Many of today’s critical challenges, from climate change and human rights violations, to health inequality and the sustainability of social security systems, are related to population processes. A large number of social problems are intimately connected to changes in population size, age structure, composition, and spatial distribution. The main goal of this course is to provide you with a set of tools for understanding the causes of population dynamics and the consequences of population processes for our societies. This course will offer an introduction to measures and methods of demographic research and to important substantive areas of inquiry at the intersection of sociological and population research. It would help you integrate a demographic perspective into the study of social, political, environmental, and economic issues. At the end of the course you would have an expanded set of skills as a social scientist, and you would become a more informed consumer of news and political reports about issues related to population problems.

**Canvas and Top Hat** We will use Canvas and Top Hat to organize materials for this course. You will find the electronic version of assigned readings in Canvas, organized by week, under “Modules”. You will be able to freely access these documents as a student in this course. In order to respect copyright restrictions, the readings should not be duplicated or passed on to individuals not enrolled in this course.

We will use the Top Hat platform to improve the learning experience in this course. I will use Top Hat to present and annotate slides, to ask questions in class, to facilitate discussion and, more broadly, to make the course material more engaging. Teaching assistants may also use Top Hat in sections. You would have to subscribe to Top Hat. The subscription cost is currently $24 per term or $36 for one year. You would also need to bring an appropriate device (e.g., laptop, tablet or phone) to class. This would permit you to respond to questions asked in class. Your questions will be automatically recorded and combined with those of other students in charts displayed on the screen. Some of the questions will be about substantive topics discussed in class. Some others will be survey questions about your own demographic background. Some may ask basic questions about assigned readings. Responses to these questions will count towards the participation component of your grade. You should have received an e-mail from Top Hat to your school e-mail account, with an invitation to sign up for the course. If you have not, please contact me and I will add you manually. Please sign up for
the Top Hat course by the end of Week 1. We will start using Top Hat from the first lecture of Week 2.

**Lectures** Lectures will be held on Mondays and Wednesdays from 1:30-2:50pm in EEB 105. The format of these lectures will vary in relation to the material that will be covered. Some lectures will consist mainly of presentation of substantive topics; others may be devoted to the discussion of various data sets or research designs; some may focus on the discussion of specific readings; some may include time for you to work on multiple-choice questions or on demographic problems that require a numeric answer. A number of lectures would have a combination of various formats. In order to make your time in lecture most productive, please make sure to i) read the assigned material before class; ii) bring an appropriate device to use the Top Hat platform (e.g., laptop, tablet or phone); iii) bring a simple electronic calculator.

**Sections** Sections will be held on Fridays at various times and locations (one hour of section per week). These sections are an essential component of this course: attendance and participation are expected. Sections will not only reinforce what you have learned in lectures, but also provide important skills needed to understand, analyze and visualize demographic data. The material covered in sections will be evaluated via homework assignments and is part of the examination material for the midterm and final exam.

**Course Requirements and Grading**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Participation and Contribution</td>
<td>10%</td>
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<tr>
<td>Homework assignments</td>
<td>20%</td>
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<tr>
<td>Midterm</td>
<td>30%</td>
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<tr>
<td>Final Exam</td>
<td>40%</td>
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<tr>
<td>Total</td>
<td>100%</td>
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**Participation & Contribution** Participation is expected and will count towards your final grade. Please help create a constructive learning environment. Different people have different ways in which they participate best, all of which are valid: thoughtful preparation, sharing a well-formulated idea, helping a classmate understand a concept, sharing the results of an in-class exercise, coming to office hours, posting relevant news articles to the class website, contributing to the discussion forums on the class website, etc. I strongly encourage you to interact with me, the TAs, and your fellow students. Listen to your peers, wait for your turn to speak, and refrain from using discriminatory language. If you are a talker, make sure that your quieter peers get a chance to speak. If you are shy, remember that if you have a question, most likely there is at least one other person with the same question who would be happy to listen to the answer in class or read it in the discussion forum on the course website.

In class and in sections we will ask questions using the Top Hat platform. Answering those questions will count towards your participation grade. We will record the number of questions to which you provide an answer. That will count towards your participation grade. We understand that on some days your device may not work properly, or you may not be able to come to class, and that some of you may not be able to sign up with Top Hat until after we start using it. For all these reasons, in order to receive the highest Top Hat score for participation, you would not need to answer all
questions asked in class: you would need to answer at least 85% of them over the course of the quarter.

**Homework assignments** There will be four problem sets/homework assignments over the course of the quarter. Homework assignments will vary in scope and size and are designed to help you reinforce what you have learned in lectures and sections. They would also be a good opportunity for you to strengthen your data analysis skills. You are welcome to discuss the problem sets in small groups, but you must write the final submission independently. Problem sets from different people containing identical material will not receive credit. Homework assignments will be graded on a ✓ basis. Assignments that are mostly correct, with answers well-thought and well-communicated would receive a ✓ (equal to 3 points); assignments with minor errors or answers not clearly communicated would receive a ✓ - (equal to 2 points); assignments with major errors or poorly written would receive a ✓ = (equal to 1 point); Assignments that are mostly incorrect and written very poorly, or assignments not turned in would receive an ✗. In circumstances where the assignment is extremely well-prepared, a a ✓ + (equal to 3.5 points) would be assigned. Credit for late assignments will be reduced by 0.3 points for each 24 hour period of late submission. For example, if the assignment is due on a Friday at noon and you submit it on Sunday at 5pm, 0.6 points would be deducted from your score. In other words, if you receive a ✓, the equivalent number of points would be 3-0.6=2.4. Assignments submitted more than 7 days after the deadline would not receive any credit.

**Exams** There will be two exams for this class: an in-class midterm and a final. The midterm will cover the material from the first part of the course. The final will cover mostly the material from the second part of the course. However, in the final exam, there may be some general questions that would require you to make connections between the topics discussed in the two parts of the course. Please bring your hand calculator and a pen or pencil to all exams.

**Class Conduct**

The class atmosphere will be quite relaxed. These are just some guidelines:

- Arriving a few minutes late is tolerated as long as you make an effort to minimize the disturbance for other students.
- Eating and drinking in class is not forbidden, but please make sure that you are not disturbing others.
- Please put your cellphone ringer on silent mode.
- If you cannot make it to class for any reason, make sure that you know what happened during the lecture that you missed. It is your responsibility, and nobody else’s.
- If you have trouble with the course material or have personal problems that are hindering your performance in the class, please come and talk to me so that we can solve the problem before it is too late. It is better to bring up any concerns as soon as they arise.
- Please always show respect to your fellow classmates.
Students with Disabilities
Please inform me as soon as possible of special needs that you may have, like larger printouts of quizzes and exams, or extra time on an exam. The sooner you notify me, the better we will be able to accommodate you.

Academic Integrity
A fundamental tenet of all educational institutions is academic honesty. Students must do all their work within the boundaries of acceptable academic norms. See the Statement of Student Academic Responsibility\(^1\) regarding college policy on plagiarism and other forms of academic dishonesty. Students found guilty of plagiarism or academic dishonesty will be subject to appropriate disciplinary actions, which may include a failing grade, suspension or expulsion.

\(^1\)https://depts.washington.edu/grading/pdf/AcademicResponsibility.pdf
## Course outline and schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topics</th>
<th>Reading reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Mon, March 28</td>
<td>Introduction to Demography</td>
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<tr>
<td></td>
<td>Wed, Mar 30</td>
<td>The One-child Policy (guest speaker: Bill Lavely)</td>
<td>[1]</td>
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<tr>
<td>II</td>
<td>Mon, April 4</td>
<td>Demographic Measures and Concepts</td>
<td>[2]</td>
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<tr>
<td></td>
<td>Wed, April 6</td>
<td>Population Growth</td>
<td>[2, 3]</td>
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<tr>
<td>III</td>
<td>Mon, April 11</td>
<td>Population growth and the Environment: Classic Theories</td>
<td>[4, 5]</td>
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<td></td>
<td>Wed, April 13</td>
<td>Population, Energy use, and CO₂ emissions</td>
<td>[6, 7, 8]</td>
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<tr>
<td>IV</td>
<td>Mon, April 18</td>
<td>The Impact of Climate Change on Populations</td>
<td>[9, 10]</td>
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<td></td>
<td>Wed, April 20</td>
<td>Human Longevity: Measures and Trends</td>
<td>[11, 12]</td>
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<td>V</td>
<td>Mon, April 25</td>
<td>Determinants of Mortality Change</td>
<td>[13, 14, 15]</td>
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<td></td>
<td>Wed, April 27</td>
<td>Review</td>
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<tr>
<td>VI</td>
<td>Mon, May 2</td>
<td><strong>Midterm</strong></td>
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<td></td>
<td>Wed, May 4</td>
<td>Fertility: Measures and Determinants</td>
<td>[16, 17]</td>
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<td>VII</td>
<td>Mon, May 9</td>
<td>Social Consequences of Fertility Change</td>
<td>[18, 19, 20]</td>
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<td></td>
<td>Wed, May 11</td>
<td>Demographic Rates and Family Structure</td>
<td>[21, 22, 23]</td>
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<td>VIII</td>
<td>Mon, May 16</td>
<td>Documentary: “Demographic Winter”</td>
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<td>Wed, May 18</td>
<td>Interdisciplinary Research Examples</td>
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<td>Fri, May 20</td>
<td>Make-up: Debates + ‘Big Data’ in Demography</td>
<td>[24, 25, 26, 27]</td>
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<td>IX</td>
<td>Mon, May 23</td>
<td>International Migration: Data, Trends and Theories</td>
<td>[28, 29]</td>
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<td>Wed, May 25</td>
<td>International Migration (cont’ed)</td>
<td>[30, 31]</td>
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<td>X</td>
<td>Mon, May 30</td>
<td>No Class: Memorial Day</td>
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<td>Wed, June 1</td>
<td>Review</td>
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<td>Monday, June 6</td>
<td><strong>Final exam</strong> (from 2:30-4:20pm)</td>
<td></td>
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</tbody>
</table>
References

Week I


Week II


Week III


Week IV


Week V


**Week VI**


**Week VII**


**Week VIII**


[26] Zagheni, E., and Weber, I. (2012). You are Where you E-mail: Using E-mail Data to Estimate International Migration Rates. In *Proceedings of the 4th Annual ACM Web Science Conference*


**Week IX**

