GGS 304 Population Geography
Fall 2017, MW 12:00 – 1:15 pm, 2312 Exploratory Hall
David Wong, Professor
703-993-9260, dwong2@gmu.edu, 2214 Exploratory Hall
Office Hours: Mon 11 –11:45am, Weds 3–4 pm. or by appointment

Global and environmental 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. A comprehensive understanding of the society and global change requires a thorough understanding of population characteristics and dynamics.

This course, meeting the core's synthesis requirements, draws on knowledge from several core areas: **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 **quantitative reasoning**, and the use of Geographic Information System (GIS), an **Information Technology** tool.

What to Expect? (Learning objectives) 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 relationships 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. Some of these tools and methods will be implemented in software programs, including spreadsheets and GIS/mapping packages. Students will acquire skills to use relevant tools to analyze population and societal issues with appropriate data.

Technology Expectations: You are expect to know basic spreadsheet commands (MS Excel or any compatible spreadsheet program). *Students with no prior experience in GIS are expected to watch the training video entitled "Learning ArcGIS" (skip Section 4) in Lynda.com. Additional hands-on tutorials information will be provided later.* You are expected to have access to ArcGIS. You will be given instruction to install it on your computers (preferably laptops using Windows – if you use a Mac, you need to install the environment that allows you to install and run Windows-based applications).

Outcome: After finishing this course, students are expected to have a better appreciation of global and local population issues. The students are also expected to develop a basic understanding of major population-demographic concepts, theories, models, and methods, both spatial and aspatial, in analyzing population. Therefore, students will be evaluated by how much they comprehend these bodies of knowledge in terms of their *definitions*, how they can be *applied* and *interpreted*.

Prerequisites: 30 hours, completion of, or concurrent enrollment in, all university general education courses, or permission of instructor. ***This course satisfies the synthesis requirement of the Mason Core.***

Text: Newbold, K. B. (2017) *Population Geography: Tools and Issues*. (3rd edition). Rowman & Littlefield.

Assessment methods:

3 exercises	35 (not equally weighted)
Mid-term	15
Final exam	20
Report/Presentation	20 in total (due on December 8)
	Report (15); Presentation (5)
Participation/attendance	10
Total:	100 points

The grades are "curved". The "average grade" will be a C+ or B-. The best students will receive an A, regardless of how high or low his/her total scores may be. Students may fail if their total scores are "significantly" lower than the rest of the class.
* 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.

GGS Computer Lab Access: All GGS students should receive "swipe" access (using your Student ID) to the GGS Student Computer Lab (Room 2102, Exploratory Hall) upon registering for the course. If you experience problems accessing the lab, please see Samantha Cooke in the Main GGS Office (2400, Exploratory Hall).

GGS Computer Lab Assistance: If you experience problems with the computers (e.g., software or hardware issues) in the GGS Student Computer Lab (Room 2102, Exploratory Hall), please email our student lab assistants, Hong Vuong (hvuong2@gmu.edu) and Ian McVey (imcvey@gmu.edu) for technical assistance.

GMU Email Accounts: Students must use their MasonLive email account to receive important University information, including messages related to this class. See http://masonlive.gmu.edu for more information.

Office of Disability Services: If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 993-2474, http://ods.gmu.edu. All academic accommodations must be arranged through the ODS.

GMU Resources:
The Writing Center: http://writingcenter.gmu.edu
University Libraries, Ask a Librarian: http://library.gmu.edu/ask
Counseling and Psychological Services: http://caps.gmu.edu
University Catalog: http://catalog.gmu.edu
University Policies: http://universitypolicy.gmu.edu

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 and Library Resources, Census Geography (Ch. 2)
   Types of data
   Sources of data, especially Census and Census Geography (US)
5. Introduction to GIS (Ch. 1)
   Installing ArcGIS and "tutorial"
Mid-term: either here or after Section 6
6. Population Composition/Population Characteristics (Ch. 3)
   Age and Sex Structure
   Sex Ratio, Dependency Ratio
   Race and Ethnicity
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
8. Fertility (Ch. 4)
9. Mortality (Ch. 5)
10. Dynamics of Population Change:
   Residential Mobility
   Internal Migration (Ch. 6)
   International Migration and Settings (Ch. 7, 8)
11. Population Geography in Action: Policies (Ch. 10)

Exercises:
Three exercises will be given out after relevant materials are covered in class throughout the semester. Specific instructions will be provided. All submissions should be in hardcopy, with 1 inch margin in all sides, 12-point font in Times New Roman, page numbers and single-sided and double-spaced.

Report:
To partially meet the synthesis requirement, 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 you have chosen 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 and more important 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 have 2800 to 3000 words (please provide a word count, approximately 10 to 13 pages), plus references, tables and figures/maps. It should be in double-spaced, single-sized, 12 point in Times New Roman or a similar font. Detail of the submission process will be provided later. The paper is due on December 6. Earlier submissions will be appreciated.

Presentation:
At the end of the semester (may start on November 20), each student should give a concise 10 minutes or less presentation of the report 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.

*The instructor reserves the right to modify this syllabus, but will notify students about the change.