

AGEC 691 HEALTH AND POPULATION ECONOMICS

Fall 2017

Rawls1071, M/W 12:30 PM to 1:45 PM

INSTRUCTOR

Dr. Brigitte Waldorf, Krannert 658, Office Hours: by appointment. E-mail: bwaldorf@purdue.edu

COURSE DESCRIPTION

This course is intended for graduate students in Agricultural Economics and related social sciences. It introduces students to theoretical, methodological and empirical approaches in demography, health and population economics. Its predominantly applied focus addresses a range of issues that are of pressing importance in today's world. They include fertility and contraceptive use; health, disease, aging and mortality; migration, displacement, and population redistributions.

The course is divided into three parts:

- **Part I: living longer and healthier.** Life expectancy has increased substantially; some estimate that—every decade—it rises by more than a year. In 2050, a newborn baby girl in Japan can expect to live for 95 years. Of pivotal importance are a concern for living longer *and* healthier, as well as for the social and economic implications of longer life expectancies. And, especially with global climate change and strengthening global linkages, we are concerned about new diseases and the ease of their spread throughout the world. AIDS, SARS, Ebola and the Zika virus are well-known examples of the last decades.
- **Part II: reproduction.** Throughout the world, we observe declining fertility. In some countries, fertility has become so low that the populations are shrinking (and aging rapidly). Take Japan, for example, where women's fertility has been below replacement for decades. Within the next 35 years, Japan's population is projected to shrink by more than 15 percent, from about 127 million to 107 million people. In contrast, women in Nigeria and Malawi, for example, have more than five children on average, contributing to rapid populations growth. We expect fertility to decline, but only slowly, and by 2050, African women are still expected to have more children than American women had during the post-WWII baby boom. What are the causes and consequences of such trajectories? And what kind of policies do governments choose to influence women's fertility?
- **Part III: immigration, displacement, relocation.** More than three percent of the world population lives outside their country of birth, and the percentage of foreign-born is particularly high in developed countries where it has doubled since 1970. In developed countries we also witness drastic population changes through internal migration: over a five-year period some 10 to 20 percent of the population relocates to an address in a different region / labor market. And most recently refugees have become part of the public discourse. The refugee crisis in Europe, the Middle East and parts of Africa has become a humanitarian crisis of historical proportions, with millions of children, women, and men—mostly from Syria—fleeing brutal and escalating wars and conflicts.

Throughout the course we adopt an integrative, multi-disciplinary perspective that emphasizes the reciprocal relationships between individual decisions (e.g., choices regarding contraception and the number

of children), aggregate outcomes (e.g., aging populations), and societal responses (e.g., immigration policies). Moreover, the course aims at a critical understanding of models and methods used in the population literature such as hazard models and choice models. The emphasis of the seminar is on stimulating discussions and active student participation rather than lengthy lectures and presentations. It will also give students a chance to actively explore their own research ideas.

GRADING

Grades are based on homework (30%), participation in in-class discussions (10%). In addition, students can choose between (a) writing and presenting a term-paper (60%) or (b) taking two open-book exams (30% each). Regular attendance is expected.

COURSE POLICIES

Communication. Please note that our primary out-of-class method of communication will be via email to your [Purdue](#) email address. It is your responsibility to check for mail on a regular basis.

Special Needs. If you have a disability that requires academic adjustments, please make an appointment to meet with us during the first week of classes to discuss your needs. Please note that university policy requires all students with disabilities to be registered with [Adaptive Programs](#) in the [Office of the Dean of Students](#) before classroom accommodations can be provided.

Academic Integrity. University policy on academic dishonesty is clear: academic dishonesty in any form is strictly prohibited. Anyone found to be cheating or helping someone else cheat will be referred directly to the Dean of Students for disciplinary action. Penalties are severe and may include dismissal from the University. The risks associated with cheating far outweigh the perceived benefits. Academic dishonesty includes citing someone else's work as your own, using "cheat sheets" or sharing your answers with someone else. If you are unsure whether your planned action constitutes academic dishonesty, seek clarification from your instructor. Other information regarding your rights and responsibilities as a student is contained in the Purdue University [Code of Conduct](#).

Campus Emergencies. In the unusual event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. To get information about changes in this course contact me by email at bwaldorf@purdue.edu.

To report an emergency, call *911*. To obtain updates regarding an ongoing emergency, sign up for Purdue Alert text messages, view www.purdue.edu/ea. There are nearly 300 Emergency Telephones outdoors across campus and in parking garages that connect directly to the PUPD. If you feel threatened or need help, push the button and you will be connected immediately.

If we hear a fire alarm during class we will immediately suspend class, evacuate the building, and proceed outdoors. Do not use the elevator. If we are notified during class of a Shelter in Place requirement for a tornado warning, we will suspend class and shelter in the basement. If we are notified during class of a Shelter in Place requirement for a hazardous materials release, or a civil disturbance, including a shooting or other use of weapons, we will suspend class and shelter in the classroom, shutting the door and turning off the lights.

Please review the Emergency Preparedness website for additional information: http://www.purdue.edu/ehps/emergency_preparedness/index.html

COURSE SCHEDULE (subject to change based on student interests)

Aug 21 Course overview, policies, expectations

Part I. Living Longer, Living Healthy

Aug 23 Demographic Transition; Age structure
Aug 28 Life Tables I: basics
Aug 30 Life Tables II: Methodological issues and extensions
Sept 4 *no class: Labor Day*
Sept 6 Longitudinal models: applications beyond staying alive
Sept 11 Epidemiological Transition; Causes of Deaths
Sept 13 What if ... a pandemic strikes?
Sept 18 Immunization programs
Sept 20 Presentation of current research: see readings - Part I
Sept 25 Presentation of current research: see readings - Part I
Sept 27 Presentation of current research: see readings - Part I
Oct 2 Presentation of current research: see readings - Part I

Part II. Reproduction

Oct 4 Demographic Transition; Fertility
Oct 9 *no class: October Break*
Oct 11 Models of Reproduction, Part 1
Oct 16 Models of Reproduction, Part 2
Oct 18 Reducing the birth rate
Oct 23 Fertility policies – anti-natalist
Oct 25 Fertility policies – pro-natalist
Oct 30 Presentation of current research: see readings - Part II
Nov 1 Presentation of current research: see readings - Part II
Nov 6 Presentation of current research: see readings – Part II
Nov 8 Presentation of Current Research: see readings – Part II

Part III. Migration Patterns and Processes

Nov 13 Models of migration
Nov 15 Migration and population redistribution
Nov 20 Costs and returns of migration; rural to urban migration
Nov 22 *no class: Thanksgiving Break*
Nov 27 Migration and amenities
Nov 29 Displacement, forced migration, refugee movements
Dec 4 Presentation of current research: see readings - Part III
Dec 6 Presentation of current research: see readings - Part III

READINGS – PART I, II AND III

—to be selected and assigned, based on student interests—