mortality and migration and how these relate to health
- 3. Adequately interpret health concepts as the relate to population students.

- 1. Siegel, Jacob S (2012). *The Demography and Epidemiology of Human Health and Aging*; Springer, New York
- 2. Young, Kue T (2005). *Population Health: Concepts and Methods* (2<sup>nd</sup> Ed); Oxford University Press, Oxford.
- 3. Galea, Sandro (ed) [2007]. *Macrosocial Determinants of Population* Health; Springer, New York
- 4. Pol, Louis G and Thomas, Richard K (2001). *The Demography of Health and Health Care*, Kluwer Academic/Plenum Publishers. New York
- 5. Siegel, Jacob S and Swanson, David A (2004). *The Methods and Materials of Demography*; Elsevier, Oxford

# POPS 622: QUANTITATIVE RESEARCH METHODOLOGY - 2 Credit Hours

# **Introduction/Course Description**

POPS 622 is a course designed to introduce students to the quantitative research methodology. Students will be equipped with skills in conducting quantitative research. They will acquire skills that cover the entire research process, from developing a research question, to analyzing and interpreting quantitative results.

# **Course Objective/Goals**

The primary objective of POPS 622 is to equip students with skills in quantitative research methodology. This course introduces students to the research process, experimental and expost facto approaches, survey sampling and questionnaire construction. It also introduces students to attitude scaling methods as well as developing their skills for writing attitude statements. Quantification and analysis of questionnaire data will also be covered.

# **Learning Outcomes**

Learning outcomes for POPS 622 include: developing a research question, distinguishing between the experimental and ex-post facto approaches, learning survey sampling techniques, questionnaire construction, writing attitude statements, developing different types of scales, and quantifying, analyzing and interpreting data.

## Reading List /Required Text

- 1. Bailey, K. D. 1987. Methods of social research. Third edition. New York: The Free Press.
- 2. Bryman, A. 2012. Social research methods. Fourth edition. Oxford: Oxford University Press.\*
- 3. Cochran, W. G. 1977. Sampling techniques. Third edition. New York: John Wiley and Sons.
- 4. Frankfort-Nachmias, C. and D. Nachimias. 1996. Fifth edition, London: St. Martin's Press, Inc.\*
- 5. Kerlinger, F. N. 1969. Foundations of behavioral research. New York: Holt, Rinehart and Winston.\*
- 6. Oppenheim, A. N. 1966. Questionnaire design and attitude measurement. London: Pinter Publishers and New York: St. Martin's Press.\*
- 7. Rossi, P. H., J. D. Wright and A. B. Anderson (eds). 1983. Handbook of survey research. San Diego: Academic Press.\*
- 8. Varkevisser, C. M. Pathmanathan, I. and Brownlee, A. 1991. Volume II. Designing and conducting health research projects. Geneva, Switzerland: International Development Research Centre and World Health Organization.

# POPS 623: POPULATION CHANGE, AGRICULTURE AND FOOD SECURITY - 2 Credit Hours

The main objective of this course is to teach students to comprehend the relationship between population, agricultural growth and food security. The course will therefore introduce students to population and land use theories and practices (agricultural extensification and intensification), population dynamics (size, structure and composition, density and distribution) and projections and how they affect food production, population and agricultural policies and programmes as they affect food security, key pillars (availability, access and utilization) of food security, and the

factors underlying food security in Africa with special emphasis on environmental change including climate change. Students will also be introduced to basic tools, e.g. Geographic Information Systems and Remote Sensing which are used to analyse population-land use data and agricultural innovations. At the end of the course student will know the major theories of the population and land use nexus as well as agricultural practices; have an understanding of how to apply basic tools such as Geographic Information Systems and Remote Sensing to analyse population-land use data; be able to undertake basic population projections and link them to agricultural outcome variables; be familiar with key population and agricultural policies and programmes; know the key pillars of food security and the general problems of food security in Africa and agricultural innovations.

#### **Reading List:**

- 1. Boserup, E. (1965). *The conditions of agricultural growth*. London: Allen and Unwin
- 2. Codjoe, S.N.A., and Bilsborrow, R.E. (2011). Population, agricultural extensification and intensification in the dry and derived savannah zones of Ghana. *Population and Environment*, 33(1): 80-107.
- 3. Codjoe, S.N.A. and Owusu, G. (2011). Climate change/variability and food systems: Evidence from Afram Plains, Ghana. *Regional Environmental Change*, 11(4):753-765.
- 4. Codjoe, S.N.A. (2007). Integrating Remote Sensing, GIS, Census and Socio-economic data in studying the Population-land use/cover Nexus in Ghana. *Africa Development*, 32 (2): 195-210
- 5. Codjoe, S.N.A. (2006). Migrant versus indigenous farmers. An analysis of factors affecting agricultural land use in the transitional agro-ecological zone of Ghana, 1984-2000. *Danish Journal of Geography*, 106(1): 103-113.
- 6. Codjoe, S.N.A. 2006. Population growth and agricultural land use in two agro-ecological zones of Ghana, 1960-2010. *International Journal of Environmental Studies*, 63(5): 645-661.
- 7. Codjoe, S.N.A., Ehlers, E., & Vlek, P.L.G. (2005). Effects of change in population, household conditions and farming practices on agricultural land use in the Volta River Basin of Ghana. *Erdkunde*, 59(2): 126-135.

# POPS 624 Population Change, Governance And Development (2 credits)

The course will discuss political democratization and decentralization in the context of population dynamics as they impact on sustainable development. This course is therefore designed to enhance the students' appreciation and understanding of the significant interrelationships between population change, governance and development from the perspective of community sensitive development.

# POPS 625: POPULATION, URBANIZATION AND DEVELOPMENT

#### **Course Description**

The primary goal of the course is to provide students an adequate understanding of the link between population change and urbanization and the implications for economic and human development. It examines the interrelationship among population and its change, the process of urbanization, and economic development; and the global and regional patterns and trends. It also discusses the determinants and the consequences of population change and urbanization, focusing on migration and the contribution of economic development to population change and

urbanization. The course further examines the role of urbanization in population change and economic development. It also examines shifting paradigms and contemporary concepts and issues in population change, urbanization and economic development in Africa, and, to a lesser extent, in Ghana and some selected countries. Students are expected to develop critical viewpoints on debatable issues in population change and development at the end of the course.

# Reading List

- 1. Department of Economic and Social Affairs (ESA) (2014) World Urbanization Prospect. New York: United Nations.
- 2. Freire, M.E, Lall, S. and Leipziger, D. (2014) Africa's Urbanization: Challenges and Opportunities. Washington DC: The Growth Dialogue.
- 3. Cohen, B. (2006) Urbanization in developing countries: Current trends, future projections, and key challenges for sustainability. *Technology in Society*, 28 (2006) 63–80.
- 4. Jelili, O. (2012) Urbanization and Future of Cities in Africa: The Emerging Facts and Challenges to Planners. *Global Journal of Human Social Science*, Volume 12 Issue 7 Version 1.0 April 2012.
- 5. Turok, I., (2012). Urbanisation and Development in South Africa: Economic Imperatives, Spatial Distortions and Strategic Responses. International Institute for Environment and Development, United Nations Population Fund (UNFPA). New York.
- 6. Adepoju, A. 2010. Rethinking the Dynamics of Migration within, from and to Africa, In Adepoju, A (ed), International Migration within, to and from Africa in a Globalised World. Accra: Sub-Saharan Publishers. Pp. 9-45.
- 7. Brand, U. and N. Sekler 2009 Postneoliberalism: Catch all Word or Valuable Analytical and Political Concept. *Development Dialogue*. 51: 5- 14.
- 8. Lutz, W. W.C. Sanderson and S. Scherbov 2008. A World of Simultaneous Population Growth and Shrinking Unified by Accelerating Aging. *Population Network Newsletter, POPNET* No. 39, Winter 2007/08. International Institute for Applied Systems Analysis.
- 9. Tawiah, E.O. 1998. Demographic Patterns and Sustainable Development in Ghana. *African Population Studies* 13(1): 99-109.

# POPS 626: POPULATION, EDUCATION AND DEVELOPMENT - 2 Credit Hours

#### **Course Description**

This course will introduce students to important theoretical and empirical work in the field of demography related to education. It will provide an overview of the interrelationships between education, population, and development. In particular it will acquaint students with education research and policy in sub-Saharan Africa and its relevance for economic development and demographic change.

# **Course Objectives**

This course will be divided into three modules which will:

- 1. Introduce students to basic concepts and empirical work in education research;
- 2. Provide an overview of the link between education and the components of population change and the implications for economic development; and
- 3. Critically examine education policy implementation and the interrelationships between education and development. The effect of education on other socio-demographic characteristics such as health, nutrition, behavioural and attitudinal changes and their implications for economic development will also be explored.

# Reading List

- 1. Ainsworth, M., Beegle, K., & Nyamete, A. (1996). The Impact of Women's Schooling on Fertility and Contraceptive Use: A Study of Fourteen Sub-Saharan African Countries. *The World Bank Economic Review*, 10(1), 85-122.
- 2. Asadullah, M. N., & Chaudhury, N. (2009). Reverse gender gap in schooling in Bangladesh: insights from urban and rural households. *Journal of Development Studies*, 45(8), 1360-1380.
- 3. Buchmann, C., & Hannum, E. (2001). Education and stratification in developing countries: A review of theories and research. *Annual review of sociology*, 77-102.
- 4. Cuñado, J., & de Gracia, F. P. (2012). Does education affect happiness? Evidence for Spain. *Social indicators research*, *108*(1), 185-196.
- 5. Esteve, A., García-Román, J., & Permanyer, I. (2012). The Gender-Gap Reversal in Education and Its Effect on Union Formation: The End of Hypergamy?. *Population and Development Review*, 38(3), 535-546.
- 6. Hanushek, E. A., & Woessmann, L. (2008). The role of cognitive skills in economic development. *Journal of economic literature*, 46(3), 607-668.
- 7. Kuenzi, M. (2005). The role of nonformal education in promoting democratic attitudes: Findings from Senegal. *Democratisation*, 12(2), 223-243.
- 8. Little, A. W., & Rolleston, C. (2014). School quality counts: evidence from developing countries. Editorial. *Oxford Review of Education*, *40*(1), 1-9.
- 9. Lloyd, C. B., & Blanc, A. K. (1996). Children's Schooling in sub-Saharan Africa: The Role of Fathers, Mothers, and Others. *Population and Development Review*, *22*(2) 265-298.
- 10. Mensch, B. S., & Lloyd, C. B. (1998). Gender differences in the schooling experiences of adolescents in low-income countries: The case of Kenya. *Studies in Family Planning*, *29*(2) 167-184.
- 11. Ogundari, K., & Aromolaran, A. B. (2014). Impact of Education on Household Welfare in Nigeria. *International Economic Journal*, 28(2), 345-364.
- 12. Rolleston, C. (2014). Learning profiles and the 'skills gap' in four developing countries: a comparative analysis of schooling and skills development. *Oxford Review of Education*, 40(1), 132-150.
- 13. Sentell, T. L., & Halpin, H. A. (2006). Importance of adult literacy in understanding health disparities. *Journal of General Internal Medicine*, *21*(8), 862-866

## POPS 628: POPULATION, CULTURE AND DEVELOPMENT - 2 Credit Hours

#### **Course Description**

Fertility, mortality, migration and nuptiality are the key demographic processes which constitute the basis of demographic theory and knowledge. The recording, compilation, aggregation of discrete statistical data relating to these events are therefore central to the development of demography as a scientific discipline. But these events take place within a larger social context and any individual actor involved in any of these processes is the product of a social environment in which several other actors, some living and others dead, influence the decision making process through the socialization process. In other words, deciding whether or not to have a birth, how many, when to marry or to migrate is influenced by the beliefs, norms, values and ideas which the individual actor has acquired over the years through social interaction with significant others in the larger society. To understand demographic events, therefore, it is important to understand the culture of the society in which these events take place.

# **Course Objective/Goals**

The course examines how and why decisions relating to the main demographic events, fertility, mortality, nuptiality, migration – are influenced by the socio-cultural environment in which individuals grow up.

These socio-cultural factors are wide ranging and affect inter-generational and gender relations, how many births are desirable, inter-spousal relations and even the incidence of infant and child mortality through certain belief and practices, The more differentiated or heterogeneous a society, the wider the range of behavior patterns and attitudes impacting on these acts. The course therefore examines in detail how particular social and cultural traits or changes in these induce particular demographic behaviour traits or acts.

Some of the key social factors examined are education, literacy, wealth status, religion and residence while cultural factors refer to ethnicity or nationality, beliefs, values, customs, mores and norms.

# **Learning Outcomes**

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

- 1. Understand The Importance Of Social And Cultural Factors In Explaining Or Understanding Demographic Behaviour.
- 2. How Major Differences In Normative Behaviour Are Driven Or Influenced By Inherited Values And Beliefs Of The Group Or Society At Large.
- 3. How the Rigidity Or Persistence Of These Cultural Factors Act As A Barrier To Social Change Specifically And Development In General.
- 4. Importance of Understanding The Complex Demographic-Culture Interrelationship In Policy Formulation And Programming.

- 1. Lorimer, Frank, 1969, Culture and human fertility, 2<sup>nd</sup> ed, New York, Green wood Press.
- 2. Goode, W., 1970, World Revolution and Family Patterns, 2<sup>nd</sup> ed. New York: Free Press.
- 3. Lesthaeghe, R., (ed), 1989, Reproduction and Social Organisation in sub Saharan Africa, Berkeley, University of California Press
- 4. Schech, Susanne and Haggis, Jane (2000), Culture and development: a critical introduction.
- 5. Caldwell, J.C. et al. (2006), Demographic Transition Theory, Springer, The Netherlands.
- 6. U.N: RIPS, 1988, The Impact of Culture and Tradition on Fertility and Mortality in Africa, Vol 1., No. 1, Legon, Ghana.
- 7. Radcliffe-Brown, A.R., and D. Forde (ed), 1950, African Systems of Kinship and Marriage, Oxford Univ. Press.
- 8. Ghana Statistical Service, 2013, Women and Men in Ghana, 2010 Population and Housing Report, Accra.
- 9. Hammel, E.A, 1990, A Theory of Culture for Demography, in *Population and Development Review,* Vol. 16, No.3