#### Analytical Methods for Global Policy Studies: PA 397G

Fall, 2016 Meeting time: Monday 9:00-12:00 Room: SRH 3.124 (TBC) Version: August 4, 2016

| Professor:       | Dr. Erin Lentz  |
|------------------|---|
| Office Location: | SRH 3.257   |
| Office Hours:    | Thursdays, 2:30-4:30pm  |
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| Office Hours:    | TBD   |
| Section:         | Tuesdays, 5:30 – 7pm. Room TBD.                               |
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Analytical Methods for Global Policy Studies introduces the core quantitative and qualitative methods used by global policy professionals. This course is required for GPS students. Students will learn the strengths and weaknesses of qualitative and quantitative research methods; the difference between systematic research and anecdotal evidence; the links between theory, evidence, and professional practice; and strategies for analysis, inference, and interpretation of data. Students will be exposed to a variety of qualitative and quantitative research tools. We will examine which methods are best suited for which questions and unpack assumptions underlying findings. The goal of this course is for students to gain exposure to and practice with a variety of research methods and to become savvy consumers of research. Student progress will be evaluated on the basis of performance along four criteria: (1) a mid-term exam; (2) a take-home final; (3) six problem sets; and (4) class participation. The required text is Meier, K. Brudney, J., and Bohte, J. (2015) *Applied Statistics for Public and Nonprofit Administration*. Cengage Learning. Ninth Edition. Journal articles and supplementary book chapters intended to complement the text are also required.

### Format

Most classes will begin with a lecture. During class, we will also break to work in groups and solve problems in class based on the reading. I encourage students to participate throughout by asking questions. I reserve the right to revise the syllabus based on the class's pace and interests.

### Group work

You can work on problem sets with your classmates. Trying to explain a concept to a colleague is a powerful way to evaluate your own understanding. However, everyone should turn in his or her own work. If you turn in the same answers word-for-word as your study partners, you are plagiarizing.

#### **Teaching Assistant & Section:**

Your TA will run a section that meets one evening a week. Section attendance is strongly encouraged. Your TA will cover Stata commands and provide additional examples. She will be available to answer questions. We strongly prefer you use section time to ask questions; office hours are also available. Come to section and to office hours prepared.

### **Office hours**

Please email me if you would like an appointment during my office hours. I will email you a link to my Google calendar; you can choose a time to meet me. I will also gladly answer e-mailed questions. Note that I only check email a few times a day and I cannot promise to respond to emails sent over the weekend until after class on Monday. For any assignments due on Monday mornings, please plan ahead (i.e., don't start work for an assignment on Friday night). Come to office hours prepared.

# Grading

- One in-class quiz: 15%. About one-hour in length. The quiz date is November 14, 9-10:30am. We will be learning new material after the quiz, so plan to attend the entire class. No extensions will be granted. You will need a doctor's note if you are sick.
- Take-home final: 40%. The final will be due at the start of our scheduled exam period, which is likely to be **Wednesday December 14<sup>th</sup> at 9am.** This final will be synthetic: it will include both qualitative and quantitative components. No extensions will be granted. The final can be submitted electronically.
- Six problem sets: 6% each. The problem sets will be distributed throughout the semester.
  - Turn in printed assignments. We cannot accept late Problem Set #6, which is due in-class and will discussed that day. Otherwise, assignments are due in your TA's mailbox on specified Thursdays at 5pm.
  - Please keep a soft-copy. Include your mailbox number and name on your assignment.
  - If you cannot be on campus on the days the assignments are due, please make arrangements for a classmate to bring your assignment to the mailbox. Unless you have a legitimate emergency, I will not accept emailed assignments. If you turn in an assignment late, I will deduct 10 points off of your grade per 24 hours after the deadline.
- Class participation: 9%. I evaluate class participation based on students (1) attending class (2) being prepared to work in-class on problems based on the assigned reading and (3) productively participating during class.

### **Reading and Reading Assignments**

Complete the readings before each class meeting. I will occasionally assign problems based on the day's reading for you to solve during class.

Please purchase the following text for this class:

Meier, K. Brudney, J., and Bohte, J. (MBB) (2015) *Applied Statistics for Public and Nonprofit Administration*. Cengage Learning. Ninth Edition.

This book is available at the Co-Op East, from various Internet booksellers, and electronically from the publisher. The electronic edition is substantially cheaper. I will post other readings to the course Canvas site. Occasionally, these readings will cover the same material as MBB but in a different manner.

# Stata

You will need access to Stata to complete your problem sets. Small Stata (also known as "Student Stata"), which allows for a limited number of observations and variables, is fine.

- The computers on the second floor have Stata.
- You can connect remotely for \$5. Some people report difficulty logging onto this service. Take a look at the process here: http://statistics.utexas.edu/consulting/stat-apps-server

 Six-month licenses for Small Stata are \$35. You can download the software directly from Stata. Most quantitative methods classes at LBJ use Stata. If you expect to take additional quantitative classes, you may want to consider other types of licenses, such as 12 month licenses, perpetual licenses, or licenses that allow for larger datasets: <a href="http://www.stata.com/order/new/edu/gradplans/student-pricing/">http://www.stata.com/order/new/edu/gradplans/student-pricing/</a>

### Academic Integrity

Students are expected to respect the LBJ School's standards regarding academic dishonesty. You owe it to yourself, your fellow students, and the institution to maintain the highest standards of integrity and ethical behavior. A discussion of academic integrity, including definitions of plagiarism and unauthorized collaboration, as well as helpful information on citations, note taking, and paraphrasing, can be found at the Office of the Dean of Students web page (http://deanofstudents.utexas.edu/sjs/acint\_student.php) and the Office of Graduate Studies (Http://www.utexas.edu/ogs/ethics/transcripts/academic.html). The University has also established disciplinary procedures and penalty guidelines for academic dishonesty, especially Sec. 11.304 in Appendix C of the Institutional Rules on Student Services and Activities section in UT's General Information Catalog.

# **University Electronic Mail Notification Policy**

I will use e-mail as a means of communication with students in this course. You will be responsible for checking your e-mail regularly, recognizing that certain communications may be time-critical. The University of Texas recommends that you check e-mail daily and requires you to check at least twice per week. You are responsible for keeping the University informed of e-mail address changes. The complete text of this policy and instructions for updating your e-mail address are available at http://www.utexas.edu/its/policies/emailnotify.html.

### About Canvas

Check the course Canvas site regularly for class work and announcements or request that Canvas sends you a daily update. The university's IT staff occasionally schedules downtimes for the Canvas site, as noted on the Canvas login page. Scheduled downtimes are <u>not</u> an excuse for late work. The ITS Help Desk at 475-9400 provides technical support for Canvas Monday - Friday, 8 am to 5 pm. http://www.utexas.edu/its/helpdesk/

### Students with Disabilities

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities (471-6259) or visit <u>http://ddce.utexas.edu/disability</u> for more information. Students with Accommodation letters should make an appointment to speak with me to discuss the approved accommodations.

# **IMPORTANT DATES**

| PS #1 due:      | September 29, 5:00 pm   |
|-----------------|---|
| PS #2 due:      | October 13, 5:00 pm   |
| PS #3 due:      | October 20, 5:00 pm   |
| PS #4 due:      | November 3, 5:00 pm   |
| Quiz # 1:       | November 14, 9:00-10:30 am  |
| PS #5 due:      | December 1, 5:00 pm   |
| PS # 6 due:     | December 5, 9:00am (No late problem sets will be accepted)          |
| Final exam due: | December 14, 9:00am (TBC – don't make travel plans until finalized) |
|                 |   |

### **CLASS SCHEDULE**

- August 29: C1: Introduction to course: Answering questions with data
- September 12: C2: Interrogating data: what's missing?
- September 19: C3: Case selection, participatory methods, ethnography
- September 26: C4: Interview techniques
- October 3: C5: Analysis of qualitative data
- October 10: C6: Descriptive statistics
- October 17: C7: Probability distributions
- October 24: C8: Inference I
- October 31: C9: Inference II
- November 7: C10: Correlation vs causation and analysis of variance
- November 14: C11: Quiz #1 & Bivariate regression
- November 21: C12: Regression assumptions and multiple regression I
- November 28: C13: Multiple regression II
- December 5: C14: Mixed methods & wrap up

December 14, 9:00am: Final exam due (TBC – don't make travel plans until finalized)

| <b>C</b> # | Date    | Topics, Readings, Assignments   |
|------------|---------|---|
| 0          |         | Revisit basic statistics  |
|            |         | Summer Reading:   |
|            |         | • Cartoon Introduction to Statistics (Klein and Dabney)   |
| 1          | 8/29/16 | Introduction: Answering questions with theory and variables   |
|            |         | <ul><li>Reading:</li><li>Ragin: Strategies for Social Research: pp. 31-53</li></ul>   |
|            |         | Assignment:<br>• PS #1 assigned   |
| -          | 9/5/16  | No class: Labor Day   |
| 2          | 9/12/16 | Interrogating data: what's missing?   |
|            |         | <ul> <li>Reading:</li> <li>Jerven, 2013. "Chapter 3: Facts, assumptions and controversies:<br/>Lessons from the datasets" in <i>Poor Numbers: How we are misled</i><br/><i>by African development statistics and what we can do about it</i>.<br/>Cornell University Press.</li> <li>Feingold, D. 2010. "Chapter 3: Trafficking in numbers: the social<br/>construction of human trafficking data." In <i>Sex, Drugs, and Body</i><br/><i>Counts</i>. Cornell University Press.</li> <li>Stoler, A. 2002. "Colonial archives and the arts of governance."<br/><i>Archival Science</i>.</li> </ul> |
| 3          | 9/19/16 | <ul> <li>Case selection</li> <li>Participatory approaches and case selection – Guest lecture by<br/>Dr. Jason Cons 9:30-10:45</li> <li>Thick descriptions; reflexivity</li> </ul>   |

|   |          | <ul> <li>Reading:</li> <li>Burawoy, M. 2003. "Revisits: An outline of a theory of reflexive ethnography." <i>American Sociological Review.</i> 68(5)</li> <li>Lund, C. 2014. "Of what is this a case?" <i>Human Organization</i>.</li> <li>Paprocki and Cons (2014) "Life in a Shrimp Zone: aqua- and other cultures of Bangladesh's coastal landscape" <i>Journal of Peasant Studies</i></li> <li>US State Department Cable, posted on the Guardian. 2006. "US Embassy Cables: A Wedding Feast, the Caucasuses way." August 31, 2006. <u>https://www.theguardian.com/world/us-embassy-cables-documents/76763?CMP=share_btn_link</u></li> <li><i>Readings tbc</i></li> </ul> |
|---|----------|--|
|   |          | Assignment:<br>• PS #2 assigned  |
| 4 | 9/26/16  | Interviews <ul> <li>Interview techniques and analysis</li> </ul>   |
|   |          | <ul> <li>Reading:</li> <li>Lynch. 2013. "Ch 1: Aligning sampling strategies with analytic goals" in Mosley (ed.) <i>Interview Research in Political Science</i>. Cornell.</li> <li>Brooks. 2013. "Ch 2. The ethical treatment of human subjects and the institutional review board process." Mosley (ed.) <i>Interview Research in Political Science</i>. Cornell.</li> <li>Bleich and Pekkanen. 2013. "Ch 4: How to report interview data" in Mosley (ed.) <i>Interview Research in Political Science</i>. Cornell.</li> <li><i>Readings tbc</i></li> </ul>   |
|   | 9/29/16  | Assignments:<br>• PS #1 due at 5pm   |
| 5 | 10/3/16  | <ul> <li>Making sense of qualitative data</li> <li>Reading: <ul> <li>Lynch. 2013. "Ch 9: Capturing meaning and confronting measurement." in Mosley (ed.) Interview Research in Political Science. Cornell.</li> <li>Van Evera, S. 1997 "Chapter 3" Guide to methods for students of political science. TBC</li> <li>Readings tbc</li> <li>If you are feeling rusty on the quantitative side, you may want to start reading for next week</li> </ul> </li> </ul>  |
| 6 | 10/10/16 | <ul> <li>Descriptive statistics</li> <li>Reading (if you did your summer reading, Chapters 2, 4-6 will be review):</li> <li>MBB, chs. 2, 4, 5, 6 &amp; 14.</li> <li>Wonnacott and Wonnacott chs. 3.1-3.6, 4.1-4.2, and 5.1</li> </ul>  |

| [  |           | Assignments   |
|----|-----------|---|
|    |           | • PS #3 assigned  |
|    |           |   |
|    | 10/13/16  | Assignments   |
|    | 10/10/10  | • PS #2 due at 5pm  |
|    |           |   |
| 7  | 10/17/16  | Probability distributions & bivariate statistics                    |
|    |           |   |
|    |           | Reading (if you did your summer reading, Chapter 7 will be review): |
|    |           | • MBB chs. 7, 8   |
|    |           | • Wonnacott and Wonnacott chs. 5.3                                  |
|    |           |   |
|    |           | Assignments   |
|    |           | • PS #3 due   |
|    |           | • PS #4 assigned  |
|    |           |   |
|    | 10/20/16  | Assignments   |
|    |           | • PS #3 due at 5pm  |
|    |           |   |
| 8  | 10/24/16  | Inference I   |
|    |           |   |
|    |           | Reading:  |
|    |           | • MBB chs. 10, 11   |
|    |           | • Wonnacott and Wonnacott, chs. 7                                   |
|    |           | • Greenland et al. 2016. "Statistical tests, P values, confidence   |
|    |           | intervals, and power: a guide to misinterpretations." European      |
|    |           | Journal of Epidemiology 31(4): 337-350.                             |
|    |           | http://link.springer.com/article/10.1007/s10654-016-0149-           |
|    |           | <u>3/fulltext.html?utm_&amp;&amp;&amp;</u>                          |
| 0  | 10/01/16  |   |
| 9  | 10/31/16  | Inference II  |
|    |           | Deading   |
|    |           | Reading:  |
|    |           | • MBB chs. 12, 13<br>Warmagett and Warmagett also 8 and 0.1.0.4.0.6 |
|    |           | • Wonnacott and Wonnacott, chs. 8 and 9.1-9.4, 9.6                  |
|    | 11/3/16   | Assignment:   |
|    | 11/3/10   | • PS #4 due at 5pm  |
|    |           | • $15\pi + ddc$ at spin   |
| 10 | 11/7/15   | Correlation and causation & analysis of variance                    |
| 10 | 11/ // 13 | Correlation and causation & analysis of variance                    |
|    |           | Reading:  |
|    |           | Wonnacott and Wonnacott, Chs. 10.1, 10.2                            |
|    |           |   |
|    |           | Assignment:   |
|    |           | Study for test  |
|    |           |   |
| 11 | 11/14/16  | Quiz: 9-10:30am   |
|    | 0         | Bivariate linear regression   |
|    |           |   |

| r  |          |  |
|----|----------|--|
|    |          | <ul> <li>Reading: <ul> <li>MBB chs. 17</li> <li>Wonnacott and Wonnacott, chs. 11.1, 11.2, 12.2, 12.3 and 15.1, 15.2.</li> </ul> </li> <li>Assignment: <ul> <li>PS#5 assigned</li> </ul> </li> </ul>  |
| 12 | 11/21/16 | <ul> <li>Regression assumptions &amp; Multivariate regression I</li> <li>Reading: <ul> <li>MBB chs. 18 and 20</li> <li>Allison. 1999. "Ch 1: What is multiple regression?" and "Ch 2: "How do I interpret multiple regression results?" in Multiple Regression: A primer.</li> <li>Wonnacott and Wonnacott, chs. 13.3, 13.5</li> </ul> </li> </ul> |
|    |          | Assignment:<br>• PS #6 assigned  |
| 13 | 11/28/15 | <ul> <li>Multivariate regression II</li> <li>Reading: <ul> <li>Mirer, ch 7.1-7.3</li> <li>Mirer, ch 14.1</li> <li>MBB ch 21 (skimmable, but read carefully: pp. 426-432)</li> <li>Allison. 1999 "Ch3: What can go wrong with multiple regression?" in <i>Multiple Regression: A primer</i>.</li> </ul> </li> </ul>                                 |
|    | 12/1/16  | Assignment:<br>• PS #5 due on December 1, 2016   |
| 14 | 12/5/16  | Wrap up & Mixed methods<br>Reading:<br>• TBD<br>Assignment:<br>• PS #6 due   |
|    | 12/14/16 | Final exam due at 9am  |