

DRAFT

DEMOGRAPHY AND POPULATION

Course Overview and Syllabus

Schar School of Policy and Government
George Mason University

Fall 2025

Course Schedule: GOVT 339 001
Fairfax Campus (room: Enterprise 174)
Class on Thursday (10:30 am – 1:10 pm)
Credit Hours: 3

Faculty: Dr. John F. May, Van Metre Hall, Room # 648
3351 Fairfax Drive, MS 3B1, Arlington, VA 22201
Office Hours (via Skype): By appointment
Email address: jmay21@gmu.edu

Placement: Undergraduate; Recommended pre-requisites: GOVT-132, GOVT-133

Students with special needs. If you are a student with a disability and you need academic accommodations, please tell me, and contact the Disability Resource Center (DRC) at (703) 993 2474. All academic accommodations must be arranged through the DRC.

Academic integrity. Faculty in the Schar School of Policy and Government have zero tolerance for academic dishonesty and will strictly enforce Mason's honor code.

INTRODUCTION

Demography and population issues are fundamental dimensions of the world, regions, countries, societies, as well as communities in which we live. Demographic patterns and trends exert their influence at different levels, namely global, regional, national, and sub-national, including the urban-rural divide. To follow current events and be able to plan for future socio-economic development, we need to understand the changing size, rate of growth, and spatial distribution of a country's population as well as its age structure and evolving labor force. We need also to understand how these national and sub-national demographic dynamics interact with those of other nations, especially at the regional and global levels. Finally, we need to assess the policies and politics that will address the linkages between demographic and population trends, on the one hand, and future socio-economic development, on the other.

COURSE DESCRIPTION AND RATIONALE

The **Demographic Module** of the course will explain the sources of demographic information (censuses, surveys, civil registration data, and population registers) and review the core demographic measurements of mortality, fertility, migration, and natural and net population growth. The course will provide a very brief introduction to the Lexis diagram, a tool to represent demographic events on two axes: a horizontal axis with the time since occurrence of an event (or a common event experienced by a group of people aka a cohort) and a vertical axis with the age of the person(s) (or the cohort). The demographic component of the course will also cover other dimensions of demographic change, including the preparation of population projections, urbanization patterns (and slums), the intermediate (or distal) vs. the proximate determinants of fertility, and key family planning indicators. For the students to fully grasp these demographic concepts and measurements, the course will explain how to calculate basic demographic indicators and rates with hands-on exercises, using a pocket calculator or a cell phone.

The **Population and Policies Module** of the course will bring the analytical information gathered so far into a broader perspective. It will consider demographic history, i.e., the slow growth of population before the Industrial Revolution when life was “nasty, brutish and short” (Thomas Hobbes, 1651). It will show the transition from “the world we have lost” (according to Peter Laslett, *The World we Have Lost: England Before the Industrial Age*, 3rd edit., New York, NY: Charles Scribner’s Sons, 1984) to “the world we have gained”, which is demographically more “modern” (see L. Bonfield, R. Smith, and K. Wrightson (Eds), *The World We Have Gained: Histories of Population and Social Structure*, Oxford, GB: Basil Blackwell, 1986). However, because of better survival patterns and extended longevity, life could possibly become “nasty, brutish, and long,” especially in situations of population aging and hyper-aging. This module will also review the various population theories, especially the theory of Rev. Thomas Robert Malthus (1766-1834) and, later, the counter-Malthusian theory proposed by the Danish economist Ester Boserup (1910-1999), as well as Marxist views of population issues. Other key topics will be the impact of major diseases (e.g., HIV/AIDS, Ebola, COVID-19, etc.), national and international migration patterns and trends, and ongoing demographic developments and their implications for healthcare, education, employment, gender equity, reduction of poverty and inequality, and socio-economic development. With respect to economic development, one class will be devoted to the relatively new concept of the demographic dividend(s). The course will also cover how population policies may influence demographic patterns and trends, how effective these policies can be, and how they relate to the gender, equality, and Human Rights agendas. Finally, a class will be devoted to the demography of the United States, with references to, and comparisons with Canada and Mexico.

LEARNING OBJECTIVES

The learning objectives of the course are to give students a basic understanding of the different demographic, population, and population policies issues around the world as well as their relationship to the various dimensions of socio-economic development. The course will also equip participants with tools that they will find useful in their future professional life (in particular, the database and projections available on the Websites of the UN Population

Division and the Population Reference Bureau, as well as *STATcompiler*, a software to tabulate, present, and use data from the Demographic and Health Surveys aka DHS).

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

1. Identify and describe the *main demographic indicators and issues* in the various parts of the world;
2. Differentiate between the *various demographic* regimes across the more developed, the less developed, and the least developed countries (we will also use the World Bank classification of countries);
3. Analyze the *impact of demographic differentials* on socio-economic outcomes;
4. Interpret the empirical evidence on demographic patterns and trends and use this understanding to *design policy interventions* across the various sectors with the view of improving demographic and socio-economic outcomes; and
5. Use demographic indicators and concepts that would be needed to implement the UN's post-2015 *Sustainable Development Goals* (SDGs) Agenda (2015-2030).

Learning Strategies: Teaching will rely on formal presentations, videos (when available), hands-on exercises as well as interactive exchanges and discussions among the students. Sometimes, the class will be divided into two groups, which will need to defend opposite or contradictory views. Several podcasts of experts in the field will be presented as well, to benefit from their insights on specific topics. Some guest-lecturers will be invited, when feasible. And many simple and practical exercises will be proposed.

There will be an emphasis on learning from comparisons and specific discussions of Africa, Asia, the Middle East, Europe, Latin America and the Caribbean, and North America. Students will be trained to become enlightened users of population data, concepts, and demographic tools for independent analysis. Students will also recognize linkages of population issues to the economy, development, gender equity, poverty and inequality reduction, environment, and mitigation of epidemics (e.g., HIV/AIDS, Ebola, COVID-19, etc.). Finally, students will appreciate the significance and effectiveness of policy measures to intervene on demographic trends as well as how demographic changes impact also on politics and policies (e.g., large migration flows into Europe in 2015-2016 and reassessments of the China 1979 “One-child” policy at the end of 2015 and in 2021). In the same vein, students will also discuss some of the decisions of the second Trump Administration regarding for instance fertility or migration.

ASSIGNMENTS AND GRADINGS

Students will demonstrate their understanding and learning in several ways. First, there will be two mid-term exams, to be taken in-class. Second, there will be the preparation of a Research Paper, which will address an issue with a demographic basis. During the course, students will prepare a draft abstract of their Research Paper. Feedback and guidance on the proposed topic will be provided. This Research Paper may be focused on a country, a region, or a world issue, and will be submitted at the end of the course. The Research Paper will have 4,000 words. (Further details on the preparation of the Research Paper are provided below.)

Grade Weightings:

- Two at home exams (first exam: 15%; second exam: 25%. Note: both exams will be taken without access to course notes and might include simple calculations);
- Research Paper 45%; and
- In-class participation 15%, **for a total of 100%.**

SCHEDULE AND OUTLINE OF TOPICS

	DATE	LECTURE TOPICS	KEY MILESTONES
		Demographic Module	
1.	August 28, 2025	<i>Introduction to Demography and Population.</i> Overview of the course; demographic components; balancing equation; population doubling time; world demographic patterns and trends; presentation of the PRB <i>2024 World Population Data Sheet (WPDS)</i> (the new 2025 WPDS will be available in September); simple exercises.	First class
	September 1, 2025	<i>Labor Day</i>	Day off
2.	September 4, 2025	<i>Demographic data collection.</i> Censuses, surveys, civil registration, and population registers; the US Census of 2020 and the 52 censuses of 2020 around the world. Presentation of the Demographic and Health Survey (DHS) and Multiple Indicator Cluster Survey (MICS) programs, history, rationale, survey modules, HIV/AIDS, Ebola, and COVID-19	

		data collection, comparative analyses. Electronic availability of data and preparation of tabulations and graphs.	
3.	September 11, 2025	<i>Mortality.</i> Key measures; infant and child mortality; adult mortality; life expectancy at birth; life tables; model life tables; mortality trends; longevity; epidemiological patterns and trends; exercises.	
4.	September 18, 2025	<i>Fertility.</i> Key measures; total fertility rate (TFR) and age-specific fertility rates (ASFRs); intermediate (or distal) and proximate (biological and behavioral) determinants of fertility; Bongaarts model; fertility trends and differentials; exercises.	
5.	September 25, 2025	<i>Migration.</i> Key measures; migration trends; pull and push factors; rural-urban drift; urbanization and slums; internally displaced persons (IDPs); asylum seekers; refugees; international migration; migration data sources and issues; exercises.	First Mid-Term exam (in-class)
6.	October 2, 2025	<i>Population Projections.</i> Population projections with cohort component method; projections assumptions (normative, policy-oriented, analysis-	

		based, expert-based); assumptions and variants; population projections results; use of population projections; in-class use of UN Population 2024 Division projections (United Nations 2024 <i>World Population Prospects</i>) issued on July 11, 2024.	
		Population and Policies Module	
7.	October 9, 2025	<i>Population Changes in History</i> . 16 th - 18 th century demographic regimes, with a focus on Western Europe; traditional and modern demographic regimes; demographic transition (first, second, and third); Industrial Revolution; importance of the fertility transition; replicability of the demographic transition in the less and the least developed countries.	Research Paper – Draft Abstract due
	October 13, 2025	<i>Columbus Day</i>	Day off & one-week Fall break
8.	October 23, 2025	<i>Population and Development</i> . Rev. Thomas Robert Malthus (1766-1834) and Ester Boserup (1910-1999); Marxist views on population issues; economists vs. demographers' views; “developmentalists” vs. “family planners”; revisionist reappraisal and modern approaches, including the demographic	Initial Faculty Feedback on Research Paper Draft Abstract

		dividend(s); population and climate change; the <i>Millennium Development Goals</i> (MDGs) and the <i>Sustainable Development Goals</i> (SDGs).	
9.	October 30, 2025	<i>Demography of the United States</i> . Mortality, fertility, migration, population aging; demographic differentials and convergences (mortality and fertility) between the USA and Canada; migration trends to both countries; Canada and U.S. migration policies; migration from Mexico; ongoing migration reform (or lack of it) in the U.S.	
	November 4, 2025	<i>2025 Virginia Elections</i>	Day off
10.	November 6, 2025	<i>The Demographic Dividend(s)</i> (DD). Definition; first and second DD; demographic dependency ratio, employment dependency ratio, and socio-economic dependency ratio; lessons from Asia; replicability to sub-Saharan Africa; policy implications (multisector and integrated policies).	
11.	November 13, 2025	<i>Contraception and Family Planning Programs</i> . History of contraception; contraceptive technology and	Second Mid-Term exam (in-class)

		methods; family planning programs; contraceptive method-mix; long-term family planning methods; family planning programs funding; induced abortion; ethical considerations.	
12.	November 20, 2025	<i>Population Policies in High Fertility Countries.</i> Origin, evolution, and impact of population policies; population policy vs. population policies; explicit vs. implicit policies; direct vs. indirect population interventions; gender and human rights dimensions; integrated population policies; policies' measurement and effectiveness (example of Niger).	Research Paper due
	November 27, 2025	<i>Thanksgiving</i>	Day off
13.	December 4, 2025	<i>Population Policies in Low Fertility Countries.</i> Focus on policy levers and policy interventions in low and very low fertility countries (examples of Hungary and South Korea); special presentation on family policies in Europe; and special presentation on sex selection at birth in Asia. General reflections on the course. Course evaluation (in-class).	Last class

REQUIRED READINGS

Students will be required to purchase or rent the book of Tim Dyson, *Population and Development: The Demographic Transition*, London, GB: Zed Books, 2010, which will be the main textbook used throughout the course. The 2025 World Population Data Sheet of the Population Reference Bureau (PRB) will also be a key tool, which will be used and referred to in every class (an electronic copy of this document will be distributed to students).

The required reading (to be done before the classes) will provide critical data and basic information that will be referred to in-class (a maximum of about 25 pages of reading will be assigned per week). There will also be handouts of the formal presentations, which will be distributed electronically.

Materials for each class will be listed on **Canvas**. Papers, chapters, and documents that are not readily available in libraries and/or bookshops will be provided.

In addition, two publications, which are available from the Population Reference Bureau (PRB) Website, either for purchase (paper copy) or downloading for free (electronic copy) (see www.prb.org), will be suggested readings:

- *Population Handbook* (6th edition, 2011)
- MCFALLS Jr, J. A. Population: A Lively Introduction (5th edition, *Population Bulletin*, Vol. 62, No. 1, March 2007)

Finally, students will be expected to review and/or use identified sections of:

Bongaarts, J. and B. C. O. Neill. 2018. "Global warming policy: Is population left out in the cold?", *Science* 361(6403), pp. 650-652.

Goldstone, J. A., E. P. Kaufmann, and M. Duffy Toft. 2012. *Political Demography: How Population Changes Are Reshaping International Security and National Policies*. Oxford, GB - New York, NY: Oxford University Press.

Groth, H. and J. F. May (Eds). 2017. *Africa's Population: In Search of a Demographic Dividend*. Cham, CH: Springer.

May, J. F. 2012. *World Population Policies: Their Origin, Evolution, and Impact*. New York, NY: Springer.

May, J. F. 2017. "The Politics of Family Planning Policies and Programs in sub-Saharan Africa." Pp. 308-329 in J. B. Casterline and J. Bongaarts (Eds). *Fertility Transition in sub-Saharan Africa, Population and Development Review* 43(Suppl.). New York, NY: The Population Council.

May, J. F. 2017. "The Role of Public Population Institutions on Fertility Outcomes in Sub-Saharan Africa." *Population Horizons* 14(1): 1-8.

May, J. F. 2019. "Population Policy," chapter from D. L. Poston, Jr. (Ed.), *Handbook of Population*, 2nd edit. Cham, CH: Springer, pp. 875-899.

May, J. F. and J. A. Goldstone (Eds). 2022. *International Handbook of Population Policies*. Cham, CH: Springer

May, J. F. and J. P. Guengant. 2020. *Demography and Economic Emergence of Sub-Saharan Africa*. Brussels, BE: Belgian Royal Academy.

Ross, J. 2017. *The Dynamics of Family Planning: Key Demographic Insights*. Washington, DC: Population Reference Bureau.

Other readings that can contribute to research papers will be available from Professor May.

PREPARATION OF RESEARCH PAPER

Each student will prepare a short Research Paper, which will count for 45% of the final grade.

This is an opportunity to do research and write an essay in an area of your choice. The paper will explore an issue with a demographic dimension, then discuss the policy implications of this issue (about 25% of the paper should be devoted to policy interventions). The topic could alternatively be focused on a country, a region, a city, or a state (e.g., a U.S. state) or, on the contrary, could adopt a world-wide approach. Papers on demographic aspects of the United States and/or Canada are also appropriate. It will be very important to provide your scientific sources (more on this later). Lists of potential research topics will be shared with the students.

Students will be graded on their ability to identify an issue and analyze it from a demographic perspective. This will likely include historical data. Data in table or graph format is encouraged to provide time-series perspective. The paper will have 4,000 words (approximately 8 pages). Annexes (which do not count against the word-count) can be used to support the analysis, and documentary references must be provided to show the sources which you used (references do not count against the word-count either). Please note that Wikipedia is not considered a reliable source of information. Instead, your paper should rely on academic (peer-reviewed) books and journal articles as well as official documents from Governments and/or international institutions and NGOs.

Here are the three key milestones for this project:

October 9, 2025: Draft Abstract is due (but earlier submissions are encouraged). This Draft Abstract will provide a basis for reactions and suggestions from the faculty.

The Draft Abstract, with a maximum of 250 words, will offer a short statement giving the title, the country (or region or else) to be considered, the area you will research, the topic that will be the focus of your work, and the sources (both data and references) that you intend to use.

For example, your Draft Abstract could state: Impact of girls' education on family size in Ghana. This research would look at the issue of family size, with a particular focus on girls' education over the last 30 years. The eventual focus of the work would be the impact of school fees on fertility levels and population growth. The paper will rely mostly on data from the series of Ghana Demographic and Health Surveys (DHS) and MICS, if available.

Other example: The topic of the study will be the life expectancy at birth in Russia. The research will investigate the role of alcohol, tobacco use, accidents, poor diet, and possibly

war in Ukraine in the low life expectancy of the Russian population. The topic may be narrowed to focus on only one aspect (e.g., alcohol). The research would rely on the health surveys and other health statistics and reports available for Russia.

October 23, 2025: Initial Faculty Feedback is Provided on Draft Abstract.

You will receive electronic feedback from Professor May. This will confirm the Research Paper's title, clarify the statement of the issue you will be researching, and confirm the sources you expect to use [i.e., the data sources and main references such as documents/reports, books, journal articles, grey literature, etc.]. Revisions may be made as the work progresses; however, any major deviation from the agreed topic and framework should be discussed with Professor May.

November 20, 2025: The final research paper is due before midnight, to be sent electronically to Professor May <jmay21@gmu.edu> in a Word file format (not in a PDF file format). Please put your name in the file name. Note: NO LATE PAPERS WILL BE ACCEPTED. Remember that the paper should have 4,000 words. Again, annexes and references do not count against the word-count.

MAIN POPULATION JOURNALS

- *Population and Development Review*
- *Population Studies*
- *Demography*
- *Studies in Family Planning*
- *Canadian Studies in Population*
- *Population* (in French; English version available)
- *Genus* (articles in English, French, and Italian)

Other online and/or open-access journals are available as well.

MAIN POLITICAL SCIENCE JOURNALS

- *Foreign Affairs*
- *Foreign Policy*

USEFUL WEBSITES FOR FUTURE RESEARCH

Primary Sources on Population

- [UN Population Division \(to access the 2024 Population Projections under the title of 2024 World Population Prospects\)](#)
- [The DHS Program](#)
- [UNICEF MICS Surveys](#)
- [US Census Bureau, International Program Center](#)
- [Population Reference Bureau](#)
- [The World Bank Group – Health and Population Statistics](#)
- [The Population Council](#)
- [Migration Policy Institute](#)
- [Global Aging Institute \(GAI\)](#)

- [Institut national d'études démographiques \(INED\)](#)
- [Australian National University](#)
- [The Oxford Institute of Population Ageing](#)
- [Vienna Institute of Demography](#)

Secondary Sources on Population

- [Population Action International \(PAI\)](#)
- [The Population Institute](#)
- [RAND—Population Matters](#)
- [Center for Global Development](#)
- [Central Intelligence Agency](#)
- [The Center for Reproductive Rights](#)
- [The Center for Strategic and International Studies \(CSIS\)](#)
- [UNAIDS](#)
- [UNESCO](#)

Academic Standards

Academic Standards exist to promote authentic scholarship, support the institution's goal of maintaining high standards of academic excellence, and encourage continued ethical behavior of faculty and students to cultivate an educational community which values integrity and produces graduates who carry this commitment forward into professional practice.

As members of the George Mason University community, we are committed to fostering an environment of trust, respect, and scholarly excellence. Our academic standards are the foundation of this commitment, guiding our behavior and interactions within this academic community. The practices for implementing these standards adapt to modern practices, disciplinary contexts, and technological advancements. Our standards are embodied in our courses, policies, and scholarship, and are upheld in the following principles:

- **Honesty:** Providing accurate information in all academic endeavors, including communications, assignments, and examinations.
- **Acknowledgement:** Giving proper credit for all contributions to one's work. This involves the use of accurate citations and references for any ideas, words, or materials created by others in the style appropriate to the discipline. It also includes acknowledging shared authorship in group projects, coauthored pieces, and project reports.
- **Uniqueness of Work:** Ensuring that all submitted work is the result of one's own effort and is original, including free from self-plagiarism. This principle extends to written assignments, code, presentations, exams, and all other forms of academic work.

Violations of these standards—including but not limited to plagiarism, fabrication, and cheating—are taken seriously and will be addressed in accordance with university policies.

[The process for reporting, investigating, and adjudicating violations is outlined in the](#)

[university's procedures here](#). Consequences of violations may include academic sanctions, disciplinary actions, and other measures necessary to uphold the integrity of our academic community.

The principles outlined in these academic standards reflect our collective commitment to upholding the highest standards of honesty, acknowledgement, and uniqueness of work. By adhering to these principles, we ensure the continued excellence and integrity of George Mason University's academic community.

Student responsibility: Students are responsible for understanding how these general expectations regarding academic standards apply to each course, assignment, or exam they participate in; students should ask their instructor for clarification on any aspect that is not clear to them.

Accommodations for Students with Disabilities

Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at George Mason University. If you are seeking accommodations, please visit the [Disability Services website](#) for detailed information about the Disability Services registration process. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu. Phone: (703) 993-2474.

Student responsibility: Students are responsible for registering with Disability Services and communicating about their approved accommodations with their instructor in advance of any relevant class meeting, assignment, or exam.

FERPA and Use of GMU Email Addresses for Course Communication

The Family Educational Rights and Privacy Act (FERPA) governs the disclosure of education records for eligible students and is an essential aspect of any course. **Students must use their GMU email account** to receive important University information, including communications related to this class. Instructors will not respond to messages sent from or send messages regarding course content to a non-GMU email address.

Student responsibility: Students are responsible for checking their GMU email regularly for course-related information, and/or ensuring that GMU email messages are forwarded to an account they do check.

Title IX Resources and Required Reporting

As a part of George Mason University's commitment to providing a safe and non-discriminatory learning, living, and working environment for all members of the University community, the University does not discriminate on the basis of sex or gender in any of its education or employment programs and activities. Accordingly, **all non-confidential employees, including your faculty member, have a legal requirement to report to the Title IX**

Coordinator, all relevant details obtained directly or indirectly about any incident of Prohibited Conduct (such as sexual harassment, sexual assault, gender-based stalking, dating/domestic violence). Upon notifying the Title IX Coordinator of possible Prohibited Conduct, the Title IX Coordinator will assess the report and determine if outreach is required. If outreach is required, the individual the report is about (the “Complainant”) will receive a communication, likely in the form of an email, offering that person the option to meet with a representative of the Title IX office.

For more information about non-confidential employees, resources, and Prohibited Conduct, please see University Policy 1202: [Sexual and Gender-Based Misconduct and Other Forms of Interpersonal Violence](#). Questions regarding Title IX can be directed to the Title IX Coordinator via email to TitleIX@gmu.edu, by phone at 703-993-8730, or in person on the Fairfax campus in Aquia 373.

Student opportunity: If you prefer to speak to someone confidentially, please contact one of Mason’s confidential employees in [Student Support & Advocacy \(SSAC\)](#), Counseling and [Psychological Services \(CAPS\)](#), [Student Health Services \(SHS\)](#), and/or the [Office of the University Ombudsperson](#).