### Practicum in Sociological Research: Issues in Health, Risk, Society SOCY 625

Spring 2017 Monday 5:30-8:00pm Watkins G-12 Michael Bader bader@american.edu Watkins G-13

#### **OFFICE HOURS**

Mondays 3:00-4:30pm, or by appointment

Please make an appointment at http://mikebader.net/officehours.

I am happy to talk by phone or meet in my office. If you would like to speak by phone, please include your phone number in the appointment and send me an e-mail letting me know that you would like to meet by phone. As a general rule, I cannot meet before class because I need time to prepare (which might often include eating) and I can occasionally schedule short meetings after class (but I will also want to get to bed and become increasingly grumpy as the night progresses).

#### **COURSE DESCRIPTION**

You will learn the theory and practice of survey methods research by participating in the process of fielding a survey to a representative sample of Washington, DC-area residents. In the course, you will learn about survey design, sampling, question wording, and basic inference from sample data. We will focus in particular on common pitfalls that come about in the process of designing surveys.

The course will follow the process used by professional researchers designing surveys for research purposes. In fact, you will be involved in the design of the 2018 DC Area Survey. You will take a theoretical construct, determine how to measure that construct using questions on a survey, and advocate for why such a construct should be included on the survey. The process will expose you to each phase of fielding a survey.

We will discuss basic data management techniques and best practices for documenting data. I will introduce you to statistical software that you use to document data and, in the future, analyze the data that we collect.

This course is the second in the sequence of the "practicum experience" in the Masters of Arts in Sociology Research and Practice. I expect that students have passed a basic statistics course such as SOCY 621.

#### **OBJECTIVES**

By the end of this course students will be able to

- 1. explain the principles of survey design including question design, sampling, statistical inference, and sources of error;
- 2. develop and test questions to answer a specific research hypothesis;
- 3. advocate for inclusion of measures on surveys using a scientific justification; and
- 4. conduct basic data management tasks and descriptive analysis in R

#### **CLASSROOM POLICIES**

### Respect in (and out of) the Classroom

I expect everyone to treat, and be treated, with respect in our classroom. Every one of us brings something new, interesting, and engaging to the topics that we will discuss. This does not mean you cannot disagree and express disagreements; however, we can all expect that each other does so with the respect we desire to be treated with ourselves.

#### Academic Integrity

You are expected to follow university guidelines regarding academic integrity on all assignments (graded or not). I expect that you will provide appropriate credit through citation and acknowledgement of others' ideas while you take this class. I am required to report all suspected violations of the university's code of conduct to the Dean and will do so when I suspect plagiarism or academic dishonesty.

### **ACCOMMODATIONS & ACADEMIC SUPPORT**

Academic Support and Access Center (ASAC) MGC 243, 202-885-3360.

All students may take advantage of the Academic Support and Access Center (ASAC) for individual academic skills, counseling, workshops, tutoring and writing assistance, as well as Supplemental Instruction. All services are free. The services include the Writing Center (first floor of Bender Library), which assists students with academic writing and assignments. The Math/Stat Lab (Myers Building, 202-885-3154) which provides mathematics and statistics tutoring. Additional content tutoring is also available in the ASAC's Tutoring Lab.

### Students with Disabilities, ASAC

American University is committed to making learning and programming as accessible as possible. Students who wish to request accommodations for a disability, must notify me with a letter of approved accommodations from the ASAC. As the process for registering and requesting accommodations can take some time, and as accommodations, if approved, are not retroactive, I strongly encourage students to contact the ASAC as early as possible. For more information about the process for registering and requesting disability-related accommodations, contact ASAC.

### Counseling Center MGC 214, 202-885-3500.

The Counseling Center helps students make the most of their university experience, both personally and academically. We offer individual and group counseling, urgent care, self-help resources, referrals to private care, as well as programming to help you gain the skills and insight needed to overcome adversity and thrive while you are in college. Contact the Counseling Center to make an appointment in person or by telephone, or visit the Counseling Center page on the AU website for additional information.

### Center for Diversity & Inclusion MGC 201, 202-885-3651.

CDI is dedicated to enhancing LGBTQ, Multicultural, First Generation, and Women's experiences on campus and to advance AU's commitment to respecting & valuing diversity by serving as a resource and liaison to students, staff, and faculty on issues of equity through education, outreach, and advocacy.

OASIS: The Office of Advocacy Services for Interpersonal and Sexual Violence McCabe Hall 123, 202-885-7070, oasis@american.edu.

OASIS provides free and confidential advocacy services for students who experience sexual assault, dating or domestic violence, sexual harassment, and/or stalking. Please email or call to schedule an appointment with one of the two victim advocates in OASIS.

- American University expressly prohibits any form of discriminatory harassment including sexual harassment, dating and domestic violence, sexual assault, and stalking. The university is and equal opportunity, affirmative action institution that operated in compliance with applicable laws and regulations, and does not discriminate on the basis of race, color, national origin, religion, sex (including pregnancy), age, sexual orientation, disability, marital status, personal appearance, gender identity and expression, family responsibilities, political affiliation, source of income, veteran status, an individual's genetic information or any other bases under federal or local laws in its programs and activities.
- If you experience any of the above, you have the option of filing a report with the AU Department of Public Safety 202-885-2527 or the Office of the Dean of Students 202-885-3300 dos@american.edu. To file a Title IX complaint, contact the Title IX Program Officer 202-885-3373 or TitleIX@american.edu. Please keep in mind that all faculty and staff with exception of counselors in the Counseling Center, victim advocates in OASIS, medical providers in the Student Health Center, and ordained clergy in the Kay Spiritual Life Center who are aware of or witness this conduct are required to report this information to the university, regardless of the location of the incident.

International Student & Scholar Services, Batelle 4th Butler Pavilion, Room 410.

ISS has resources to support academic success and participation in campus life including academic counseling, support for second language learners, response to questions about visas, immigration status and employment and intercultural programs, clubs and other campus resources.

#### ASSIGNMENTS & GRADING

Assignments

Question Proposal (20% each) Over the course of the semester, you will advocate to include your research topic and questions on the DCAS2018 at three workshops:

- February 19: Pitch a concept to be included in the DCAS2018
- March 26: Advocate for questions to be included in the DCAS2018
- May 7: Present a research plan to analyze data from the DCAS2018

For each workshop, you will write a memo to explain the rationale for your research idea, question, or design. You will distribute this to the class the week before and you will read your colleague's memos before coming to class. You will then come prepared to advocate for your ideas during class on the day of the workshop. A complete description of each assignment will be distributed on the first week of class.

**Weekly Exercises (30%)** Each week you will be given a series of exercises to complete. These will take different forms on different weeks, but will include some combination

of answering questions about the readings, reflecting on what you have learned, applying lessons to your own research question, and exercises in R. Exercises will be due by Sunday at 11:59pm on Blackboard. You will have the opportunity to revise each of your exercises one time if you submit the revision within one week of the original due date. Please plan to spend 2-3 hours on each exercise. No exercises will be due when we have workshops.

Class Attendance & Participation (10%) This class provides an opportunity to learn a valuable professional skill. You will learn the most if you actively engage during class by attending and asking questions. The material for this class accumulates over the course of the semester; missing a class will likely be detrimental to your understanding of the material the following week. If you are absent, you should get notes from a colleague and be sure that you understand the notes.

### Grading

- A (4.0) Student exceeds expectations of the assignment. Evidence of exceeding expectations includes deeply engaging with the material, demonstrating of initiative beyond what can be expected by simply completing the assignment, nuanced understanding of the material, and fostering a collaborative environment for learning in and out of the classroom.
- **B (3.0)** Student meets expectations of all objectives identified for the assignment. Evidence of meeting expectations includes engaging with material, actively participating in classroom discussions, and basic understanding of the material.
- **C (2.0)** Student meets expectations of some objectives identified for the assignment. See above for description of evidence of meeting expectations.
- **D (1.0)** Student fails to meet most expectations of objectives identified for the assignment. See above for description of meeting expectations.
- **F (0.0)** Student fails to meet expectations of objectives identified for the course. See above for description of meeting expectations.

Grades are given based on the grade points above. Final grades are determined by rounding the weighted average grade to two decimal places:

		3.16 - 3.49	B+	2.16 - 2.49	C+		
3.84 - 4.00	Α	2.84 - 3.15	В	1.84 - 2.15	С	0.50 - 1.49	D
3.50 - 3.83	A-	2.50 - 2.83	B-	1.50 - 1.83	C-	< 0.50	F

#### REQUIRED TEXT & SOFTWARE

Text

Groves, R. M., Fowler Jr., F. J., Couper, M. P., Lepkowski, J. M., Singer, E., and Tourangeau, R. (2009). *Survey Methodology*. Wiley, 2nd edition.

### Software

We will use the statistical software R in this class. R is a programming language used for statistical analysis. In one sense it is like Stata, SPSS, or SAS. I know that you are more likely to have learned one of those three statistical software programs in your intro

statistics class. R is more difficult to learn than those three software programs. The difficulty of learning is offset by several advantages:

- Most importantly, R is free. R is open source software which means that it is free as in beer and as in speech. This means that as long as you have a computer, you will have access to the software. Since many students plan to go onto work at organizations that might not have large research budgets, this means that you will be able to use the software wherever you go.
- R is also becoming the standard for statistical software in the field. In the coming
  five to ten years, more employers will require new hires to know R. Exposure to it
  now will help you gain those skills and be ahead of the learning curve.
- Other programs focus only on statistics while R offers a full-fledged programming language. For much of what we do in this class, that will be unimportant. If, however, you ever want to do things like text processing, scraping websites, or downloading hashtags or tweets, R already has libraries to do that easily.
- R has the best graphics of any software program available.

In addition to R we will use RStudio. RStudio is an *integrated development environment*, or IDE, for R. RStudio offers a graphical user interface that makes R easier to use and makes it more like the types of statistical programs to which you are familiar.

You may download both R and RStudio:

- 1. Download R first; visit <a href="http://mirrors.nics.utk.edu/cran/">http://mirrors.nics.utk.edu/cran/</a> and select the correct version for your operating system
- 2. Then download RStudio here https://www.rstudio.com/products/RStudio/#Desktop

#### SCHEDULE

Using Surveys for Research

## **Week 1 (January 22): Introduction to Survey Methods** *Readings:*

Groves et al., Chapter 1.

### Week 2 (January 29): Inference and Error in Surveys Readings:

- Groves et al., Chapter 2.
- King, G. (2014). Restructuring the Social Sciences: Reflections from Harvard's Institute for Quantitative Social Science. PS: Political Science & Politics, 47(1):165–172
- Prewitt, K. (2000). The US Decennial Census: Political Questions, Scientific Answers. *Population and Development Review*, 26(1):1–16, *recommended*

## **Week 3 (February 5): Target Populations and Survey Coverage** *Readings:*

Groves et al., Chapter 3.

- Burnham, G., Lafta, R., Doocy, S., and Roberts, L. (2006). Mortality after the 2003 invasion of Iraq: a cross-sectional cluster sample survey. *The Lancet*, 368(9545):1421–1428. (you might also wish to listen to the This American Life podcast about this study: https://www.thisamericanlife.org/320/whats-in-a-number-2006-edition)
- Dardagan, H., Sloboda, J., and Dougherty, J. (2006). Reality checks: some responses to the latest Lancet estimates (available at: https://www.iraqbodycount.org/analysis/beyond/reality-checks/1).

# **Week 4 (February 12): DC Population & Demographic Characteristics** *Readings:*

- Bader, M. D. M. (2016). Diversity in the D.C. Area: Findings from the 2016 D.C. Area Survey. *CLALS Working Paper 14*. Center for Latin American and Latino Studies, American University, Washington, D.C. Available at: <a href="https://papers.ssrn.com/abstract=2846003">https://papers.ssrn.com/abstract=2846003</a>
- Mora, G. C. (2014). Cross-Field Effects and Ethnic Classification: The Institutionalization of Hispanic Panethnicity, 1965 to 1990. American Sociological Review, 79(2):183–210

### Week 5 (February 19): WORKSHOP: Pitch ideas for inclusion in DCAS2018

Designing High Quality Instruments

Week 6 (February 26): Questions & Answers in Surveys *Readings:* 

• Groves et al., Pages 183-191, 208-210, and Chapter 7.

### **Week 7 (March 5): Evaluating Survey Questions** *Readings:*

- Groves et al., Chapter 8.
- Schaeffer, N. C. and Presser, S. (2003). The Science of Asking Questions. Annual Review of Sociology, 29(1):65–88

SPRING BREAK: NO CLASS MARCH 12

# **Week 8 (March 19): Methods of Data Collection** *Readings:*

- Groves et al., Chapter 5.
- Couper, M. P. (2017). New Developments in Survey Data Collection. Annual Review of Sociology, 43(1):121–145

### Week 9 (March 26): WORKSHOP: Pitch questions for inclusion in DCAS2018

## Week 10 (April 2): Ethics in Survey Design Readings:

• Groves et al., Chapter 11.

### Data Collection & Management

## Week 11 (April 9): Non-Response Readings:

- Groves et al., Chapter 6.
- Keeter, S., Kennedy, C., Clark, A., Tompson, T., and Mokrzycki, M. (2007). What's
  Missing from National RDD Surveys? The Impact of the Growing Cell-Only Population (available at: http://assets.pewresearch.org/wp-content/uploads/sites/12/old-assets/pdf/514.pdf).
- American Association for Public Opinion Research (AAPOR) (2016). An Evaluation
  of 2016 Election Polls in the U.S. Technical report, Oakbrook Terrace, Illinois (available at: http://www.aapor.org/Education-Resources/Reports/An-Evaluation-of-2016Election-Polls-in-the-U-S.aspx).

# **Week 12 (April 16): Post-Collection Data Processing** *Readings:*

• Groves et al., Chapter 10.

# **Week 13 (April 23): Data Documentation and Dissemination** *Readings:*

- King, G. (2007). An Introduction to the Dataverse Network as an Infrastructure for Data Sharing. *Sociological Methods & Research*, 36(2):173–199
- Freese, J. (2007). Replication Standards for Quantitative Social Science: Why Not Sociology? *Sociological Methods & Research*, 36(2):153–172
- Firebaugh, G. (2007). Replication Data Sets and Favored-Hypothesis Bias: Comment on Jeremy Freese (2007) and Gary King (2007). Sociological Methods & Research, 36(2):200–209

## Week 14 (April 30): Reproducible Research *Readings:*

• Healy, K. (2017). The Plain Person's Guide to Plain Text Social Science (available at: http://plain-text.co).

FINAL WORKSHOP (MONDAY, MAY 7 5:30PM): PRESENT A RESEARCH PLAN