

**SSCI 601a, Population, Health & Place Research
Practicum**

Units: 2

Term — Day — Time: Summer 2020 (Session 050) –
Mondays and Wednesdays– 10:00 a.m.-12:00 p.m.

Location: KAP 150

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Course Description

The overarching goal of this course is to support Ph.D. students in Population, Health and Place (PHP) as you develop the skills to conduct interdisciplinary research. The Research Practicum, which is taken over consecutive summers (i.e., SSCI 601a followed in the next summer by SSCI 601b), targets the development of research skills by: (1) providing research experience through participation in supervised research projects prior to the dissertation; (2) involving students in conducting research early in their doctoral studies; (3) increasing the students' research skills; and (4) developing skills in communicating with an interdisciplinary audience – in writing journal articles, conference papers, extended abstracts, thesis proposals, grant proposals, and speaking at professional meetings.

Learning Objectives

On completion of this course, students will be able to:

- Discuss how to review literature using both systematic and conceptual approaches.
- Discover and review literature using either a systematic or a conceptual approach.
- Discuss how methodologies are integrated in research designs that straddle the intersection of population, health, and place.
- Integrate population science, public health, and spatial science theory and practice into research designs.
- Assess complex population science, public health, and geospatial data for fitness of use in research designs.
- Formulate and execute either a review article or an empirical study at the intersection of population, health, and place.
- Discuss strategies and develop insights for identifying dissertation topics and composing a PHP guidance committee.

On completion of the successor to this course, SSCI 601b, students will be able to:

- Write a draft of a dissertation proposal that would lead to either a monograph of publishable quality (i.e., suitable as a basis on which to gain a book contract with a university press) or three manuscripts of publishable quality (i.e., suitable for publication as journal articles in peer reviewed journals or as refereed conference papers).

Prerequisite(s): None

Co-Requisite (s): None

Concurrent Enrollment: None

Recommended Preparation: Students must be enrolled in the USC PHP PhD program

Course Notes

This course is intended to help students along their research trajectories, not primarily to cover content or as a broadening experience. Therefore, relative to other courses in the PHP program,

there will be a limited set of required readings and related assignments. Instead, the course will be devoted to reading about and discussing the research process itself, along with individually supervised work to set the foundation for either a review paper or an empirical paper. The course meets for the first 7 weeks of the summer. However, as fellowship support extends throughout the summer, the review or the empirical paper will be due at the end of the summer term.

The first two learning objectives listed above aim at building skills and knowledge about how to research and write a review article for all students. Also, whether or not students choose to write a review paper, we will aim to inform your research interests with exploration of literature. To facilitate this, we will discuss your research interests, analyze published review articles, and discuss the research and writing process behind such manuscripts. For those who choose to write a review paper during the summer, one specific goal is to set a firm foundation of literature under your own research interests. You should aspire to synthesize and develop existing research designs and methods in population, health, and place to create a new, interdisciplinary frame to solve an important public health problem.

The next four learning objectives above aim at building skills and knowledge about how to conduct interdisciplinary empirical work in population, health, and place for all students. Whether or not students choose to write an empirical paper, it is worthwhile to inform your research interests with a discussion of various data gathering techniques/processes and exploration of available data. To facilitate this, we will discuss various data sources and fitness of use for different purposes. We will discuss your research interests, analyze published empirical articles, and discuss the research and writing process behind such manuscripts. For those who choose to write an empirical paper, specific goals may vary slightly. When research can be conducted with existing datasets, you will explore datasets in an area of dissertation interest and practice data processing and analysis techniques. If new data needs to be gathered, then you might develop and test qualitative or quantitative instruments. You should aspire to creatively link data and techniques from two or more of fields of sociology/demography, spatial sciences, and public health to assess or solve an important public health problem.

Substantial time will be devoted to assisting students with formulation of the review paper or empirical paper. The expectation is that achieving one of these two goals will help you move forward towards your PHP Ph.D. degree. In general, this course will give you the opportunity to talk about your research with other scientists and among yourselves, to help clarify the specific hypotheses or research questions you want to explore, to practice relevant methods, and to position your work in the literature.

The last learning objective aims to help you organize your dissertation topic and guidance committee. To place your work on either a review or an empirical paper in the context of the long-term goals in your Ph.D. program, you will write an individual learning contract. In this document, you will declare activities and goals through May 15, 2021, leading up to the recruitment of your guidance committee and SSCI 601b. The learning contract will include goals and activities leading to a dissertation prospectus or précis and establishing a guidance committee.

This class can only work as intended if research goals are rapidly developed. By not later than the end of Week 6, I will expect you to commit to either a review paper or an empirical paper. Also, by not later than the end of Week 6, I will ask you to have identified **one PHP faculty member** (beyond the SSCI 601a course instructor) to advise you on either a review paper or an empirical paper. Given that many of you have some significant training in one of the PHP fields already, I would suggest that it might be a good idea to select this faculty member from one of the fields with which you are least experienced, so long as their specific background and skills is a good complement to your research interests. The engagement with this faculty member can range from general advice to direct engagement in an existing empirical research project. At a minimum, this faculty member will be a sounding board for the research and writing process.

Whether you write a review paper or an empirical paper, we will discuss how to identify a target journal for publication and the peer review process. You should aspire to submit either a review paper or an empirical paper to a journal by sometime during the Fall 2020 semester. It is reasonable to suppose that you might choose to ask one or more PHP faculty members to co-author a revised manuscript for submission.

Technological Proficiency and Hardware/Software Required

The modeling software and geospatial data required for research projects will be accessed using computing resources provided by the Spatial Sciences Institute.

Required Readings and Supplementary Materials

The following three textbooks are required for this class; these are available from online outlets such as Amazon. Please acquire these books before the start of the course because reading assignments from these are required starting at the first session:

1. Guest, Greg and Emily E. Namey. 2015. *Public health research methods*. Thousand Oaks, CA: Sage Publications, Inc. (~\$100 hard cover, ISBN: 978-1-4522-4133-3 and ~\$50 e-book, ISBN 978-1-4833-1142-5) (also available for free online at the USC libraries)
2. Montello, Daniel. R., and Paul C. Sutton. 2013. *An introduction to scientific research methods in geography and environmental studies*. 2nd ed. Los Angeles, CA: Sage. (~\$39 paper; ISBN-10: 1412902878)
3. Turabian, Kate L., Wayne C. Booth, Gregory G. Colomb, Joseph M. Williams, Joseph Bizup, and William T. Fitzgerald. 2018. *A manual for writers of research papers, theses, and dissertations*. 9th ed. Chicago, IL: University of Chicago Press. (~\$10 paper; ISBN-13: 978-0-226-430577)

In subsequent weeks, article and book chapters will be used as indicated on the course schedule and will be made available on Blackboard under the Readings tab.

On the Course Schedule, each reading is labeled in one of three categories with expectations as described below:

- **All** – All students will read in detail and be prepared to engage in a discussion led by the instructor or a guest scholar.
- **Assigned** – One student will be assigned to read and present this reading in detail with the expectation that other students will have familiarity suitable for a general discussion during seminar.
- **Optional** – One student may choose to read and present this reading in detail if it suits his or her interests and needs.

Description and Assessment of Assignments

Students must make good effort to achieve the learning objectives goals of the course, stay abreast of course readings, and participate in class discussion on a regular basis.

Class Participation – 10 pts. A class participation grade for the semester will be assigned based upon how actively students engage in the course, with the instructor, with guest scholars, and with fellow students.

Lead Discussion of Readings – 30 pts. Students will read, present, and raise questions for discussion of selected assigned or optional weekly readings. For these readings, students will provide a brief written outline or outline on a slide deck for classmates to follow during their presentation. Specific assignments will be determined at the first meeting of the class. When leading discussions of seminar readings, students should strive to address the following aspects of the reading:

1. **Central theme** – Organize your presentation in terms of central themes or main points in the readings you are covering. Please relate the reading to methodological themes in the course and describe how ideas in the reading have been applied in other research you have read at the intersection of population, health, and place.
2. **Interdisciplinary connections** – Think of the central themes in terms of how they inform the intersection of the population, health, and place disciplines. If the method being described comes primarily from geography, sociology, or public health explain how it might be used in coordination with the other disciplines.
3. **Critical Evaluation** – Carefully assess the ideas in the reading and think about how the reading might or might not apply to research tasks at hand for yourself or others in the course. Describe how it does or does not inform your own research.
4. **Questions** – Raise questions for discussion and ideas needing clarification.

Draft Learning Contract – 5 pts. To create a firm basis for further discussion, students will individually author a short briefing paper that expresses their choice for either a review or empirical paper and their initial plan for accomplishing this during the summer, including the faculty advisor they have identified.

Model Review Article Evaluation - 15 pts. Students will choose a review article in area of potential dissertation interest. Students will evaluate this article by “reverse engineering” its outline and comparing it against the practices for literature reviews discussed in our course and the style guide and stated standards of the journal in which it appeared.

Model Empirical Article Evaluation -15 pts. Students will choose an empirical article in area of potential dissertation interest. Students will evaluate this article by “reverse engineering” its outline and comparing against the best practices for research design and scientific communication discussed in our course and the style guide and the stated standards of the journal in which it appeared.

Revised Learning Contract – 20 pts. To create a foundation for writing either a review or an empirical paper, students will provide a description of the purpose and scope of the article. In the case of the review paper, students will provide an abbreviated annotated bibliography of a minimum set of initial sources. In the case of an empirical paper, students will provide a data exploration. Students will also provide a plan with activities and goals through May 15, 2021, leading up to the recruitment of your guidance committee and SSCI 601b

Review or Empirical Paper Preliminary Presentation – 5 pts. Students will give a short slide presentation outlining their research plan for the summer and suggesting main claims they may make in either their review or empirical paper.

Review or Empirical Paper Written Draft – 0 pts. Students will provide a written draft of the review or empirical paper in the style and length of an identified target journal. Because this assignment is due at the end of the general Spatial Sciences Institute summer term, rather than the end of the course, it is ungraded. However, it is key for students to present this to ensure timely progress toward the qualifying proposal and ultimately toward completion of the dissertation itself and the deadline is also in the PHP student handbook.

Grading Breakdown

The following table summarizes the SSCI 601a course assignments and their point distribution:

Assessment	Number	Points Each	Total Points
General Assignments			
Class Participation	1	10	10
Lead Discussion of Readings	2	15	30
Model Review Article Evaluation	1	15	15
Model Empirical Article Evaluation	1	15	15
Draft Learning Contract	1	5	5
Revised Learning Contract	1	20	20
Review or Empirical Paper			
Preliminary Presentations	1	5	5
Written Draft	1	N/A	N/A
Total	16	-	100 points

Assignment Submission Policy

Assignments will be submitted for grading via Blackboard using the dates specified in the Course Schedule below.

Additional Policies

Students are expected to attend and participate in every class session and to complete and upload all assignments before the deadlines detailed in the Course Schedule. Late work will be assessed a penalty of 10% per day and zero grades will be assigned for work that is more than one week late.

Course Schedule: A Weekly Breakdown

	Topic	Readings and Assignments	Deliverables/Due Dates
Week 1 5/20	Introduction Introduction to the course, including individual meetings in the afternoon for the draft learning contract (as needed). A discussion of the research process and collaboration with Dr. Andrew Marx, Associate Professor of the Practice of Spatial Sciences.	Guest & Namey (2015), Ch. 1 (All) Guest & Namey (2015), pages 723-746 (All) Turabian et al. (2013), Ch. 1-2 (All) Marx et al. 2019. Detecting village burnings with high-cadence smallsats: A case-study in the Rakhine State of Myanmar. <i>Remote Sensing Applications: Society and Environment</i> 14: 119-125.	
Week 2 5/25	Memorial Day, No Class Meeting		
Week 2 5/27	Research Design: Overview of principles and major types of research design for empirical work on population, health, and place. Discussion or individual meetings on the draft learning contracts (as needed).	Guest & Namey (2015), Ch. 2 (All) Montello & Sutton (2013), Ch. 1-2 & 8 (All) Turabian et al. (2013), Ch. 5 (All)	
Week 3 6/1	Literature Review (I): A discussion of the centrality and importance of literature review and the conceptual review approach. A discussion of conceptual reviews and the research process behind Schwartz et al. with Dr. Jennifer Unger, Professor of Preventive Medicine at USC Keck.	Turabian et al. (2013), Ch. 3-4 (All) Boote, D. and Beile, P. 2005. Scholars before researchers: On the centrality of the dissertation literature review in research preparation. <i>Educational Researcher</i> 34(6): 3-15. (All) Hart, C. 1998. <i>Doing a literature review: releasing the social science imagination</i> . Thousand Oaks, CA: Sage Publications, Inc. Ch. 1-4. (Two Assigned Presentations) Schwartz et al. 2010. Rethinking the Concept of Acculturation: Implications for Theory and Research. <i>Am Psychol</i> 65(4): 237-251. (All)	Draft Learning Contract

	Topic	Readings and Assignments	Deliverables/Due Dates
Week 3 6/3	<p>Literature Review (II): A discussion of systematic literature reviews and bibliometrics.</p> <p>A discussion of your model review article evaluations.</p>	<p>Arcaya et al. 2016. Research on Neighborhood Effects on Health in the United States: A Systematic Review of Study Characteristics. <i>Social Science and Medicine</i> 168: 16-29. (Assigned)</p> <p>PRISMA Checklist: http://www.prisma-statement.org (Optional)</p> <p>Cochrane Overview Training for PRISMA https://www.youtube.com/watch?v=Y-fu00PSm9o (Optional)</p> <p>Sweileh et al. 2018. Bibliometric analysis of global migration research in peer-reviewed literature (200-2016). <i>BMC Public Health</i> 18: 777. (Assigned)</p> <p>Christopher Olsen talk on bibliometrics at USC SSI: https://bluejeans.com/s/KisNn (Optional)</p>	Model Review Article Evaluation (Draft for Class Discussion)
Week 4 6/8	<p>Quantitative Social Science: A discussion of quantitative methods and data sources that social scientists typically deploy to examine one or more aspects of human well-being across place and space.</p> <p>A discussion of empirical research and the research process behind Owens (2016) with guest Dr. Ann Owens, USC Associate Professor of Sociology and Spatial Sciences.</p>	<p>Guest & Namey (2015), Ch. 9 (All) Guest & Namey (2015), Ch. 14 (Optional)</p> <p>Spielman, S.E. and Folch, D.C. 2016. Reducing uncertainty in the American Community Survey through data-driven regionalization. <i>PLOS One</i> 10(2): e0115626. (Optional)</p> <p>Owens, A. 2016. Inequality in children's contexts: Income segregation of households with and without children. <i>American Sociological Review</i> 81(3): 549-574 (All)</p>	Model Review Article Evaluation (Final Draft for Grading)
Week 4 6/10	<p>Data Use and Collection: A discussion of different types of data, as well as sampling and means of collecting and using data for research in population, health, and place.</p> <p>A discussion on the use of secondary data with Dr. Jennifer A. Ailshire, USC Assistant Professor of Gerontology and Spatial Sciences.</p>	<p>Montello & Sutton (2013), Ch. 9 (All) Guest & Namey (2015), Ch. 17 (All) Guest & Namey (2015), Ch. 12-13 (Assigned) Montello & Sutton (2013), Ch. 4-6 (Assigned)</p> <p>Ailshire, J.A. and Burgard, S.A. 2012. Family Relationships and troubled sleep among U.S. adults: Examining the influences of contact frequency and relationship quality. <i>Journal of Health and Social Behavior</i>. 53(2): 248-262. (All)</p>	

	Topic	Readings and Assignments	Deliverables/Due Dates
Week 5 6/15	<p>Spatial Sciences Research: A discussion of existing social and physical spatial data and spatial methods for deriving health data, and how these may be used in conjunction with health studies.</p> <p>Discussion with Zaria Tatalovich, Geospatial Scientist in the Division of Cancer Control and Population Sciences at the National Cancer Institute on organizing and executing spatial epidemiology research in the federal government.</p>	<p>SSI Core Geospatial Datasets (All)</p> <p>Miller, H. and Goodchild, M. 2015. Data-driven geography. <i>GeoJournal</i> 80: 449-461. (All)</p> <p>Guest & Namey (2015), Ch. 5 (Optional) Guest & Namey (2015), Ch. 20 (Optional) Guest & Namey (2015), Ch. 21 (Optional)</p> <p>Tatalovich, Z. and Stinchcomb, D. "Creating Maps and Mapping Systems for Cancer Control and Prevention." In <i>Geospatial Approaches to Energy Balance and Breast Cancer</i>. Energy Balance and Breast Cancer, Vol. 15. Cham, Switzerland: Springer. (All)</p> <p>Please also view this website: https://gis.cancer.gov/tools/data_sources.html</p>	
Week 5 6/17	<p>Public Health Research: An overview research from USC's Southern California Environmental Health Sciences Center (https://scehsc.usc.edu) and USC's Institute on Inequities in Global Health (https://globalhealth.usc.edu)</p> <p>Discussion of the children's health study with regards to how major collaborative multi-year work is planned and carried out.</p> <p>Discussion with Laura Ferguson, Assistant Professor of Preventive Medicine and Associate Director, Program on Global Health & Human Rights centered around two of her articles.</p>	<p>Gauderman, W.J. et al. 2015. Association of improved air quality with lung development in children. <i>New England Journal of Medicine</i> 372(10): 905-913. (All)</p> <p>Ferguson L., Tarantola D., Hoffman M., and Gruskin, S. 2016. Non-communicable diseases and human Rights: Assessing the links. <i>Global Public Health</i>. Mar 17: 1-28. (All)</p> <p>Tarantola, D., Ferguson L., and Gruskin, S. 2011. "International health, global health and human rights." In <i>Handbook of global public health</i>, edited by R. Parker and M. Sommer, 51-61. New York, NY: Routledge. (All)</p>	Model Empirical Article Evaluations

	Topic	Readings and Assignments	Deliverables/Due Dates
<p>Week 6 6/22</p>	<p>Mixed Methods and Community-Based Research: Overview of the application of qualitative methods in PHP research and ways to promote co-learning among researchers, public health professionals, and communities.</p> <p>A discussion with Manuel Pastor, Professor of Sociology and Director of USC's Program in Environmental and Regional Equity on working with mixed-methods and community-based research, with particular attention to genesis and process for Pulido and Pastor (2013)</p>	<p>Guest & Namey (2015), Ch. 15 & 19 (All) Guest & Namey (2015), Ch. 4 (All)</p> <p>Balazs, C.L. and Morello-Frosch, R. 2013. The three R's: How community based participatory research strengthens the rigor, relevance, and reach of science. <i>Environmental Justice</i> 6(1): 1-11. (All)</p> <p>Pulido, L., and Pastor, M. 2013. Where in the world is Juan – and what color is he? The geography of Latina/o racial identity in Southern California. <i>American Quarterly</i> 65(2): 309-341. (All)</p>	
<p>Week 6 6/24</p>	<p>Building and Maintaining Scientific Reputation: A discussion of the ways in which scholars can build and sustain a stellar scientific reputation in an interdisciplinary context, including writing and presentation styles.</p> <p>A discussion with John Wilson, Professor and Founding Director of USC's Spatial Sciences Institute about the manuscript submission and peer review process from the perspective of both author and journal editor.</p>	<p>Turabian et al. (2013) Ch. 13-14 (All) Montello & Sutton (2013) Ch. 11 (All)</p> <p>Bourne, P. E. and V. Barbour. 2011. Ten simple rules for building and maintaining a scientific reputation. <i>PLoS Computational Biology</i> 7(6): e1002108. (All)</p> <p>Yi, L. et al. 2019. Methodologies for assessing contextual exposure to the built environment in physical activity studies: A systematic review. <i>Health and Place</i> 60: 10226. (All)</p>	<p>Model Review Article Evaluation</p>

	Topic	Readings and Assignments	Deliverables/Due Dates
Week 7 6/29	<p>Research Ethics and Final Presentations: A discussion exploring the ethical aspects of research designs, subject recruitment, and data collection, as well as the various ways in which institutions are required to safeguard privacy, confidentiality and related outcomes.</p> <p>Student presentations of work completed to date on the review or empirical papers according to the learning contracts.</p>	<p>Guest and Namey (2015), Ch. 3 (Assigned) Montello & Sutton (2013), Ch. 14 (Assigned)</p> <p>USC Health Sciences Review Board (HSIRB), https://oprs.usc.edu/hsirb/</p> <p>USC University Park Institutional Review Board (UPIRB), https://oprs.usc.edu/upirb/</p>	<p>Revised Learning Contract</p> <p>Review Article Preliminary Presentations (at class)</p>
PHP Handbook Year 1 Deadline 8/15	<p>Review Article or Empirical Paper Feedback: You will receive feedback from the instructor and designated USC PHP faculty at the beginning of the Fall 2020 term.</p>	<p>Submit review article or empirical via email to vos@usc.edu no later than 5 p.m. 8/15/20.</p>	<p>Review Article or Empirical Paper</p>

Statement on Academic Conduct and Support Systems

Academic Conduct

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

Support Systems

Counseling and Mental Health– (213) 740-9355 – 24/7 on call
engemannshc.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline – 1 (800) 273-8255 – 24/7 on call

www.suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) – (213) 740-9355(WELL), press “0” after hours – 24/7 on call

studenthealth.usc.edu/sexual-assault

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED) – (213) 740-5086 | Title IX Compliance – (213) 821-8298

equity.usc.edu, titleix.usc.edu

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment– (213) 740-5086 or (213) 821-8298

usc-advocate.symplicity.com/care_report

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

The Office of Disability Services and Programs – (213) 740-0776

dsp.usc.edu

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Campus Support and Intervention – (213) 821-4710

uscsa.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC – (213) 740-2101

diversity.usc.edu

Information on events, programs and training, the Provost’s Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety – - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call
dps.usc.edu

Non-emergency assistance or information.

Resources for Online Students

All registered students can access electronic library resources through the link <https://libraries.usc.edu/>. Also, the USC Libraries have many important resources available for distance students through the link: <https://libraries.usc.edu/faculty-students/distance-learners>. These include instructional videos, remote access to university resources, and other key contact information for distance students.