

**GGIS 304 Population Dimension of Global Change
(Population Geography)**

Fall 2015, TR 3:00 – 4:15 pm, 213 Aquia

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Office Hours: Tues 2–2:45 pm, Thurs 6-7 pm or by appointment

Global change is often addressed from physical and/or environmental sciences perspectives, ignoring the roles of human population. But in fact, population and human behavior are major sources of physical, environment and societal changes. Without a thorough understanding of population characteristics and dynamics, a comprehensive understanding of the society and global change can be developed.

This course draws on knowledge from several core areas of General Education: **social science** (involving economics, geography, and demography); **natural science** (relations to the natural environment); **global understanding** (providing a background of the world's condition). The course also involves the use of Geographic Information System (GIS), an **Information Technology** tool, and **quantitative reasoning**.

This course has been approved by the Faculty Senate Writing Across the Curriculum Committee to fulfill all/in part the **Writing Intensive** requirement in the Geography major. It does so through the 3500-word report/paper. The report/paper will be completed through a draft/feedback/revision process. The first draft, which will be commented, will be due on October 29. The revised final report/paper will be due on December 8.

The course will review basic demographic concepts. A major purpose of this course is to provide students an understanding of the spatial dimension of population and its relationship to natural resources, environment and various aspects of the society. This understanding can serve as the foundation of analyzing not only population issues but almost all societal problems. The course will discuss both concepts (analytic) and facts (descriptive). Students are expected to learn concepts and models related to population growth, dynamics, and distribution, and acquire tools/methods to analyze population issues. These tools and methods include measurements, statistics, models, theories, and maps. These tools and methods will be implemented in software programs, including spreadsheets and GIS or mapping packages. Students will acquire skills to use relevant tools to analyze population and societal issues with appropriate data. *Students with no prior experience in GIS are expected to attend a workshop offered by Fenwick Library.* Detailed information will be provided when the workshop schedule becomes available.

Prerequisites:

30 hours, completion of, or concurrent enrollment in, all university general education courses, or permission of instructor. *This course satisfies the synthesis and writing intensive requirements of the general education.*

Course format:

Besides lecture, one-half hour at the end of each week will be reserved for “tutorials”, giving students the opportunities to ask for clarifications of lecture material and exercises, and discussions on topics that are not elaborated sufficiently during lectures.

Text: Newbold, K. B. (2013) *Population Geography: Tools and Issues*. Rowman & Littlefield.

Evaluation Criteria:

| | |
|---------------------------|------------------------------|
| 2 small projects | 25 (not equally weighted) |
| 1 in-class test | 15 (likely after Section 5) |
| Final exam | 20 |
| Report/Paper | |
| Draft | 10 (due on October 29) |
| Final | 25 total (due on December 8) |
| Content (15) | |
| English (5) | |
| Presentation (5) | |
| Participation/"tutorials" | 5 |
| Total: | 100 points |

Approximate grade distribution among students: 10-20% (A), 20-35% (B), 40-60% (C), ??? % (D) and (F). **Implication:** best students will get As, regardless of how high or low the total scores they have.

* 10% of the score for each day will be deducted if assignments are late.

* All materials submitted to meet the evaluation criteria should be completed in accordance with the student Honor Code (University Catalog). Also no "double dipping" of term paper/report is allowed unless permissions are given by involved instructors.

Incomplete will be handled strictly according to the University policy. Make-up tests are not given unless under unusual circumstances such as serious illness. Proof (documentation) is necessary to be eligible for make-up tests.

Major Topics:

1. Introduction
Population Geography, related disciplines, and Purposes (Intro)
2. Importance of Population Geography (Ch. 11)
Environment and Food Supply
3. World Population and Population Growth: History and Theories (Ch. 1, 11)
Demographic Equation, rates, modeling population growth
Demographic Transition Model
Three major periods of population growth
US Population Change - Baby Boomers
Demographic measures and doubling time
4. Data Sources, Internet Resources, Census Geography (Ch. 2)
Types of data
Sources of data, especially Census and Census Geography (US)
5. Introduction to GIS and Library Resources
6. Population Composition/Population Characteristics (Ch. 3)
Age and Sex Structure
Sex Ratio, Dependency Ratio
Race and Ethnicity
Introduction to Excel (if necessary)
 - Project 1: Population Statistics and Population Pyramid

7. Spatial Distribution (Ch. 3 and 9)
 - Distribution Global Scale: Size and Growth
 - Urban-Rural Geography
 - Measures of Population Distribution
 - (Dot map, Dissimilarity Index/Hoover, Pop Center)
 - Population Density
 - Location Quotient
 - Project 2: Population Distribution
8. Fertility (Ch. 4)
9. Mortality (Ch. 5)
10. Dynamics of Population Change:
 - Residential Mobility
 - Internal Migration (Ch. 6)
 - International Migration (Ch. 7)

Report/Paper:

To partially meet the requirement of a writing intensive course, students are required to submit a report/paper, describing the population characteristics of a chosen country. Each student should use the Wikis tool in the course website to announce to the class the country of your choice to research and write about. Countries taken cannot be used by another student (“first-come, first-serve”). However, prior to the sign up, students should conduct preliminary research, exploring if sufficient data and information for the particular country is available. The report should include the minimum the following sections:

- Geographical and political settings of the chosen country
- Who are the people? Demographic characteristics
- Where are the people? Their spatial distributions
- Relevant and significant historical development related to the population
- Major population issues in the country (all issues are related to population, but some are more population-oriented than others)
- References: use a format adopted by a major academic journal (*Annals of the AAG; The Professional Geographer*, etc) consistently throughout the report/paper

This is a research paper/report. Sources of information, including statistics, should be provided (as citations, references or footnotes). Beware of the definition of plagiarism and not to claim the credits that you do not deserve. The report/paper should be about 3500 words (please provide a word count), plus references, tables and figures/maps. It should be typed in double-spacing, single-sized, 12 point in Times Roman or a similar font, and submitted in hardcopy. The draft is due on October 29 and the final version is due on December 8 in class. Earlier submissions will be appreciated.

Presentation:

At the end of the semester (starting on December 8, tentatively), each student should give a concise 8 to 9 minutes presentation of the report/paper to meet the verbal communication requirement of a synthesis course. The presentation should be well structured and organized, highlighting major or unique population characteristics or issues of the chosen country.