## SENATE COMMITTEE ON CURRICULAR AFFAIRS
### COURSE SUBMISSION AND CONSULTATION FORM

**Principal Faculty Member(s) Proposing Course**

<table>
<thead>
<tr>
<th>Name</th>
<th>User ID</th>
<th>College</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEPHEN MATTHEWS</td>
<td>sxm27</td>
<td>Liberal Arts (LA)</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

**Academic Home:** Liberal Arts (LA)

**Type of Proposal:** [ ] Add  [ ] Change  [ ] Drop

**Course Designation**

(SOC 211Z) Health Inequality: Understanding the Geographies of Life and Death

### Course Information

**Cross-Listed Courses:**

**Prerequisites:**

**Corequisites:**

**Concurrents:**

**Recommended Preparations:**

**Abbreviated Title:** Geographies of Life and Death

**Discipline:** General Education

**Course Listing:** Linked

### Special categories for Undergraduate (001-499) courses

**Foundations**

- [ ] Writing/Speaking (GWS)
- [ ] Quantification (GQ)

**Knowledge Domains**

- [ ] Health & Wellness (GHW)
- [ ] Natural Sciences (GN)
- [ ] Arts (GA)
- [ ] Humanities (GH)
- [ ] Social and Behavioral Sciences (GS)

**Additional Designations**

- [ ] Bachelor of Arts
- [ ] International Cultures (IL)
- [ ] United States Cultures (US)
- [ ] Honors Course
- [ ] Common course number - x94, x95, x96, x97, x99
- [ ] Writing Across the Curriculum

**First-Year Engagement Program**

- [ ] First-Year Seminar

**Miscellaneous**
Course Outline

A brief outline or overview of the course content:
This course is a lecture and lab based course that provides an introduction to the concepts, measurement and study of health and health inequality across geographic scales from international and national through to sub-national and local scales, and to study health inequality in diverse contexts (including but not limited to urban and rural; historical and contemporary). The course will cover the nature, causes and consequence of health inequality, incorporating and understanding of temporal trends and spatial patterns in health indicators and examine associations between social, economic and environmental factors with health and wellbeing. The emphasis will be on easily measured and available primary health indicators such as mortality and morbidity, communicable and non-communicable disease as well as measures of mental health. The lab component of the course will focus on finding, critiquing, interpreting and presenting health-related data and will introduce students to fundamental concepts and expand their skill set in both basic statistics (numerical and graphical skills) and mapping (geographic visualization skills). The students will have an opportunity to develop their own short health/disease mapping project based on skills acquired during the course.

A listing of the major topics to be covered with an approximate length of time allotted for their discussion:
1. Measuring Health Inequalities
2. A Historical View: Understanding the Past
3. A Global View: Understanding the Present
4. Techniques for Graphing Health Data
5. Maps as Models
6. Health and Disease in the United States and Appalachia: Examining National and Regional Patterns and Trends
7. Health and Disease in Pennsylvania: Examining the Rural/Urban Divide State and County Trends
8. Mapping Health Data 4: Exploratory Spatial Data Analysis
9. Social Determinants and the Geographies of Health
10. Geographies of Restrictions: Legal Landscapes and Discrimination
11. Geographies of Mental Health/Abuse
12. Geographies of Exposure to Risks and Health
13. Geographies of Access to Resources and Health
14. Global Futures: The Emerging an Re-emerging Geographies of Health

Course Description:
This course provides an introduction to the concepts, measurement and study of health and health inequality across geographic
scales from the international to the local scale, and to study health inequality in diverse contexts (including urban and rural; historical and contemporary). The lectures will cover the nature, causes and consequence of health inequality, temporal trends and spatial patterns in health indicators, and examine associations between socioeconomic and environmental factors and health. The emphasis will be on easily measured and available primary health indicators such as mortality and morbidity, communicable and non-communicable disease as well as mental health. The lab component of the course will focus on finding, critiquing, interpreting and presenting health-related data and will introduce students to fundamental concepts and expand their skill set in both basic statistics (numerical and graphical skills) and mapping (geographic visualization skills). At the end of the course the students will be more familiar with measures of human health and a variety of international and US data resources.

The lecture component begins with focus on describing and understanding past, present and future patterns and trends in human health, examining these at the global, national (US), regional (Appalachia) and local (Pennsylvania) scales. The second half of the course includes lectures on the social determinants of health, the ways in which the legal landscape and direct and indirect discriminatory practices can influence health and wellbeing (e.g., around reproductive health, sexuality, and risk-taking behaviors), mental health, and the geographies of access to resources and the geography of exposure to risks. The final lecture will discuss 21st century “Global” health challenges.

The parallel lecture and labs provide opportunities for practical learning. The labs are designed to expose students to the use of health data, geographic information systems and basic spatial analysis tools providing them with skills that help them to accurately summarize and report data on health outcomes. Students will learn how to find, critique and use data appropriately to measure and map health outcomes. The labs will be based on sample data sets and case studies that draw on the use and interpretation of a variety of data sets – international, national, and sub-national. Towards the end of the course, students will generate their own community health case study based on the skills they have used during the course.

HDFS 210Z is linked to SOC 211Z

The name(s) of the faculty member(s) responsible for the development of the course:
- Name: STEPHEN MATTHEWS (sxm27)
- Title:
- Phone:
- Address:
- Campus: UP
- City:
- Fax:

Course Justification

Instructional, Educational, and Course Objectives:
This section should define what the student is expected to learn and what skills the student will develop. Students in this course will learn about concepts and measures of health and the study of health outcomes in diverse settings. The lecture component will cover salient topics relevant to understanding 21st century America and the modern world. The lab components introduce diverse data sets (US and international), software for tabular and spatial analysis, and basic analytical methods that enhance data interpretation and presentation.

This course falls within the General Education Knowledge domains of (a) Social and Behavioral Sciences and (b) Health and Wellness. Fitting with the General Education goals, this course will enable students to:
1. Acquire knowledge
2. Analyze and evaluate acquired knowledge
3. Use logical and rational thinking to make critical judgments
4. Gain understanding of cultural diversity and consider lifestyles and values that may differ from their own

Given that the dominant modern narrative about health and disease focuses on an individual’s genetic predispositions, biological risk factors, and personal behaviors, this course (and others in the linked course sequence) will evaluate whether students have the following proficiencies:
- Students can competently describe the social, economic, political and environmental factors that influence health and disease patterns in the United States and across the globe.
- Students can describe and discuss the social, economic, political and environmental factors that contribute to the presence and persistence of health inequalities across populations, in the United States and across the globe.

Evaluation Methods:
Include a statement that explains how the achievement of the educational objective identified above will be assessed. The procedures for determining students’ grades should be specifically identified.

The grade for this course is based on multiple components.
1. Participation: Participation in class and via a discussion forum will form part of the course grade (Approximately 12 % total – at 1% per week for the first 12 weeks of the class)
2. Mid-term Quiz: A mid term quiz (worth 10%) will examine the students understanding of basic concepts and familiarity with class material.
3. Lab Assignments: Each of the first 12 labs sections will include short assignments. Each labs will be worth 4% and will accumulate to approximately 48% of the class grade.
4. Term Paper/Presentation: The term project includes a student-led lab assignment. This will be presented and handed in during week 15 (worth 10%).
5. Final: The final exam will be worth 20%.

Overall, 60 percent of the course grade is based on continuous assessment (lab assignments and class/discussion participation), 10 percent on an assignment, and 30 percent on quizzes and final exam.

Relationship/Linkage of Course to Other Courses:
This statement should relate the course to existing or proposed new courses. It should provide a rationale for the level of instruction, for any prerequisites that may be specified, or for the course’s role as a prerequisite for other courses.

This course is designed to be one of the three General Education Integrative Studies Linked Courses in the area of “Health Inequalities.” The other two courses also currently Curriculum Review, are:

SOC 210Z “Social Determinants of Health” (authored by Dr. Molly Martin, Sociology) to meet the Social and Behavioral Sciences General Education (GS) requirements, and

HDFS 210 Ethnicity, Health, and Aging (authored by Alyssa Gamaldo, Human Development and Family Studies) to meet the Health and Wellness General Education (GWH) requirements.

Under the current arrangement, all undergraduate students pursuing this linked course option will take HDFS 210Z, but choose between the two Sociology courses (SOC 210Z or SOC 211Z).

The three courses intersect substantively, methodologically, and with regard to their pedagogical goals and assessments. Substantively, all courses (1) discuss individual health behaviors, individual health outcomes and health inequalities across groups; (2) consider the interplay between social institutions and individual action; (3) largely draw on the American experience to discuss these processes and engage student interest; and (4) discuss the healthcare and non-healthcare policy implications of these empirical patterns. Yet the courses differ with regard to which social layer of influence they emphasize.

SOC 210Z, spans macro-, meso- and micro-level causes of individual health outcomes, ranging, for example, from national economic conditions to workplace resources to family interactions.

SOC 211Z (THIS COURSE) focuses on macro- to meso-level causes of individual health outcomes, considering spatially-organized resources from the national to local community area.

SOC 210Z focuses on meso- and micro-level causes, including, for example, lifestyle behaviors associated with late life health outcomes to type of communication between older patients and health providers.

Thus, all three courses take a multi-level, multi-factorial approach to the study of health and health inequalities. Methodologically, all courses develop students’ understanding of temporal patterns (delineating cross-sectional and longitudinal estimates), distinguish between population-representative samples and clinical samples, increase students’ familiarity and facility with statistical estimates, and stress the importance of defining the populations at risk when considering statistical estimates and policy implications. Finally, the three courses share the following pedagogical goals: to foster students’ in-depth understanding of health inequalities and their determinants, encourage students’ ability to see connections across these determinants and the synergies they create, and develop students’ transferable skills related to critical thinking, discerning the quality of information they encounter, and interpreting statistical estimates. All courses will use extended case examples for integrating course material, but the particular assessments will differ given the different data and methods needed to study the macro-, meso- and micro- causes of health inequalities. Students will either engage in (1) a secondary data analysis of multiple places or institutions, (2) a mixed methods analysis that contextualizes and largely details the experiences in a single place or institution, or (3) an in-depth, in-person analysis of a single place or institution. Regardless of its form, this extended case approach advances skills necessary for the development of policy briefs, program evaluations, and social and behavioral interventions.

Note: At this time there are no Gen Ed courses in Sociology listed with the word “health” in title.

Relationship of Course to Major, Option, Minor, or General Education:
This statement should explain how the course will contribute to the major, option, or minor and indicate how it may function as a service course for other departments.

This course has the potential to draw in students from social science and health minors and majors specifically from departments across both the College of the Liberal Arts (Sociology) and College of Health and Human Development (e.g., HDFS, BBH and Global Health Minor).

SOC 211Z is suitable for all social science, health and global health majors. It is important that undergraduate majors in these fields of study understand the spatial patterning of health, its variability over time and space, and that health inequalities have roots in macro-level social, economic, political, demographic and geographic factors. The course exposes students to studies of health at various spatial scales (international, national, sub-national and local) and draws on examples from both the US and other countries; with a strong emphasis on understanding health in local communities focusing on Pennsylvania and the Appalachian Region.

A description of any special facilities:
All materials provided in this course will come from published materials (scientific journal articles, news articles, national, state and local government and agency reports).

All data will be from validated on-line data providers (i.e., health-related government and non-governmental agencies including but not limited to the World Health Organization, United Nations, GapMinder, Centers for Disease Control and Prevention, and Pennsylvania State Health Department and Pennsylvania State Data Center). Over time these validated and respected data sources will be supplemented by others agencies that offer near equivalent coverage of the main substantive issues discussed in the course with data across time (updated) and geographic areas (national and subnational/within country data).

The class will need access to the Internet and both statistical and mapping software. As such this class will be taught in technology/lab classrooms. The statistical and mapping software packages are all freeware/open source and the accompanying data are easily accessible from highly respected vendors and/or researchers based at leading universities.

Frequency of Offering and Enrollment:
Once a year, possibly twice per annum depending on demand.
N = 30 (ideally), 50 maximum

Alignment with General Education Objectives

- EFFECTIVE COMMUNICATION – the ability to exchange information and ideas in oral, written, and visual form in ways that allow for informed and persuasive discourse that builds trust and respect among those engaged in that exchange, and helps create environments where creative ideas and problem-solving flourish.

- KEY LITERACIES – the ability to identify, interpret, create, communicate and compute using materials in a variety of media and contexts. Literacy acquired in multiple areas, such as textual, quantitative, information/technology, health, intercultural, historical, aesthetic, linguistic (world languages), and scientific, enables individuals to achieve their goals, to develop their knowledge and potential, to lead healthy and productive lives, and to participate fully in their community and wider society.
**Critical and Analytical Thinking** – the habit of mind characterized by comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating a conclusion. It is the intellectually disciplined process of conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.

**Integrative Thinking** – the ability to synthesize knowledge across multiple domains, modes of inquiry, historical periods, and perspectives, as well as the ability to identify linkages between existing knowledge and new information. Individuals who engage in integrative thinking are able to transfer knowledge within and beyond their current contexts.

**Creative Thinking** – the capacity to synthesize existing ideas, images, or expertise in original ways and the experience of performing, making, thinking, or acting in an imaginative way that may be characterized by innovation, divergent thinking, and intellectual risk taking.

**Global Learning** – the intellectually disciplined abilities to analyze similarities and differences among cultures; evaluate natural, physical, social, cultural, historical, and economic legacies and hierarchies; and engage as community members and leaders who will continue to deal with the intricacies of an ever-changing world. Individuals should acquire the self- knowledge and leadership skills needed to play a role in creating and maintaining healthy, civil, safe, and thriving communities.

**Social Responsibility and Ethical Reasoning** – the ability to assess one’s own values within the social context of problems, recognize ethical issues in a variety of settings, describe how different perspectives might be applied to ethical dilemmas, and consider the ramifications of alternative actions. Individuals should acquire the self- knowledge and ethical reasoning skills needed to play a role in creating and maintaining healthy, civil, safe, and thriving communities.

What component(s) of the course will help students achieve the General Education Learning Objectives covered in the course? Provide evidence that students in the course have adequate opportunities to achieve the identified learning objectives.

**Key Literacies:**

Students will have the opportunity to enhance their reading, numeracy and mapping skills by finding, synthesizing, critiquing, interpreting and presenting data and research findings on human health and health disparities drawing on materials from several academic domains including the social sciences, public health and epidemiology. The students will participate in classroom discussions and lab sessions that are designed to enhance their familiarity with and comfort level interpreting health-related data. Throughout the semester the students will learn numeracy and mapping skills via a series of lab assignments drawing on sample data sets and exercises. It is expected that the student will adapt and integrate different statistical and mapping skills in unique ways, demonstrating proficiency, during the term paper/presentation.

**Critical and Analytical Thinking:**

The lecture material will draw on published data and reports and via complementary “lab” assignments the students will demonstrate skills and more holistic understanding of health-related problems. This will be demonstrated as the students move beyond simply acquiring data and comprehending knowledge to applying, analyzing, synthesizing and evaluating the information.

**Integrative Thinking:**

Both across and within each of the three linked courses (i.e., SOC 210Z, SOC 211Z, and HDFS 210Z), students will learn how various social processes influence health and generate health disparities. Further within this specific course (SOC 211Z), students will develop an integrative understanding of macro- to meso-level factors related to the patterning and trends in health inequality outcomes both between and within countries, with a focus on variation across place within the United States and more locally within Pennsylvania and Appalachia.

**How will students be assessed to determine their attainment of the Learning Objective(s) of General Education covered in this course? This assessment must be included as a portion of the student’s overall performance in this course.**

**Key Literacies:**

The lab assignments will directly provide feedback and facilitate an evaluation of student mastery of statistical and mapping literacies. The assignments will give them the opportunity to demonstrate and deepen their statistical and scientific literacies.

**Critical and Analytical Thinking:**

The lab assignments require students to analyze, synthesize and evaluate information garnered through the hands-on activities.

**Integrative Thinking:**

Because the course is structured around integrating social science and health and the multiple, yet interrelated social determinants of health and health inequalities, all dimensions of the course – lectures, readings, “lab” sessions, the classroom and online discussions, assignments and quizzes – will require students to combine and integrate information.

**General Education Domain Criteria**

**General Education Designation:** Linked

**Linked Courses**

- SOC 210Z
- HDFS 210Z

**GS Criteria**

- Explain the various methods of inquiry used in the social and behavioral sciences and describe how the contributions of these fields complement inquiry in other areas
Identify and explain major foundational theories and bodies of work in a particular area of social and behavioral sciences

Describe the ways in which many different factors may interact to influence behaviors and/or institutions in historical or contemporary settings

Explain how social and behavioral science researchers use concepts, theoretical models and data to better understand and address world problems

Recognize social, cultural, political and/or ethical implications of work in the social and behavioral sciences

What components of the course will help students achieve the domain criteria selected above?

“Explain the various methods of inquiry used in the social and behavioral sciences and describe how the contributions of these fields complement inquiry in other areas.

This course focuses on macro- and meso-level factors related to the patterning and trends in health inequality outcomes both between and within countries, with a focus on variation across place within the United States and more locally within Pennsylvania and Appalachia. This focus on contextual factors defined and measured for geographical units (countries to ZIP codes and communities) is complementary to courses focusing on group and individual level units of analysis (e.g., SOC 210Z and HDFS 210Z). The course explicitly integrates both historical and geographical perspectives on health-related and health disparities questions. A focus on processes and patterns requires consideration of factors associated with the emergence, persistence and/or reversal of trends in health over time and across space.

“Identify and explain major foundational theories and bodies of work in a particular area of social and behavioral sciences.”

The conceptual models used in this class discuss social determinants of health that range from macro- to meso- to micro-level factors and processes. Further the models discuss how broader social contexts influence the smaller social units, down to the individual, and how this matrix of influence can change over time and across geographic areas.

“Describe the ways in which many different factors may interact to influence behaviors and/or institutions in historical or contemporary settings”

The course will present multiple conceptual models that have been developed to understand how broad social processes and trajectories followed by nation states can influence health profiles between and within countries (e.g., the demographic transition, the epidemiological transition as well as consideration of economic development and global environmental change). At a more local level several components of the course will examine both local access to resources (e.g., food, clinics) and exposure to risks (pollution, crime, disease vectors) an their geographical patterning in relation to health disparities and vulnerable populations in diverse communities (e.g., inner city, rural and suburban locations).

“Explain how social and behavioral science researchers use concepts, theoretical models, and data to better understand and address world problems.”

The course will define key conceptual terms, key indicators and the sources of data used by government and non-governmental agencies. Throughout the course students will acquire and interrogate national and subnational statistics on the prevalence of various health metrics across the globe and in particular within the United States. As the assignments zoom in on US state and local communities the health and demographic data they use will allow them to explore and examine differences in prevalence of health outcomes across within communities by social groups (e.g., groups defined by their educational attainment, age, gender, race/ethnicity, nativity). The students will read several research articles for several “lab” activities and, thus, gain an awareness of and greater understanding of research conducted on the social determinants of health.

Integrative Studies

Explain how the intellectual frameworks And methodologies of each course’s Knowledge Domain will be explicitly addressed in the course and practiced by the students.

To better understand health disparities, some the conceptual concepts focused on in both SOC 210Z and HDFS 210Z will be addressed in SOC 211Z. For example, both SOC210Zand HDFS 210Z focus on micro- and meso- determinants of individual health outcomes which offers a complement and overlaps with the macro-level focus of SOC 211Z. Understanding the historical and contemporary variation in health indicators and how these may vary across diverse contexts, both within and between countries (an especially within the US), provides a broader understanding for engagement with the micro- and meso-level social determinants of health that will be encountered and highlighted in both SOC 210Z and HDFS 210Z. The skills acquired in statistical and mapping health indicators and in creating community health profiles dovetail with methodologies used within SOC 201Z and HDFS 210Z that focus more explicitly on acquiring data and understanding the health behaviors and outcomes as well as the challenges faced by specific populations such as the elderly, disabled, minority and other vulnerable groups.

Explain how the courses in the Linkage will be linked with each other. It is anticipated that courses will usually be linked by subject matter, but they should additionally be linked by some purposeful component that provides opportunities for students to experience and practice integrative thinking across Knowledge Domains. The Linkage component between courses needs to be intentional and explicit to students. However, each course in a Linkage must be self-contained such that students can successfully complete just one course in the Linkage if they so choose.

The three courses intersect substantively, methodologically, and with regard to their pedagogical goals and assessments. Substantively (1) discuss individual health behaviors, individual health outcomes and health inequalities across groups; (2) consider the interplay between social institutions and individual action; (3) largely draw on the American experience to discuss these processes and engage student interest; and (4) discuss the healthcare and non-healthcare policy implications of these empirical patterns. Yet the courses differ with regard to which social layer of influence they emphasize. This course, SOC 211Z, focuses on macro- to meso-level causes of individual health outcomes, considering spatially-organized resources from the national to local community area. SOC 210Z spans macro-, meso- and micro-level causes of individual health outcomes, ranging, for example, from national economic conditions to workplace resources to family interactions. Finally, HDFS 210 focuses on meso-
and micro-level causes, including, for example, lifestyle behaviors associated with late life health outcomes to type of communication between older patients and health providers. Thus, all courses take a multi-level, multi-factorial approach to the study of health and health inequalities. Methodologically, all courses develop students’ understanding of temporal patterns (delineating cross-sectional and longitudinal estimates), distinguish between population-representative samples and clinical samples, increase students’ familiarity and facility with statistical estimates, and stress the importance of defining the populations at risk when considering statistical estimates and policy implications. Finally, the three courses share the following pedagogical goals: to foster students’ in-depth understanding of health inequalities and their determinants, encourage students’ ability to see connections across these determinants and the synergies they create, and develop students’ transferable skills related to critical thinking, discerning the quality of information they encounter, and interpreting and presenting statistical data and estimates.

Briefly explain the staffing plan. Given that each Linked course is approved for a single Knowledge Domain, it will be taught by an instructor (or instructional team) with appropriate expertise in that domain, who will also be expected to implement the Linkage’s shared component as defined in this proposal.

Each course (SOC 210Z, SOC 211Z, and HDFS 210Z) will be taught by an instructor with expertise in the domain. Currently, Dr. Stephen Matthews will be the instructor for SOC 211Z (Fall 2018) while Dr. Alyssa Gamaldo will be the instructor for HDFS 210Z. Dr. Molly Martin will be the instructor for SOC 210Z. Each of these instructors have taught previous courses that have included some of the concepts and methodologies proposed in these course proposals. Furthermore, their research interests and experience align with the content proposed in the courses. Dr. Molly Martin will implement the Linkage’s shared component as defined in this proposal.

Describe the assessments that will be used to determine students’ ability to apply integrative thinking.

All courses will use extended case examples for integrating course material, but the particular assessments will differ given the different data and methods needed to study the macro-, meso- and micro- causes of health inequalities. Students will either engage in (1) a secondary data analysis of multiple places or institutions, (2) a mixed methods analysis that contextualizes and largely details the experiences in a single place (local community) or institution, or (3) an in-depth, in-person analysis of a single place (local community) or institution.

Campuses That Have Offered ( ) Over The Past 4 Years

| Semester | AB | AL | BK | BR | BW | CR | DS | ER | FE | GA | GV | HB | HN | HY | LV | MA | NK | PC | SH | SL | UP | WB | WC | WS | XC | XP | XS | YK |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
UPLOADED DOCUMENTS FOLLOW:
Health Inequality: 
Understanding the Geographies of Life and Death

Sociology 211Z
(3 credits)

Fall 2018

Instructor
Stephen A. Matthews, Ph.D.
Liberal Arts Professor of Sociology, Anthropology, Geography and Demography
(courtesy in School of International Affairs)

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Course Basics

Time and Location:

Scheduled Class: TBA
Office Hours: TBA

All course materials will come from resources and materials made available on CANVAS.

All PowerPoint™ slides will usually be made available in PDF format before class.

Assignments/Grade

Brief summary: Overall 60 percent of the course grade is based on continuous assessment (lab assignments and class/discussion participation), 10 percent on an assignment, and 30 percent on quizzes and final exams; see pages 7 and 8 for additional details.
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General Introduction

This course will cover the nature, causes and consequence of health inequality, incorporating and understanding of temporal trends and spatial patterns in health indicators and examine associations between social, economic and environmental factors with health and wellbeing. The emphasis will be on easily measured and available primary health indicators such as mortality and morbidity, communicable and non-communicable disease as well as measures of mental health.

This course is a lecture and lab based course that provides an introduction to the concepts, measurement and study of health and health inequality across geographic scales from international and national through to sub-national and local scales, and to study health inequality in diverse contexts (including but not limited to urban and rural; historical and contemporary).

The lecture component

The lectures begin with focus on describing and understanding past, present and future patterns and trends in human health, examining these at the global, national (US), regional (Appalachia) and local (Pennsylvania) scales. How to define and measure health outcomes and factors associated with health precedes an introduction to mapping and spatial concepts.

The second half of the course includes lectures on the social determinants of health, the ways in which the legal landscape and direct and indirect discriminatory practices can influence health and wellbeing (e.g., around reproductive health, sexuality, and risk-taking behaviors), mental health, and the geographies of access to resources and the geography of exposure to risks. The final lecture (week 14) will discuss 21st century “Global” health challenges.

The lab component

The labs provide parallel opportunities for practical learning. Specifically, the labs are designed to expose students to the use of health data, geographic information systems and basic spatial analysis tools providing them with skills that help them to accurately summarize and report data on health outcomes. Students will learn how to find, critique and use data appropriately to measure and map health outcomes and will introduce students to fundamental concepts and expand their skill set in both basic statistics (numerical and graphical skills) and mapping (geographic visualization skills).

The labs will be based on sample data sets and case studies that draw on the use and interpretation of a variety of data sets – international, national, and sub-national. Towards the end of the course, students will generate their own community health case study based on the skills they have used during the course. By the end of the course the students will be familiar with measures of human health and a variety of international and US data resources.

Resources

The course will draw on multiple texts and workbooks; drawing mostly from reliable and validated online materials. At this time there is no single suitable text that covers the substantive topics to be discussed, nor are there textbooks that combine these topics with data interpretation.
and presentation in the ways described in this course.

The course will mostly draw on local, state, national (CDC, NIH, NAS) and international agency (e.g., UN, WHO, World Bank) reports on health status and health inequality. Many of these agencies release reports and data annually.

Short readings will draw on contemporaneous newspapers, feature articles and editorials in leading weekly/monthly magazines (e.g., *The Atlantic*, *Newsweek*, *NY Times* etc.) and where relevant audio/video interviews (TED talks such as by the late Hans Rosling, Larry Brilliant, Bill Gates and others) or documentaries (e.g., HBO’s *Weight of the Nation*, 2012).

Data analytic, mapping skills and software will draw on online open source texts (e.g., [www.spatialanalysisonline.com](http://www.spatialanalysisonline.com)) and resources (e.g., [www.socialexplorer.com](http://www.socialexplorer.com) and [www.gapminder.org](http://www.gapminder.org)).

Sample data sets will be drawn from a diversity of sources including international agencies as well as US Federal Agencies and State Data Centers (including Pennsylvania).

**Software and Related Issues**

Since the scheduling of this course and ordering of textbooks both Windows operating systems and the leading GIS software have been upgraded. The version of ArcGIS installed in most Campus Labs is currently ArcGIS 10.x. Software used in this course are freeware and can be downloaded to your own computers (if available) and will be available in the teaching classroom/lab. The installation of software in the lab is beyond the instructors control and hopefully any problems will be glitches and not major concerns. I encourage all of you to also work off a laptop if possible (Windows or a machine that can emulate Windows).

Other recommendations Other recommendations include that you become comfortable with generic file management issues and that you consider purchasing a high-capacity flash-drive.

**CANVAS**

Information on all course readings, handouts, lab section materials and related data will be distributed via CANVAS.

**Communication**

By far the best way to communicate with me is via e-mail; I check e-mail several times a day and as often as practicable when traveling. As much as possible I will communicate with the class through E-mail ([sxm27@psu.edu](mailto:sxm27@psu.edu)) or through an e-mail (or discussion section) on CANVAS. All students are encouraged to send questions or comments on lectures, texts, readings or exercises. Where appropriate I will send responses to questions to all students enrolled in the course, redacting individual identifiers when necessary. If you raise a question but do not want a reply sending to the class please send to [sxm27@psu.edu](mailto:sxm27@psu.edu) and put SOC 579 - PRIVATE in the subject line of the e-mail. Please note that some e-mails relating directly to the course content may count towards the ‘participation’ grade.
| Week 1: | Lectures: | **Course Overview: Measuring Health Inequalities**  
Lab: | Finding Health Data |
| Week 2: | Lectures: | **A Historical View: Understanding the Past**  
Lab: | Understanding and Visualizing Data 1: Global Patterns (using GapMinder and Global Burden of Disease) |
| Week 3: | Lectures: | **A Global View: Understanding the Present**  
Lab: | Understanding and Visualizing Data 2: Global Trends |
| Week 4: | Lectures: | **Techniques for Graphing Health Data**  
Lab: | Understanding and Visualizing Data 3: One and Two Variables (Univariate and Bivariate Analysis) (using GapMinder and Global Burden of Disease) |
| Week 5: | Lectures: | **Maps as Models**  
Lab: | Mapping Life and Death: The Good, the Bad and the Ugly  
(online health mapping resources such as CDC Quick Maps, RWJ Foundation County Health Rankings) |
| Week 6: | Lectures: | **Health and Disease in the United States and Appalachia**  
Lab: | Examining National and Regional Patterns and Trends  
(ESDA)  
Understanding Data Distributions and Univariate Mapping (Using Geoda) |
| Week 7: | Lectures: | **Health and Disease in Pennsylvania: Examining the Rural/Urban Divide**  
Lab: | State and County Trends  
PA State Department of Health/Local Health Departments |
| Week 8: | Lecture: | **Mid-term Quiz**  
Lab: | Mapping Health Data 4: Exploratory Spatial Data Analysis  
Measuring Spatial Dependence, Detecting Clusters, Examining Outliers |
Week 9: Lectures: Social Determinants and the Geographies of Health
Lab: Mapping Relationships 1: Factors Associated with Health & Disease

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Lab: Reviewing and Critiquing Data Visualizations

Week 12: Lectures: Geographies of Exposure to Risks and Health
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Week 13: Lectures: Geographies of Access to Resources and Health
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Week 14: Lectures: Global Futures: The Emerging an Re-emerging Geographies of Health
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Week 15: Lecture/Lab: Class Presentations
Poster/short PowerPoint presentations of own assignments

Week 16: Exam Week: Final Exam
Evaluation Methods

The grade for this course is based on multiple components.

1: **Participation:**
Participation in class and via a discussion forum will form part of the course grade (Approximately 12% total – at 1% per week for the first 12 weeks of the class)

2: **Mid-term Quiz:**
A mid-term quiz (worth 10%) will examine the students understanding of basic concepts and familiarity with class material. Scheduled for Week 8.

3: **Lab Assignments:**
Each of the first 12 labs sections will include short assignments. Each lab will be worth 4% and will thus accumulate to approximately 48% of the class grade.

4: **Term Paper/Presentation:**
The term project includes a student-led lab assignment. This will be presented and handed in during Week 15 (worth 10%).

5: **Final:**
The final exam will be worth 20% and will be held during Exam Week (Week 16)

Brief summary:

60 percent of the course grade is based on continuous assessment (lab assignments and class/discussion participation)

10 percent on a term paper

30 percent on quizzes and final exams.

By week you a student will accumulate the following percent of their total grade.

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Assignments & Participation: Titles, due dates, and grade points

Assignments

There are twelve in-class assignments (4% each) totaling 48 percent of the course grade. These assignments can be complete outside of class hours. A description of each assignment is posted on CANVAS.

All assignments are to be submitted to CANVAS by 11.59pm EST on the Friday of each week #1 through #12.

Students are encouraged to work with – and learn from - one another but each student is required to prepare and submit their own assignments. If you receive significant assistance in preparing an assignment you are expected to acknowledge this assistance in an acknowledgement section. No changes in due dates for any assignments are anticipated. Any change can only be made by me and will not be official unless it is revealed in an e-mail to the entire class.

Participation

Participation and discussion are all an important component of your grade. Participation in class and via discussion boards will be assessed weekly over the first 12 weeks of the semester. You will receive 1% of your overall grade for each week of active participation – Totaling 12% of the overall grade.

Grading & Examination Policy

Each assignment will be graded on a scale of 0-10. A score of 7 is a good competent piece of work. Scores of 8 would represent very good, 9 excellent, and 10 is reserved for outstanding work (where extra initiative/innovation clearly sets the work apart).

Example: A score of 7% for a lab assignment worth 4% of the course grade would earn the student 2.8% towards their final grade. Similarly, a score of 8 for the same assignment will be worth 3.2% of the overall grade; a score of 9 would be worth 3.6% of the overall grade; and, a score of 10 would be worth 4% of the overall course grade.

Late assignments will be reduced by a score of 1 (10%) for each day they are late. A grade of zero will be assigned to assignments not turned in (or are over 1 week late).

Attendance Policy

Please note 60 percent of the grade is assigned for weekly lab assignments, in-class discussion and overall course/class participation. Attendance and participation in all its forms is expected.
General Education Objectives & Outcomes

Students in this course will learn about concepts and measures of health and the study of health outcomes in diverse settings. The lecture component will cover salient topics relevant to understanding 21st century America and the modern world. The lab components introduce diverse data sets (US and international), software for tabular and spatial analysis, and basic analytical methods that enhance data interpretation and presentation.

This course falls within the General Education Knowledge Domains of Social and Behavioral Sciences

Fitting with the General Education goals, this course will enable students to:

a) Acquire knowledge
b) Analyze and evaluate acquired knowledge
c) Use logical and rational thinking to make critical judgments
d) Gain understanding of cultural diversity and consider lifestyles and values that may differ from their own

What components of the course will help students achieve the domain criteria?

“Explain the various methods of inquiry used in the social and behavioral sciences and describe how the contributions of these fields complement inquiry in other areas.”

This course focuses on macro- and meso-level factors related to the patterning and trends in health inequality outcomes both between and within countries, with a focus on variation across place within the United States and more locally within Pennsylvania and Appalachia. This focus on contextual factors defined and measured for geographical units (countries to ZIP codes and communities) is complementary to courses focusing on group and individual level units of analysis (e.g., SOC 210Z and HDFS 210Z). The course explicitly integrates both historical and geographical perspectives on health-related and health disparities questions. A focus on processes and patterns requires consideration of factors associated with the emergence, persistence and/or reversal of trends in health over time and across space.

“What identify and explain major foundational theories and bodies of work in a particular area of social and behavioral sciences.”

The course will present multiple conceptual models that have been developed to understand how broad social processes and trajectories followed by nation states can influence health profiles between and within countries (e.g., the demographic transition, the epidemiological transition as well as consideration of economic development and global environmental change). At a more local level several components of the course will examine both local access to resources (e.g., food, clinics) and exposure to risks (pollution, crime, disease vectors) on their geographical patterning in relation to health disparities and vulnerable populations in diverse communities (e.g., inner city, rural and suburban locations).
“Describe the ways in which many different factors may interact to influence behaviors and/or institutions in historical or contemporary settings”

The conceptual models used in this class discuss social determinants of health that range from macro- to meso- to mico-level factors and processes. Further the models discuss how broader social contexts influence the smaller social units, down to the individual, and how this matrix of influence can change over time and across geographic areas.

“Explain how social and behavioral science researchers use concepts, theoretical models, and data to better understand and address world problems.”

The course will define key conceptual terms, key indicators and the sources of data used by government and non-governmental agencies. Throughout the course students will acquire and interrogate national and subnational statistics on the prevalence of various health metrics across the globe and in particular within the United States. As the assignments zoom in on US state and local communities the health and demographic data they use will allow them to explore and examine differences in prevalence of health outcomes across within communities by social groups (e.g., groups defined by their educational attainment, age, gender, race/ethnicity, nativity). The students will read several research articles for several “lab” activities and, thus, gain an awareness of and greater understanding of research conducted on the social determinants of health.

Given that the dominant modern narrative about health and disease focuses on an individual’s genetic predispositions, biological risk factors, and personal behaviors, this course (and others in the linked course sequence – e.g., Soc 210Z and HDFS 210Z) will evaluate whether students have the following proficiencies:

Students can:

i) competently describe the social, economic, political and environmental factors that influence health and disease patterns in the United States and across the globe.

ii) describe and discuss the social, economic, political and environmental factors that contribute to the presence and persistence of health inequalities across populations, in the United States and across the globe.
General Education Objectives

Key Literacies: Students will have the opportunity to enhance their reading, numeracy and mapping skills by finding, synthesizing, critiquing, interpreting and presenting data and research findings on human health and health disparities drawing on materials from several academic domains including the social sciences, public health and epidemiology. The students will participate in classroom discussions and lab sessions that are designed to enhance their familiarity with and comfort level interpreting health-related data. Throughout the semester the students will learn numeracy and mapping skills via a series of lab assignments drawing on sample data sets and exercises. It is expected that the student will adapt and integrate different statistical and mapping skills in unique ways, demonstrating proficiency, during the term paper/presentation.

Critical and Analytical Thinking: The lecture material will draw on published data and reports and via complementary “lab” assignments the students will demonstrate skills and more holistic understanding of health-related problems. This will be demonstrated as the students move beyond simply acquiring data and comprehending knowledge to applying, analyzing, synthesizing and evaluating the information.

Integrative Thinking: Both across and within each of the three linked courses (i.e., SOC 210Z, SOC 211Z, and HDFS 210Z), students will learn how various social processes influence health and generate health disparities. Further within this specific course (SOC 211Z), students will develop an integrative understanding of macro- to meso-level factors related to the patterning and trends in health inequality outcomes both between and within countries, with a focus on variation across place within the United States and more locally within Pennsylvania and Appalachia.

The Learning Objectives of General Education

Key Literacies: The lab assignments will directly provide feedback and facilitate an evaluation of student mastery of statistical and mapping literacies. The assignments will give them the opportunity to demonstrate and deepen their statistical and scientific literacies.

Critical and Analytical Thinking: The lab assignments require students to analyze, synthesize and evaluate information garnered through the hands-on activities.

Integrative Thinking: Because the course is structured around integrating social science and health and the multiple, yet interrelated social determinants of health and health inequalities, all dimensions of the course – lectures, readings, “lab” sessions, the classroom and online discussions, assignments and quizzes – will require students to combine and integrate information.
Academic Integrity Policy

As suggested by the College of the Liberal Arts "Penn State defines academic integrity as the pursuit of scholarly activity in an open, honest and responsible manner. All students should act with personal integrity, respect other students’ dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts (Faculty Senate Policy 49-20).

Dishonesty of any kind will not be tolerated in this course. Dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Students who are found to be dishonest will receive academic sanctions and will be reported to the University’s Judicial Affairs office for possible further disciplinary sanction.”

Faculty and students alike are part of an academic community in which the sharing and advancement of knowledge are core values. High standards of academic integrity must be in place to ensure that this intellectual enterprise functions smoothly. Honoring the principles of academic integrity is a fundamental responsibility of all scholars, and the College of the Liberal Arts and the University is firmly dedicated to maintaining an environment in which practicing academic integrity is the norm.

Additional information about Academic Integrity can be found at the Liberal Arts Policies and Procedures: Academic Integrity and Teaching Guidelines

http://www.la.psu.edu/current-students/student-services/academic-integrity/academic-integrity

and the University Academic and Administrative Policies and Procedures Manual at:

http://www.psu.edu/oue/aappm/G-9-academic-integrity.html

University Statement of Academic Integrity (Policy 49-20): Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, the University's Code of Conduct states that all students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts. Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others.
Course Copyright

All course materials students receive or to which students have online access are protected by copyright laws. Students may use course materials and make copies for their own use as needed, but unauthorized distribution and/or uploading of materials without the instructor’s express permission is strictly prohibited. University Policy AD 40, the University Policy Recording of Classroom Activities and Note Taking Services addresses this issue. Students who engage in the unauthorized distribution of copyrighted materials may be held in violation of the University’s Code of Conduct, and/or liable under Federal and State laws.

For example, uploading completed labs, homework, or other assignments to any study site constitutes a violation of this policy.

Class and Exam Attendance (Policies 42-27, 44-35)

Class attendance recognizes that on occasion, students may opt to miss a class meeting in order to participate in a regularly scheduled university-approved curricular or extracurricular activity, or due to unavoidable or other legitimate circumstances such as illness, injury, family emergency, or religious observance. As professionals, regular attendance is considered the norm. Therefore, your attendance and participation is expected in all classes. In addition, this class relies heavily upon student participation. Therefore, any absence or late arrival to class should be discussed with the instructor prior to their occurrence to prevent grade disturbance.

Policy on Academic Freedom (AC64 Policy; Formerly HR64)

The faculty member is entitled to freedom in the classroom in discussing his/her subject. The faculty member is, however, responsible for the maintenance of appropriate standards of scholarship and teaching ability. It is not the function of a faculty member in a democracy to indoctrinate his/her students with ready-made conclusions on controversial subjects. The faculty member is expected to train students to think for themselves, and to provide them access to those materials which they need if they are to think intelligently. Hence, in giving instruction upon controversial matters the faculty member is expected to be of a fair and judicial mind, and to set forth justly, without supersession or innuendo, the divergent opinions of other investigators. If a student wishes to file a complaint, please review the procedures that should be followed, at this link: https://policy.psu.edu/policies/ac64

Statement of Non-Discrimination/Code of Responsible Conduct (AD88)

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state of federal authorities.

The Pennsylvania State University does not discriminate against any person because of age,
ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status: see http://equity.psu.edu/diversity-statement

For all Penn State Policies see: https://policies.psu.edu/(e.g., https://policy.psu.edu/policies/ad88).

Emergency Preparedness Information

Students are encouraged to sign up for the PSU text messaging service, PSUAlert, at: https://police.psu.edu/psualert/

Students with Disabilities

Disability Access Policy

Penn State welcomes students with disabilities into the University's educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Educational Equity/Student Disability Resources at 814-863-1807 (V/TTY). For further information regarding Disability Resources, please visit the Student Disability Resources website at:

http://equity.psu.edu/student-disability-resources/

In order to receive consideration for course accommodations, you must contact ODS and provide documentation; see the documentation guidelines at:

http://equity.psu.edu/student-disability-resources/accommodations

If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please share this letter and discuss the adjustments with your instructor as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.

Student Affairs

The Department of Student Affairs provides many resources for students at all levels within Penn State. The Center for Counseling and Psychological Services (CAPS) primary mission is to address the psychological needs and personal concerns of students that may interfere with their academic progress, social development, and emotional wellbeing. To accomplish this, CAPS provide a variety of services, including: Crisis Intervention; Individual Counseling; Group Counseling; Couples Counseling; Psychiatric Services; Consultation; Outreach; CAPS Chat; and Workshops on “Life Hacks.” For additional information please see:

http://studentsaffairs.psu.edu/counseling/
Health Inequality: Understanding the Geographies of Life and Death

Sociology 211Z
Fall 2018

Time and Location: TBA
Office Hours: TBA

Instructor: Stephen A. Matthews, Liberal Arts Professor of Sociology, Anthropology, and Demography, (courtesy, Geography & School of International Affairs) E-mail: sxm27@psu.edu
Office: 507 Oswald Tower  Phone: (814) 863-9721

Credits: 3
Prerequisites: None
Course Designation: Gen Ed
Knowledge Domain: Social & Behavioral Sciences
Gen Ed Learning Objectives: See below and page 11 for more detail. This course focuses on Key Literacies
Critical and Analytical Thinking
Integrative Thinking

Learning Objectives

Key Literacies: Students will enhance their reading, numeracy and mapping skills by finding, synthesizing, critiquing, interpreting and presenting data and research findings on human health and health disparities. The student will adapt and integrate different statistical and mapping skills in unique ways, demonstrating proficiency, during the term paper/presentation.

Critical and Analytical Thinking: The students will demonstrate a more holistic understanding of health-related problems, moving beyond simply acquiring and comprehending data to applying, analyzing, synthesizing and evaluating the information.

Integrative Thinking: Students will develop an integrative understanding of macro- to meso-level factors related to the patterning and trends in health inequality outcomes both between and within countries, with a focus on variation across place within the United States and more locally within Pennsylvania and Appalachia.

Assignments/Grade and Course Materials

Brief summary: Overall 60 percent of the course grade is based on continuous assessment (lab assignments and class/discussion participation), 10 percent on an assignment, and 30 percent on quizzes and final exams; see pages 7 and 8 for additional details.

All course materials will come from resources and materials made available on CANVAS. All PowerPoint™ slides will usually be made available in PDF format before class.
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Attendance Policy

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General Education Knowledge Domains
General Education Objectives
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Copyright
Class/Exam Attendance
Academic Freedom
Non-discrimination/Code of Responsible Conduct
Emergency Preparedness
Students with Disabilities/ Disability Access Policy
Student Affairs.
General Introduction

This course will cover the nature, causes and consequence of health inequality, incorporating and understanding of temporal trends and spatial patterns in health indicators and examine associations between social, economic and environmental factors with health and wellbeing. The emphasis will be on easily measured and available primary health indicators such as mortality and morbidity, communicable and non-communicable disease as well as measures of mental health.

This course is a lecture and lab based course that provides an introduction to the concepts, measurement and study of health and health inequality across geographic scales from international and national through to sub-national and local scales, and to study health inequality in diverse contexts (including but not limited to urban and rural; historical and contemporary).

The lecture component

The lectures begin with focus on describing and understanding past, present and future patterns and trends in human health, examining these at the global, national (US), regional (Appalachia) and local (Pennsylvania) scales. How to define and measure health outcomes and factors associated with health precedes an introduction to mapping and spatial concepts.

The second half of the course includes lectures on the social determinants of health, the ways in which the legal landscape and direct and indirect discriminatory practices can influence health and wellbeing (e.g., around reproductive health, sexuality, and risk-taking behaviors), mental health, and the geographies of access to resources and the geography of exposure to risks. The final lecture (week 14) will discuss 21st century “Global” health challenges.

The lab component

The labs provide parallel opportunities for practical learning. Specifically, the labs are designed to expose students to the use of health data, geographic information systems and basic spatial analysis tools providing them with skills that help them to accurately summarize and report data on health outcomes. Students will learn how to find, critique and use data appropriately to measure and map health outcomes and will introduce students to fundamental concepts and expand their skill set in both basic statistics (numerical and graphical skills) and mapping (geographic visualization skills).

The labs will be based on sample data sets and case studies that draw on the use and interpretation of a variety of data sets – international, national, and sub-national. Towards the end of the course, students will generate their own community health case study based on the skills they have used during the course. By the end of the course the students will be familiar with measures of human health and a variety of international and US data resources.

Resources

The course will draw on multiple texts and workbooks; drawing mostly from reliable and validated online materials. At this time there is no single suitable text that covers the substantive topics to be discussed, nor are there textbooks that combine these topics with data interpretation.
and presentation in the ways described in this course.

The course will mostly draw on local, state, national (CDC, NIH, NAS) and international agency (e.g., UN, WHO, World Bank) reports on health status and health inequality. Many of these agencies release reports and data annually.

Short readings will draw on contemporaneous newspapers, feature articles and editorials in leading weekly/monthly magazines (e.g., *The Atlantic, Newsweek, NY Times* etc.) and where relevant audio/video interviews (TED talks such as by the late Hans Rosling, Larry Brilliant, Bill Gates and others) or documentaries (e.g., HBO’s *Weight of the Nation*, 2012).

Data analytic, mapping skills and software will draw on online open source texts (e.g., [www.spatialanalysisonline.com](http://www.spatialanalysisonline.com)) and resources (e.g., [www.socialexplorer.com](http://www.socialexplorer.com) and [www.gapminder.org](http://www.gapminder.org)).

Sample data sets will be drawn from a diversity of sources including international agencies as well as US Federal Agencies and State Data Centers (including Pennsylvania).

**Software and Related Issues**

Since the scheduling of this course and ordering of textbooks both Windows operating systems and the leading GIS software have been upgraded. The version of ArcGIS installed in most Campus Labs is currently ArcGIS 10.x. Software used in this course are freeware and can be downloaded to your own computers (if available) and will be available in the teaching classroom/lab. The installation of software in the lab is beyond the instructors control and hopefully any problems will be glitches and not major concerns. I encourage all of you to also work off a laptop if possible (Windows or a machine that can emulate Windows).

Other recommendations Other recommendations include that you become comfortable with generic file management issues and that you consider purchasing a high-capacity flash-drive.

**CANVAS**

Information on all course readings, handouts, lab section materials and related data will be distributed via CANVAS.

**Communication**

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Week-by-Week Schedule

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Lab: Finding Health Data

Week 2: Lectures: **A Historical View: Understanding the Past**
Lab: Understanding and Visualizing Data 1: Global Patterns (using GapMinder and Global Burden of Disease)

Week 3: Lectures: **A Global View: Understanding the Present**
Lab: Understanding and Visualizing Data 2: Global Trends

Week 4: Lectures: **Techniques for Graphing Health Data**
Lab: Understanding and Visualizing Data 3: One and Two Variables (Univariate and Bivariate Analysis) (using GapMinder and Global Burden of Disease)

Week 5: Lectures: **Maps as Models**
Lab: Mapping Health Data 1: Basic Principles of Cartographic Design (using online health mapping resources such as CDC Quick Maps, RWJ Foundation County Health Rankings)

Week 6: Lectures: **Health and Disease in the United States and Appalachia**
Lab: Mapping Health Data 2: Exploratory Spatial Data Analysis (ESDA) Understanding Data Distributions and Univariate Mapping (Using Geoda)

Week 7: Lectures: **Health and Disease in Pennsylvania: Examining the Rural/Urban Divide**
Lab: Mapping Health Data 3: Building Community Health Profiles PA State Department of Health/Local Health Departments

Week 8: Lecture: **Mid-term Quiz**
Lab: Mapping Health Data 4: Exploratory Spatial Data Analysis Measuring Spatial Dependence, Detecting Clusters, Examining Outliers
Week 9: Lectures: Social Determinants and the Geographies of Health
Lab: Mapping Relationships 1: Factors Associated with Health & Disease

Week 10: Lectures: Geographies of Restrictions: Legal Landscapes and Discrimination
Lab: Mapping Relationships 2: Revisiting Geographic Scale and Data Aggregation (Using Geoda)

Week 11: Lectures: Geographies of Mental Health
Lab: Reviewing and Critiquing Data Visualizations

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Week 13: Lectures: Geographies of Access to Resources and Health
Lab: Preparation time for own assignment

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Lab: Preparation time for own assignment

Week 15: Lecture/Lab: Class Presentations
Poster/short PowerPoint presentations of own assignments

Week 16: Exam Week: Final Exam
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The grade for this course is based on multiple components.

1: Participation:
Participation in class and via a discussion forum will form part of the course grade (Approximately 12% total – at 1% per week for the first 12 weeks of the class)

2: Mid-term Quiz:
A mid-term quiz (worth 10%) will examine the students understanding of basic concepts and familiarity with class material. Scheduled for Week 8.

3: Lab Assignments:
Each of the first 12 labs sections will include short assignments.
Each lab will be worth 4% and will thus accumulate to approximately 48% of the class grade.

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The term project includes a student-led lab assignment.
This will be presented and handed in during Week 15 (worth 10%).

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The final exam will be worth 20% and will be held during Exam Week (Week 16)

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60 percent of the course grade is based on continuous assessment (lab assignments and class/discussion participation)
10 percent on a term paper
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<td>25%</td>
<td>Week 13</td>
<td>70%</td>
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<tr>
<td>Week 6</td>
<td>30%</td>
<td>Week 14</td>
<td>70%</td>
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<td>Week 7</td>
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<td>Week 15</td>
<td>80%</td>
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<tr>
<td>Week 8</td>
<td>50%</td>
<td>Week 16</td>
<td>100%</td>
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Assignments & Participation: Titles, due dates, and grade points

Assignments

There are twelve in-class assignments (4% each) totaling 48 percent of the course grade. These assignments can be complete outside of class hours. A description of each assignment is posted on CANVAS.

All assignments are to be submitted to CANVAS by 11.59pm EST on the Friday of each week #1 through #12.

Students are encouraged to work with – and learn from - one another but each student is required to prepare and submit their own assignments. If you receive significant assistance in preparing an assignment you are expected to acknowledge this assistance in an acknowledgement section. 

No changes in due dates for any assignments are anticipated. Any change can only be made by me and will not be official unless it is revealed in an e-mail to the entire class.

Participation

Participation and discussion are all an important component of your grade.
Participation in class and via discussion boards will be assessed weekly over the first 12 weeks of the semester. You will receive 1% of your overall grade for each week of active participation – Totaling 12% of the overall grade.

Grading & Examination Policy

Each assignment will be graded on a scale of 0-10. A score of 7 is a good competent piece of work. Scores of 8 would represent very good, 9 excellent, and 10 is reserved for outstanding work (where extra initiative/innovation clearly sets the work apart).

Example: A score of 7% for a lab assignment worth 4% of the course grade would earn the student 2.8% towards their final grade. Similarly, a score of 8 for the same assignment will be worth 3.2% of the overall grade; a score of 9 would be worth 3.6% of the overall grade; and, a score of 10 would be worth 4% of the overall course grade.

Late assignments will be reduced by a score of 1 (10%) for each day they are late. A grade of zero will be assigned to assignments not turned in (or are over 1 week late).

Attendance Policy

Please note 60 percent of the grade is assigned for weekly lab assignments, in-class discussion and overall course/class participation. Attendance and participation in all its forms is expected.
General Education Objectives & Outcomes

Students in this course will learn about concepts and measures of health and the study of health outcomes in diverse settings. The lecture component will cover salient topics relevant to understanding 21st century America and the modern world. The lab components introduce diverse data sets (US and international), software for tabular and spatial analysis, and basic analytical methods that enhance data interpretation and presentation.

This course falls within the General Education Knowledge Domains of Social and Behavioral Sciences

Fitting with the General Education goals, this course will enable students to:

a) Acquire knowledge
b) Analyze and evaluate acquired knowledge
c) Use logical and rational thinking to make critical judgments
d) Gain understanding of cultural diversity and consider lifestyles and values that may differ from their own

What components of the course will help students achieve the domain criteria?

“Explain the various methods of inquiry used in the social and behavioral sciences and describe how the contributions of these fields complement inquiry in other areas.”

This course focuses on macro- and meso- level factors related to the patterning and trends in health inequality outcomes both between and within countries, with a focus on variation across place within the United States and more locally within Pennsylvania and Appalachia. This focus on contextual factors defined and measured for geographical units (countries to ZIP codes and communities) is complementary to courses focusing on group and individual level units of analysis (e.g., SOC 210Z and HDFS 210Z). The course explicitly integrates both historical and geographical perspectives on health-related and health disparities questions. A focus on processes and patterns requires consideration of factors associated with the emergence, persistence and/or reversal of trends in health over time and across space.

“What identify and explain major foundational theories and bodies of work in a particular area of social and behavioral sciences.”

The course will present multiple conceptual models that have been developed to understand how broad social processes and trajectories followed by nation states can influence health profiles between and within countries (e.g., the demographic transition, the epidemiological transition as well as consideration of economic development and global environmental change). At a more local level several components of the course will examine both local access to resources (e.g., food, clinics) and exposure to risks (pollution, crime, disease vectors) an their geographical patterning in relation to health disparities and vulnerable populations in diverse communities (e.g., inner city, rural and suburban locations).
“Describe the ways in which many different factors may interact to influence behaviors and/or institutions in historical or contemporary settings”

The conceptual models used in this class discuss social determinants of health that range from macro- to meso- to mico-level factors and processes. Further the models discuss how broader social contexts influence the smaller social units, down to the individual, and how this matrix of influence can change over time and across geographic areas.

“Explain how social and behavioral science researchers use concepts, theoretical models, and data to better understand and address world problems.”

The course will define key conceptual terms, key indicators and the sources of data used by government and non-governmental agencies. Throughout the course students will acquire and interrogate national and subnational statistics on the prevalence of various health metrics across the globe and in particular within the United States. As the assignments zoom in on US state and local communities the health and demographic data they use will allow them to explore and examine differences in prevalence of health outcomes across within communities by social groups (e.g., groups defined by their educational attainment, age, gender, race/ethnicity, nativity). The students will read several research articles for several “lab” activities and, thus, gain an awareness of and greater understanding of research conducted on the social determinants of health.

Given that the dominant modern narrative about health and disease focuses on an individual’s genetic predispositions, biological risk factors, and personal behaviors, this course (and others in the linked course sequence – e.g., Soc 210Z and HDFS 210Z) will evaluate whether students have the following proficiencies:

Students can:

i) competently describe the social, economic, political and environmental factors that influence health and disease patterns in the United States and across the globe.

ii) describe and discuss the social, economic, political and environmental factors that contribute to the presence and persistence of health inequalities across populations, in the United States and across the globe.
**General Education Objectives**

**Key Literacies:** Students will have the opportunity to enhance their reading, numeracy and mapping skills by finding, synthesizing, critiquing, interpreting and presenting data and research findings on human health and health disparities drawing on materials from several academic domains including the social sciences, public health and epidemiology. The students will participate in classroom discussions and lab sessions that are designed to enhance their familiarity with and comfort level interpreting health-related data. Throughout the semester the students will learn numeracy and mapping skills via a series of lab assignments drawing on sample data sets and exercises. It is expected that the student will adapt and integrate different statistical and mapping skills in unique ways, demonstrating proficiency, during the term paper/presentation.

**Critical and Analytical Thinking:** The lecture material will draw on published data and reports and via complementary “lab” assignments the students will demonstrate skills and more holistic understanding of health-related problems. This will be demonstrated as the students move beyond simply acquiring data and comprehending knowledge to applying, analyzing, synthesizing and evaluating the information.

**Integrative Thinking:** Both across and within each of the three linked courses (i.e., SOC 210Z, SOC 211Z, and HDFS 210Z), students will learn how various social processes influence health and generate health disparities. Further within this specific course (SOC 211Z), students will develop an integrative understanding of macro- to meso-level factors related to the patterning and trends in health inequality outcomes both between and within countries, with a focus on variation across place within the United States and more locally within Pennsylvania and Appalachia.

**The Learning Objectives of General Education**

**Key Literacies:** The lab assignments will directly provide feedback and facilitate an evaluation of student mastery of statistical and mapping literacies. The assignments will give them the opportunity to demonstrate and deepen their statistical and scientific literacies.

**Critical and Analytical Thinking:** The lab assignments require students to analyze, synthesize and evaluate information garnered through the hands-on activities.

**Integrative Thinking:** Because the course is structured around integrating social science and health and the multiple, yet interrelated social determinants of health and health inequalities, all dimensions of the course –lectures, readings, “lab” sessions, the classroom and online discussions, assignments and quizzes – will require students to combine and integrate information.
Academic Integrity Policy

As suggested by the College of the Liberal Arts "Penn State defines academic integrity as the pursuit of scholarly activity in an open, honest and responsible manner. All students should act with personal integrity, respect other students’ dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts (Faculty Senate Policy 49-20).

Dishonesty of any kind will not be tolerated in this course. Dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Students who are found to be dishonest will receive academic sanctions and will be reported to the University’s Judicial Affairs office for possible further disciplinary sanction.”

Faculty and students alike are part of an academic community in which the sharing and advancement of knowledge are core values. High standards of academic integrity must be in place to ensure that this intellectual enterprise functions smoothly. Honoring the principles of academic integrity is a fundamental responsibility of all scholars, and the College of the Liberal Arts and the University is firmly dedicated to maintaining an environment in which practicing academic integrity is the norm.

Additional information about Academic Integrity can be found at the Liberal Arts Policies and Procedures: Academic Integrity and Teaching Guidelines

http://www.la.psu.edu/current-students/student-services/academic-integrity/academic-integrity

and the University Academic and Administrative Policies and Procedures Manual at:

http://www.psu.edu/oue/aappm/G-9-academic-integrity.html

University Statement of Academic Integrity (Policy 49-20): Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, the University's Code of Conduct states that all students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts. Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others.
Course Copyright

All course materials students receive or to which students have online access are protected by copyright laws. Students may use course materials and make copies for their own use as needed, but unauthorized distribution and/or uploading of materials without the instructor’s express permission is strictly prohibited. University Policy AD 40, the University Policy Recording of Classroom Activities and Note Taking Services addresses this issue. Students who engage in the unauthorized distribution of copyrighted materials may be held in violation of the University’s Code of Conduct, and/or liable under Federal and State laws.

For example, uploading completed labs, homework, or other assignments to any study site constitutes a violation of this policy.

Class and Exam Attendance (Policies 42-27, 44-35)

Class attendance recognizes that on occasion, students may opt to miss a class meeting in order to participate in a regularly scheduled university-approved curricular or extracurricular activity, or due to unavoidable or other legitimate circumstances such as illness, injury, family emergency, or religious observance. As professionals, regular attendance is considered the norm. Therefore, your attendance and participation is expected in all classes. In addition, this class relies heavily upon student participation. Therefore, any absence or late arrival to class should be discussed with the instructor prior to their occurrence to prevent grade disturbance.

Policy on Academic Freedom (AC64 Policy; Formerly HR64)

The faculty member is entitled to freedom in the classroom in discussing his/her subject. The faculty member is, however, responsible for the maintenance of appropriate standards of scholarship and teaching ability. It is not the function of a faculty member in a democracy to indoctrinate his/her students with ready-made conclusions on controversial subjects. The faculty member is expected to train students to think for themselves, and to provide them access to those materials which they need if they are to think intelligently. Hence, in giving instruction upon controversial matters the faculty member is expected to be of a fair and judicial mind, and to set forth justly, without supersession or innuendo, the divergent opinions of other investigators. If a student wishes to file a complaint, please review the procedures that should be followed, at this link: https://policy.psu.edu/policies/ac64

Statement of Non-Discrimination/Code of Responsible Conduct (AD88)

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state of federal authorities.

The Pennsylvania State University does not discriminate against any person because of age,
ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status: see http://equity.psu.edu/diversity-statement

For all Penn State Policies see: https://policies.psu.edu/  
(e.g., https://policy.psu.edu/policies/ad88).

Emergency Preparedness Information

Students are encouraged to sign up for the PSU text messaging service, PSUAlert, at: https://police.psu.edu/psualert/

Students with Disabilities

Disability Access Policy

Penn State welcomes students with disabilities into the University's educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the Educational Equity/Student Disability Resources at 814-863-1807 (V/TTY). For further information regarding Disability Resources, please visit the Student Disability Resources website at:

http://equity.psu.edu/student-disability-resources/

In order to receive consideration for course accommodations, you must contact ODS and provide documentation; see the documentation guidelines at:

http://equity.psu.edu/student-disability-resources/accommodations

If the documentation supports the need for academic adjustments, ODS will provide a letter identifying appropriate academic adjustments. Please share this letter and discuss the adjustments with your instructor as early in the course as possible. You must contact ODS and request academic adjustment letters at the beginning of each semester.

Student Affairs

The Department of Student Affairs provides many resources for students at all levels within Penn State. The Center for Counseling and Psychological Services (CAPS) primary mission is to address the psychological needs and personal concerns of students that may interfere with their academic progress, social development, and emotional wellbeing. To accomplish this, CAPS provide a variety of services, including: Crisis Intervention; Individual Counseling; Group Counseling; Couples Counseling; Psychiatric Services; Consultation; Outreach; CAPS Chat; and Workshops on “Life Hacks.” For additional information please see:

http://studentsaffairs.psu.edu/counseling/