CORE 2401 – The Human Population: Patterns, Proccesses & Problematics

Instructor: Paul C. Sutton   **FALL 2009**
psutton@du.edu   **Class Times & Places:**
Teaching Assistant: Amanda Weaver   **Mon 2:00 – 3:50**
Amanda.Weaver@du.edu   **Boettcher Aud Room B**
Department of Geography   **Wed 2:00-3:50**
University of Denver   **Boettcher West Room 126**

SYLLABUS

Course Description

This course will cover the fundamental concepts of demography with an emphasis on demography's relevance to several other disciplines including economics, business, geography, environmental science, political science, and sociology. The course will utilize the following textbook: *Population: An introduction to concepts and issues* by John Weeks. The Weeks text covers basic demography in that it goes over the basics of measuring pattern and process in human populations (e.g. birth rates, death rates, age and sex structure, migration theory, various theories of the determinants of fertility including demographic transition theory, and many explorations of pattern in the spatial distribution of people by ethnicity, income, age, etc.). The course consists of two classes per week with (Monday 2-4 in Sturm 275 and Wednesday from 2-4 in Boettcher West 126). The Monday class session will consist of lectures that will parallel the Weeks text fairly closely with some discussions of contemporary demographic issues. The Wednesday class session will consist of a four laboratory exercise for weeks 1-4, a mid-term during week 5, and 16 student presentation on readings from the Lester Brown book: Plan B 4.0 Mobilizing to save civilization. Thirteen student groups of two students will be assigned a chapter from the Plan B 3.0 text and conduct background research on the material covered in that chapter. Each group will present a critical evaluation of their assigned chapter via a 30 minute powerpoint presentation during weeks 6 throuth 9. The teaching assistant will guide students through the four laboratory exercises and serve as host for the student presentations. The four lab exercises will utilize spatially referenced population data and Geographic Information Systems to explore four different population related problems.

Required Texts:

1) ***Population: An Introduction to Concepts and Issues*** by John Weeks
2) ***Plan B 4.0 Mobilizing to Save Civilization*** by Lester R. Brown

METHOD OF EVALUATION: *Grades for this course will be determined as follows*

Exam #1 (Mid-Term) Wed Oct 14th	**20%**
Exam #2 (Final Exam) Wed Nov 18th (2-4)	**30%**
4 Laboratory Exercises	**20%**
Powerpoint presentation on Plan B 3.0	**20%**
Attendance and participation	**10%**

Total	**100%**

Week 1: The Value of a Demographic Perspective
The introduction to this course provides motivation for studying demography. Demography plays an important role in all of the following: food security, pollution, inflation, housing, energy supply, income levels, education, and the list goes on. This introduction exposes students to the major sources of demographic data and the methods used to obtain them. In addition a global assessment of population patterns will be used to introduce some of the hotly debated demographic perspectives derived from Marxism, Malthusianism, Environmental Determinism, Demographic Transition Theory, and Neo-classical economics. *Readings Chapters 1-3 Population: An Introduction to Concepts and Issues and Chapters 1 & 2 from Plan B 3.0*

Lab Session: Computer Lab #1:
Demographic Mapping of Denver Metro Area Using ArcGIS (Due in Lab Week #2)

Week 2: Basic Population Processes I
This week will be an intensive look at the concept of fertility: What is fertility? What are the biological and social determinants of fertility? How is fertility controlled? How is fertility measured? What are the historical and contemporary trends in fertility and what drives change. Explanations for high fertility and case-study of nations with high fertility (India, Ghana, Jordan). Explanations for low fertility and case-study of three low fertility countries (England, Japan, United States) *Reading: Chapters 4 & 5 Population: An Introduction to Concepts and Issues and Chapters 3 & 4 from Plan B 3.0*

Lab Session: Computer Lab #2
Comparing nighttime Satellite Image of Colorado to Census Data (Due in Lab Week #3)

Week 3: Basic Population Processes II
The population of any given area is driven by a basic demographic equation: Births – Deaths + immigration – emigration. Births (fertility) is covered in the previous section. This section covers the demographic process of death, immigration, and emigration (e.g. mortality and migration). Mortality topics discussed include components of mortality, causes of death, measuring mortality, exploration of differences in mortality based on social status, gender, age, and urban or rural residence. Contemporary trends in, and levels of, mortality will also be covered. Migration topics will be defining migration, measuring migration, and various theories explaining the causes, consequences and patterns of migration in the world today.
Readings Chapter 6 & 7 from Population: An Introduction to Concepts and Issues and Chapters 5 & 6 from Plan B 3.0

Computer Lab #3:
Mapping Fertility and Projecting National Population growth or decline (Due Week #4)

Week 4: Basic Population Patterns I
The structure and characteristics of the world's human populations are quite fascinating and describe many different population patterns. Topics covered in this section include defining and measuring the age and sex structure of a population, examining the impact of migration, mortality, and fertility on the age and sex structure of a population and the dynamics of age and

sex structure on many aspects of life (e.g. the American Baby Boom and investments in the stock market). *Readings: Chapter 8 from Population: An Introduction to Concepts and Issues and Chapters 7 & 8 from Plan B 3.0*

Lab Session: Computer Lab #4
National Geo-Data assembly and Population Policy History (Due Week #10)

Week 5: Basic Population Patterns II
This week has a mid-term exam. Consequently reading assignment somewhat reduced. The topic covered will be an exploration of patterns in population and with patterns in life chance. What roles do education, income, occupation, marital status, race, ethnicity, religion, and geography have in population patterns? *Reading: Ch 9 from Population: An Introduction to concepts and issues and Chapters 9 & 10 from Plan B 3.0*

*** *Exam #1 on Wednesday October 8th* ***

Week 6: Population Problematics I
Many argue that the status of women, population issues, and environmental degradataion are intimately related. Part of this week's readings and lectures will look at the demographic factors facilitating higher status for women and the impacts of the status of women on fertility. Another section will look at population growth and aging and the social and economic challenges faced by very young and very old societies. Geographic variation of all of the above will also be discussed with its potential impacts on migration patterns. *Readings: Chapter 10 & 11 from Population: An Introduction to concepts and Issues Chapters 11 & 12 from Plan B 3.0*

Lab Session: Four student Presentations from Lester Brown's Plan B 3.0
Chapter 1: Entering a New World
Chapter 2: Deteriorating Oil and Food Supply
Chapter 3: Rising Temperatures and Rising Seas
Chapter 4: Emerging Water Shortages

Week 7: Population Problematics II
This week's lectures and reading will focus on the role of population growth on Urbanization and Economic Development. We will explore the demographic components of urbanization, the impact of population processes on urbanization (e.g. rural to urban migration), and the impact of urbanization on the human condition. We will also explore the relationships between population growth and economic development. It is greatly debated and not entirely clear what the role of population growth is to economic development. Several areas of the world will be examined which demonstrate the very difficult problem of teasing out causal relationships between population processes and economic development. *Readings: Ch 12 & 13 from Population: An Introduction to concepts and Issues*

Lab Session: Four student Presentations from Lester Brown's Plan B 3.0
Chapter 5: Natural Systems Under Stress
Chapter 6: Early Signs of Decline
Chapter 7: Eradicating Poverty, Stablizing Population
Chapter 8: Restoring the Earth

Week 8: Population Problematics III

A greatly debated question that is the title of Joel Cohen's excellent book: *How many people can the earth support*? has yet to be answered. This weeks lectures and reading will explore the history of human food production and questions about global carrying capacity with respect to food. The agricultural, industrial, and green revolutions will be discussed with respect to their impact on population growth and distribution. We will also explore the means still available for increasing food supply and the issues that will manifest as to the contemporary and future geographic distribution of global food supplies. Many feel that means by which future increases in food supply will be brought about will have severe, irreversible detrimental impacts on the global environment and biodiversity. *Readings: Chapter 14 from Population: Introduction to concepts and issues*

Lab Session: Four student Presentations from Lester Brown's Plan B 3.0
Chapter 9: Feeding 8 Billion well
Chapter 10: Designing Cities for People
Chapter 11 Raising Energy Efficiency
Chapter 12: Turning to Renewable Energy

Week 9: Population Policy and Demographic Analysis

During the penultimate week of the course we will look at demographic analysis and population policy development. Demographic analyses can be used in business, social, and political planning. In business planning we examine topics like marketing and investment demographics and the demographics in Human-Resource Management. In Social planning we look at provision of health services and enrollment planning for school districts. In political planning we will look at campaign strategy and legislative analysis. As for population policy we will use demographic analysis to determine what policy is desired and explore various population policies implemented in various forms to retard population growth, increase population growth, change population distribution, etc. *Readings: Ch 15 & 16 from Population: An Introduction to Concepts and Issues.*

Lab Session: Four student Presentations from Lester Brown's Plan B 3.0 & Book Reports
Chapter 13: The Great Mobilization
Hot, Flat, and Crowded By Thomas Friedman
Collapse   or   Guns, Germs, and Steel by Jared Diamond
The Tipping Point by Malcolm Gladwell
1491 by Charles C. Mann
The Creature from Jekyll Island by G. Edward Griffin
Click: What Millions of People are doing online and why it matters by Bill Tancer

FINAL EXAM IS SCHEDULED FOR
Wednesday NOVEMBER 18th 2:00 – 4:00 Boettcher West 126