Instructor
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Office: HHH room 234
Office hours: Mondays 2-4pm or by appointment

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Course Description

The health of populations in developing and developed countries is very different. Within countries, great health disparities exist between more advantaged and more disadvantaged populations. When crafting policies that aim to improve population health, it is crucial to know how to measure health and how to think about the health needs of the specific population in question. This course will provide an overview to the factors driving health, mortality, and aging across different populations. In addition, students will learn the best sources of data and measures to use to describe the health status of a population. Furthermore, students will be able to assess policy options that address the health of their population.

This course fulfills concentration requirements for the University-wide graduate minor in population studies and HHH’s Social Policy, Advanced Policy Analysis, Global Policy concentrations.

Assignments

• Problem sets/ short responses (30%) (due on Wednesdays by 9:45am)
  o PS 1. Measures of mortality (10%)
  o PS 2. Measures of morbidity (10%)
  o PS 3. One single space written assignment (10%)

• Leading class discussion/ reading summaries (20%)
  o Reading summaries are due 8am on the day the readings are going to be discussed
  o Reading summaries must be uploaded to Moodle

• Final Paper topic and outline handed in on time (5%)
• Final Paper (35%) and Presentation (10%)

Readings:
Readings that should be done before Monday classes are marked with a [1]. Readings that must be completed before a Wednesday class are marked with a [2].
Week 1: Overview: Health and mortality from demographic perspective and measuring demographic events

- Objectives:
  - Introductions
  - Overview of course and organizational matters
  - Mortality before dramatic declines in global death rates
  - Measuring demographic events

- Readings (read both before first day of class)
  - How to measure demographic events
    [http://papp.iussp.org/sessions/papp101_s02/PAPP101_s02_010_010.html](http://papp.iussp.org/sessions/papp101_s02/PAPP101_s02_010_010.html)

Optional


Week 2: Measures of mortality

- Topics:
  - Deaths, death rate, adjusted death rate, standardization
  - Infant mortality, under five mortality rate (U5MR)
  - Life expectancy at birth
  - Age patterns of mortality (models?)
  - Maternal mortality

- Readings
    [http://papp.iussp.org/sessions/papp101_s06/PAPP101_s06_010_010.html](http://papp.iussp.org/sessions/papp101_s06/PAPP101_s06_010_010.html)

Optional


**Assignment 1 handed out. Demographic rates and measures of mortality**

**Week 3: Measures of health and morbidity (can expand into week 4)**

- Topics:
  - Incidence and prevalence
  - Stunting, wasting
  - Self rated health
  - Allostatic load
  - Functional ability [aging]
    - Activities of daily living (ADL)
    - Instrumental activities of daily living (IADL) (Katz Index)
  - Mental Health

- Readings:


Optional:


**Assignment 2 handed out. Measures of Morbidity**

**Week 4: Sources of data/quality and Global Burden of Diseases**

- **Topics**
  - Sources of data
    - Vital statistics, census
    - Demographic and Health Surveys (DHS)
    - Demographic Surveillance Sites (DSS)
    - Clinical Trials
    - Health Care providers
  - Global Burden of Disease Data Visualizations

- **Readings**
demographic surveillance systems: a step towards full civil registration and vital statistics system in sub-Saharan Africa? *BMC Public Health, 12*(1), 741-752. ([1])

- Institute of Health Metrics – Global Burden of Diseases ([2])
  - http://vizhub.healthdata.org/mortality/
  - http://vizhub.healthdata.org/cod/
  - http://vizhub.healthdata.org/us-health-map/

**Extra:**


**Assignment 3 handed out. Short response based on GBD**

**Week 5: Determinants of Morbidity and Mortality Framework**

- **Topics**
  - Preston Curve
  - Disease and Development

- **Readings (TBD)**

**Week 6: Health transitions**

- **Topics:**
  - Stages of health transition
    - Age of pestilence
    - Age or receding pandemics
    - Age of degenerative and human-made diseases
    - Age of delayed degenerative disease
    - Age of emerging and re-emerging infectious diseases (?)
  - Leading causes of mortality and morbidity

- **Readings:**
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Optional

Week 7: Causes of historical transitions and causes in developing countries

- Theories:
  - Natural selection
  - Nutrition
  - Public Health interventions and the state
  - Inflammation

- Readings:


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**Outlines of Final Paper are due.**

**Week 8: Recent trends**

- **Topics**
  - Reversibility
  - Convergence and Divergences
  - Rising tide of Non-communicable diseases in developing countries

- **Readings**


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Week 9: Consequences of mortality change

**Topics**
- Effects of lower mortality on fertility preferences and practices
- Economic and social effects of increased longevity
- Political effects

**Readings**
- NIA and [WHO (2011). Global Health and Aging](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4161226/). NIH Publication no. 11-7737 (1)

(Migration and Health)

- Fennelly, K. 2006. The Healthy Migrant Phenomenon (2)

Week 10: SES/Race Differentials

**Topics**
- Measuring SES status
  - Education
  - Income
  - Wealth
  - Occupation
- Racial/ethnic differences in health

**Readings**
PA 8390
Global & U.S. Perspectives on Health and Mortality


Optional:

- *Social Science and Medicine* special issue on Education and Health
  

**Week 11: Gender/Urban differentials**

- **Topics**
  - Gender differences in health
    - Higher biological resistance of women
    - Variation of male-female mortality gap across space and time
      - Determinants of increasing gap 1950-1980s
      - Determinants of narrowing gap 1980s-
    - Health disadvantage of women in some traditional societies
  - Urban health advantage/disadvantage
    - Intra urban variation in health (slum and non slum)

- **Readings**
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**Optional**


**Week 12: Life course perspective**

- **Topics**
  - Developmental origins of health and disease
  - Obesity from life course perspective case study

- **Readings (some of these readings will be designated as optional)**
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**Extra**


**Week 13: Evolution of lifespan (biodemography)**

- **Topics**
  - Maximum lifespan debate
  - Immune Senescence and Telomere length
  - What can past trends tell us about the future?

- **Readings (some of these readings will be designated as optional)**
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Optional

Week 14: Student Final project presentations

Students will present their end-of-term papers to the class. Presentation length will depend on the number of students enrolled.

Policies

Disabilities:

The University of Minnesota is committed to providing equitable access to learning opportunities for all students. Disability Services (DS) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations. If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact DS at 612-626-1333 to arrange a confidential discussion regarding equitable access and reasonable accommodations. If you are registered with DS and have a current letter requesting reasonable accommodations, please contact your instructor as early in the semester as possible to discuss how the accommodations will be
Mental Health and Stress Management:

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student’s ability to participate in daily activities. University of Minnesota services are available to assist you with addressing these and other concerns you may be experiencing. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website at [http://www.mentalhealth.umn.edu](http://www.mentalhealth.umn.edu).

Remember that there are advisors in the Humphrey Student Services office who are trained and experienced counselors. They are available at very short notice to address any concerns you have and provide further resources within the University. Humphrey Student Services, HHH 280, 612-624-3800

Scholastic misconduct:

Is broadly defined as any act that violates the right of another student in academic work or that involves misrepresentation of your own work. Scholastic dishonesty includes, (but is not necessarily limited to): cheating on assignments or examinations; plagiarizing, which means misrepresenting as your own work any part of work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned; depriving another student of necessary course materials; or interfering with another student’s work.

Incompletes:

This course follows the Humphrey School policy regarding incompletes. An incomplete will only be granted after the Professor and the student have mutually agreed upon a timetable (written contract) for completion of coursework. An incomplete must be requested in advance, and the Humphrey Institute incompletes form must be filled out.

Additional Policies:

For further information on the following policies, please see: [http://policy.umn.edu/Policies/Education/Education/Syllabusrequirements_APPA.html](http://policy.umn.edu/Policies/Education/Education/Syllabusrequirements_APPA.html)

- Student Conduct Code
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- Use of Personal Electronic Devices in the Classroom
- Scholastic Dishonesty
- Makeup Work for Legitimate Absences
- Appropriate Student Use of Class Notes and Course Materials
- Grading and Transcripts
- Sexual Harassment
- Equity, Diversity, Equal Opportunity and Affirmative Action
- Academic Freedom and Responsibility