## Scope and Methods for Political Science Research or "How I Learned to Stop Worrying and Love Statistics" or "Preparing for Life in a World of Lying Graphs and Fake News" or just GVPT 201 Spring 2019

#### **Contact Information**

Professor Sarah E. Croco (<u>scroco@umd.edu</u>) Lecture: MW LEF 2166 1:00pm LEF 2205 2:00pm Office hours: M 11:45-12:45 Office: 2101 Chincoteague

TAs:

Kee Hyun Park <u>khpark@umd.edu</u> (101, 102, 103) Seungjun Kim: <u>sk278@umd.edu</u> (201, 202, 203) Rithvik Yarlagadda ryarlaga@umd.edu (204, 205, 206)

#### Introduction

This course teaches you how to think scientifically about politics. It will provide an introduction to **research design** and the use of **quantitative methods** in political science. In other words, you will learn how to formulate questions and theories about politics and then test them in a rigorous manner. *A central element to this is statistics*. (This is a good thing!! I promise!) This course will combine teaching the principles of statistics as used in political science with hands-on data analysis—that is, it will involve both theory and practice.

The class has three principal aims. The first is preparation for other political science classes. To this end we will discuss a large number of examples from contemporary political science research done by professors in the Department of Government & Politics at the University of Maryland and other universities. The second, and larger, purpose is preparation for life. In virtually every domain of professional life, the ability to evaluate causal arguments and use statistics to analyze data is helpful for doing a good job. The research methods you learn in this course will help you understand the world (political and otherwise) and become a more informed participant in political debate and discussion. This is increasingly relevant in the fast-paced, social-media-laden world we live in, where accusations of fake news and things going "viral" are rampant. The third is to have fun. No, I'm serious! Statistics **CAN** be fun if you have the right attitude.

The centerpiece of this class will be a survey project. Students will work with the professor (and each other) to design the online survey and distribute it to as many people as possible. We will then analyze it as a class in the second part of the semester. Finally, students will write a series of policy

memos using the survey data. This survey will not only give students "hands on" experience in the art of crafting a survey instrument, but will also allow them to explore public opinion in "real time" on issues of their choosing. The survey will unfold over several phases, which I describe in more detail below.

#### **BS** Lectures

In an effort to further increase your numerical literacy and prepare you for a world that is allegedly teeming with "fake news", I am including four lectures based on material from the following website:

#### http://callingbull.org/

Created by two University of Washington professors (Carl T. Bergstrom and Jevin West), this is an absolutely fantastic resource. Readings for those days (TBA) can be found on this website or ELMS if I decide to add additional ones. I am really excited about this portion to the class!! Please note that, at the request of the authors of the website, the slides for these four lectures will not be available electronically. You can, however, watch their lectures (which will be similar to mine) at the following website.

http://callingbull.org/videos.html

#### The Books:

Philip H. Pollock III. *The Essentials of Political Analysis*. Fifth Edition. Washington, DC: CQ Press (Required).

Philip H. Pollock III. 2010. An R Companion to Political Analysis. Second Edition. Washington, DC: CQ Press (Required).

You can buy the books in the bookstore or online

#### Software:

We will be using R in this class.

The R software is FREE and works with any computer. There are instructions on how to download R and the associated data files/packages for the homeworks in the workbook. I would also highly recommend you download R-Studio. I'll be talking about this in class. You can get the free version (R-Studio Desktop). It's the first option on this page.

#### https://www.rstudio.com/products/rstudio/download/

Your TA and I are not tech support. While we can provide assistance with how to *use* R, we cannot help you figure out why R may have a problem on your machine. We don't anticipate any problems, but if you can't get it to install correctly (or some similar problem), that needs to be directed to R tech support. Or just ask a classmate. Chances are, they've figured it out.

#### **Requirements and Grading:**

Your course grade will be determined by homework assignments, two midterm exams, participation in discussion sections and, most importantly, contributing to the class survey project. Note that the exams are designated as Major Scheduled Grading Events. If you are going to miss lecture on a day with an exam, you are required to email me regarding your absence in advance of the class and to bring documentation to support your excused absence on the day you return. The new absence policy (one sick absence without a health center note) does not apply to days where we have scheduled exams. If you are sick on an exam day, EMAIL YOUR TA AND ME AS SOON AS POSSIBLE. Note the midterms are weighted differently. Note, also, that questions about the syllabus will be part of the homeworks.

The point total for each component is as follows: Homework: 147 pts. (~13%) Subject Pool: 55 pts. (~5%; see last page of syllabus) Midterm 1: 164 pts. (~15%) Midterm 2: 219 pts. (~20%) Section Attendance and Participation: 109 pts. (~10%) Survey: 35% (total)

- Pilot Design: 33 pts. (~3%)
- Pilot Analysis: 33 pts. (~3%)
- Redrafting: 25 pts. ( $\sim 2\%$ )
- Distribution: 25 pts. (~2%)
- Memo Practice 1: 55 pts. (~5%)
- Memo Practice 2: 58 pts. (~5%)
- Final Memo: 164 pts. (~15%)

#### Homework:

The textbook *The Essentials of Political Analysis* is divided into chapters by topic. Lectures roughly follow the topical outline of the book as indicated on the syllabus and students are expected to read **before** coming to lecture. The homework in the course comes out of the companion book, *An R Companion to Political Analysis*. YOU NEED THE BOOK TO DO THE HOMEWORK EVEN THOUGH IT IS SUBMITTED ONLINE. The online "quiz" where you will submit the homework basically just has the blanks for you to enter your answers. It doesn't have the full questions written out. The topics of the workbook assignments correspond to the topics covered in the textbook and lecture but allow for some lag so that students have time to master the material. The due date of each homework assignment from the workbook is noted in the syllabus (all are due on Mondays by 5pm EST). All homework assignments are in the workbook.

Each chapter ends with an assignment. Students must read the appropriate chapter and complete the assignment using the statistical package R. Late homework will be docked 5% points off the top if it is turned in after the assigned time on the day it is due, and 5% for each additional day it is late. After each session students should save their work because the workbook assignments build cumulative skills.

Note that the homework chapters are not equal in length, so they do not all count for the same portion of your grade (ones that take longer/have more questions will count for more). Do not wait until the last minute to complete the homework-the exercises are involved and take time.

NOTE: There are two columns that have due dates listed. You need to look in both the "survey" and "homework" columns in the table below.

#### Midterms:

The midterms will be based on material covered in the books, lectures, and sections. Lectures often do not overlap directly with the readings and many key concepts and cases will be discussed in lectures only. Strictly speaking the midterms are not cumulative (that is, the first midterm emphasizes material covered from the beginning of the class up to the first midterm and the second midterm covers material covered after the first midterm but before the second). However, the nature of the material is cumulative. Therefore, there may be some overlap between the two tests. The second midterm is weighted more. The BS lectures are fair game for the midterm.

## Lecture Attendance: I do not take attendance during lecture. There is no need to tell me you will miss lecture.

#### Class Survey

As noted above, the survey serves as the centerpiece of the course. By working through all the steps required to design a survey instrument, students will gain a detailed understanding of how political scientists approach questions related to public opinion. There are five main parts of the survey: 1. Pilot drafting, 2. Pilot analysis, 3. Redrafting, 4. Distribution 5. Final memos. All parts will discussed in lecture and discussion sections and turned in online by students individually.. The dates of each are noted in the table below.

Part 1: Pilot drafting: During lecture and discussion sections, students will work with me and the TA's to design a battery of questions. Students will workshop these questions with each other and individually submit questions they would like to see on the survey. I will choose the finals set of questions and program the survey. Once this is complete, I will distribute this draft as the "pilot" survey.

Part 2: Pilot analysis: After the pilot survey has been in the field for about a week, I will release the data to the students. Students will have to complete a very basic analysis of the pilot data.

Part 3: In addition to the respondents' answers to the questions, the pilot data will also include their feedback on the instrument itself. Did they find any questions confusing? Offensive? Needlessly complicated? Etc. Based on this feedback, students will determine if any questions need to be rewritten or dropped in favor of new ones.

Part 4: Distribution: Once the final question wording has been determined, *students* will be responsible for distributing the survey to as wide a range of people as possible via social networking sites, such as Facebook and Twitter, and other means of communication. You can also post it on websites like Reddit. Students will have to provide proof of distribution. The survey will be in the field for approximately two weeks. Students are expected to promote and distribute the survey during this time.

Part 5: The final survey write up will be three memos (two "practice" and one final one) on the data gathered via the class survey. We will provide more detailed guidelines closer to the due dates. The memos are not weighted equally; the last one is weighted most heavily. Grades will be based on consistency of the analytical argument, demonstration of cumulative mastery of the material from the course, and clarity of writing.

**RTFS** means "Read The Fantastic Syllabus". I will reply with this acronym in an email if you ask me a question that was answered in the syllabus.

#### Grade Challenges

Any challenges to an exam grade must be submitted *in writing no sooner* than one week after the exams have been handed back. All challenges must be submitted to the section TA *first*.

#### Section Attendance and Participation

Students are expected to have completed all of the assigned readings and homework for each section and be prepared to discuss them. Teaching assistants take attendance in section and section grades will be based on a demonstrated ability to discuss topics covered in lectures and section.

#### Canvas (ELMS):

Important communication regarding the class is conducted via Canvas. This includes posting of the syllabus, announcements, and grades. Students are required to be proficient users of Canvas and to ensure that their emails registered with Canvas are up to date and checked regularly.

**DO NOT USE CANVAS TO EMAIL ME**. I won't respond after the first week of class. Use my email provided above. I am for real about this. In fact, I'm gonna go with some crazy big font right now to make my point.

# DO NOT EMAIL ME THROUGH CANVAS. Use regular email like you do for contacting literally every other person you know. It's scroco@umd.edu

#### **Religious Observance**

In accordance with the University's policy on the observance of religious holidays, it is the student's responsibility to inform their section TA of any absences due to these holidays well in advance and **in writing** within the first two weeks of the semester. <u>I am serious about the "in writing" part</u>.

#### Students with disabilities

We will make every effort to accommodate students who are registered with the Disability Support Services (DSS) Office. We are not able to accommodate students who are not registered with DSS or who do not provide us with documentation or have not had that documentation reviewed by DSS before the third week of class.

#### Absence due to illness

As per University policy students may submit a self-signed note for a medically necessitated absence from a single section during the semester (you DO NOT need to submit one for lecture). Such documentation is sufficient unless it coincides with a Major Scheduled Grading Event. For a definition of such events see above Requirements section. Any student missing more than one section or a Major Scheduled Grading Event is required to provide documentation from the Health Center or from an outside health care provider that verifies the dates of treatment and time frame during which the student was unable to meet academic responsibilities.

#### Code of Conduct

It is assumed that all students are familiar with and adhere to the code of academic integrity. See <u>http://www.studenthonorcouncil.umd.edu/index.html</u>

#### Extra Credit and Incompletes

Graded assignments in the class provide students with ample opportunity to demonstrate mastery of the materials. Therefore, **no extra credit assignments** will be assigned in the class. Do not ask if you can make up your own assignment for extra credit. *The answer is no.* The assigned material is also appropriate in scope for completion within a single semester. Therefore, no incompletes will be given-*no exceptions unless truly extreme circumstances warrant it.* 

#### **Other Policies**

-Be courteous in the classroom. Classroom courtesy is necessary to ensure that all students have the opportunity to learn without distractions. If you are not interested in learning, do not come to class.

-No talking during lectures or listening to music.

# -NO COMPUTERS (e.g., laptops, tablets, iPads, etc.) MAY BE USED IN LECTURE. (I will let the TA's determine their own polices for section).

Using electronic devises in class not only undercuts your ability to learn, but also distracts others (including me), thus affecting the ability of other students to learn.

I understand that some students prefer to take notes on a computer. This is fine. I also understand that some students have a university-approved reason to use a computer during lecture. This is also fine. Students wishing to use laptops in class must first sign a statement indicating that they will only use their laptops for legitimate course-related reasons such as taking notes, and that they will sit near the front of the class while using their laptop. Failure to comply (such as by surfing the web, checking email, etc.) will result in loss of laptop-using privileges. Using a laptop without having signed the statement will also result in a loss of this privilege. You are free to use hand-written notes, or print outs of my slides, which I will make available before class.

Cellphone use will not be tolerated. Please silence your cellphone and refrain from using it during class—which is distracting to me and to other students.

If I can hear you talking, it means you are too loud and are disturbing the class.

Violation of these policies will negatively affect your course participation grade.

Please be on time for class and stay until the end, unless you have made special arrangements with me. Entering late and leaving early is distracting to the instructor and to other students. If you must enter late or leave early, please take the seat nearest an exit and enter or leave as quietly as possible. Two or more disruptions of class that require me to address you directly in any form will lead to a reduction in your participation grade.

A discussion of current political events will likely take place in both lecture and section. These discussions can often stimulate strong feelings and heated debate. Students are expected to be respectful of the opinions of others, regardless of whether they share similar opinions or beliefs. Debates will be cut short that do not enhance understanding of course concepts. We (myself and the TA's) expect students to offer substantive comments and questions when appropriate. We also expect students to not dominate a conversation, but to allow a free discussion and exchange of ideas.

### Important Note about Class Communication The first avenue of communication for this course is with your designated teaching assistant.

All issues, problems, questions, concerns should first be addressed with him or her, unless the issue is of a sensitive nature. Please provide written documentation or notice of absence to your TA. If issues cannot be resolved or questions cannot be answered by the TA, then contact me. Please allow TA's and/or the professor 24 hours to respond to emails (48 to 72 hours on weekends).

#### Government and Politics Department Subject Pool

Scholarly discovery depends, in large part, on research methods. Exposure to research methods is a valuable learning tool for students trying to understand research in political science. Some of the most exciting and cutting-edge research is being conducted right here at Maryland, so there's no better opportunity to learn about research in political science than by participating in research studies. The Government and Politics department encourages students to gain hands on research experience and knowledge. To support students in gaining this knowledge, our **Scope and Methods for Political Science Research** undergraduate course (GVPT 201) will give participation credit to students who take part in studies conducted by GVPT faculty and graduate students.

Each study will take about 20-30 minutes to complete. If you prefer not to serve as a participant, you may elect to satisfy the requirement by writing a 3-5 page review of a quantitative research article. (If you are under 18 years old, you must have parental assent on file for you to participate in a research study or you may choose to write the paper instead.) However, you must notify the research administrator (William Bishop <u>wbishop@terpmail.umd.edu</u>) before the last day of schedule adjustment for the semester if you wish to register for the research alternative. You will have to either participate in **all of the studies** or write the review paper.

#### Papers cannot be used to make up for a study at the end of the semester.

Students who are under 18 years of age must obtain parental permission to participate in research. If

you are under 18, please contact the research administrator and she will provide you with instructions on how to participate in the research studies.

If you choose to participate in research, you will sign-up for three research studies. Throughout the semester you will be sent three separate emails of studies to participate in. There will be a link in the email in which you will click on to schedule a day and time to take the study. All studies take place in **Chincoteague Hall room 4101**.

Please treat your scheduled research appointments like any professional meetings. If you sign up for an experiment and do not show up at the time you signed up for (and do not cancel properly within 24 hours because of an emergency), you will lose the research credit. We will keep a record of your participation. At the end of each study, we will inform you TA that you participated in the study.

#### **Class Schedule and Readings**

I reserve the right to change the dates of homework/survey components. If a change is made, the due date will always be LATER than stated here.

| Day       | Date   | Торіс            | Homework         | Survey Work                 |
|-----------|--------|------------------|------------------|-----------------------------|
| Monday    | 28-Jan | Intro            |                  |                             |
| Wednesday | 30-Jan | Chapter 1/R      |                  |                             |
| Friday    | 1-Feb  | NO SECTION       |                  |                             |
| Monday    | 4-Feb  | Chapter 1/R      |                  |                             |
| Wednesday | 6-Feb  | Chapter 1/R      |                  | Submit pilot questions      |
| Friday    | 8-Feb  | SECTION          |                  |                             |
| Monday    | 11-Feb | Chapter 2        | Chapter 1 HW due | pilot in field              |
| Wednesday | 13-Feb | Chapter 2        |                  | pilot in field              |
| Friday    | 15-Feb | SECTION          |                  | pilot in field              |
| Monday    | 18-Feb | Chapter 3        | Chapter 2 HW due | pilot in field              |
| Wednesday | 20-Feb | Chapter 3        |                  | pilot in field              |
| Friday    | 22-Feb | SECTION          |                  | pilot in field              |
| Monday    | 25-Feb | BS lecture Intro | Chapter 3 HW due |                             |
| Wednesday | 27-Feb | Chapter 4        |                  |                             |
| Friday    | 1-Mar  | SECTION          |                  | Play with data in section   |
| Monday    | 4-Mar  | Chapter 4        |                  |                             |
| Wednesday | 6-Mar  | Chapter 4        |                  | Pilot analysis due          |
| Friday    | 8-Mar  | SECTION          |                  | Pilot revisions due         |
| Monday    | 11-Mar | Review           | Chapter 4 HW due |                             |
| Wednesday | 13-Mar | EXAM 1           |                  |                             |
| Friday    | 15-Mar | NO SECTION       |                  | Distribution link available |
| Monday    | 18-Mar | SPRING BREAK     |                  |                             |
| Wednesday | 20-Mar | SPRING BREAK     |                  |                             |
| Friday    | 22-Mar | SPRING BREAK     |                  |                             |

| Monday    | 25-Mar | Chapter 5                |  |                          |
|-----------|--------|--------------------------|--|--------------------------|
| Wednesday | 27-Mar | Chapter 5                |  | distribute link deadline |
| Friday    | 29-Mar | SECTION                  |  |                          |
| Monday    | 1-Apr  | BS lecture Spotting BS   |  |                          |
| Wednesday | 3-Apr  | Chapter 5                |  |                          |
| Friday    | 5-Apr  | SECTION                  |  |                          |
| Monday    | 8-Apr  | Chapter 6                | Chapter 5 HW due                             |                          |
| Wednesday | 10-Apr | Chapter 6                |  |                          |
| Friday    | 12-Apr | SECTION                  |  | Look at data in section  |
| Monday    | 15-Apr | Chapter 7                | Chapter 6 HW due                             |                          |
| Wednesday | 17-Apr | Chapter 7                |  | Practice 1 Due           |
| Friday    | 19-Apr | SECTION                  |  |                          |
| Monday    | 22-Apr | BS lecture Correlation   | Chapter 7 HW due                             |                          |
| Wednesday | 24-Apr | Chapter 8                |  |                          |
| Friday    | 26-Apr | SECTION                  |  |                          |
| Monday    | 29-Apr | BS lecture Data Viz      |  |                          |
| Wednesday | 1-May  | Chapter 8                |  | Practice 2 Due           |
| Friday    | 3-May  | SECTION                  |  |                          |
|           |        | BS lecture Big Data/Fake |  |                          |
| Monday    | 6-May  | News                     |  |                          |
| Wednesday | 8-May  | Review                   |  |                          |
|           |        |                          | Chapter 8 due (note, this is a Friday, not a |                          |
| Friday    | 10-May | SECTION                  | Monday)                                      |                          |
| Monday    | 13-May | EXAM 2                   |  |                          |
| Friday    | 17-May |                          |  | Final memo due           |