GVPT 201 Scope and Methods for Political Science Research

Professor: Dr. Jóhanna K Birnir Office: Chincoteague 3117B Office hrs: Mondays 11am-12:50pm, TYD 1102 or by apt through CANVAS Voice: 301-405-7206 e-mail: class communication through CANVAS only

Teaching Assistants:

Jose Cabezas, jcabezas@umd.edu Office hours: Mondays 2-4 TYD 5141 or by appointment Pavel Coronado Castellanos, pcoronad@umd.edu Office hrs: Mondays 3-5pm TYD 5133 or by appointment Peggy McWeeney , memcween@umd.edu Office hrs: Mondays 3-5pm TYD 1135D or by appointment

Class Time and Location:

Dr. Birnir lecture: Mondays and Wednesdays 10-10:50am in LEF 2166 Dr. Birnir lecture: Mondays and Wednesdays 1-1:50pm in ASY 2203 Teaching Assistants: Friday sections.

About the course:

We are inundated with questionable political information about politics every day. This course teaches you how to think scientifically about politics. You will learn to recognize the hallmarks of quality data so that you can efficiently shift through information to distinguish facts from fiction. This course will also provide an introduction to **research design** and the use of **quantitative methods** in political science. You will learn how to state questions and theories (educated guesses at an answer) about politics and then formulate and test the implications of your theories (testable hypotheses) in a rigorous manner. *A central element to this is statistics*. This course will combine teaching the principles of statistics as used in political science with hands-on data collection and 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 and Politics at the University of Maryland and at 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 essential. 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. The third is to have fun. Seriously. **Statistics can be fun.**

The centerpiece of this class will be a survey project. Students will work with the teaching staff (and each other) to design the 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 choose questions from the survey that they have a particular interest in to focus on in their final paper. 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 the syllabus describes in more detail below.

The Books:

Philip H. Pollock III. 2016. The Essentials of Political Analysis. Fifth Edition. Washington D.C. CQ Press. (Required)

Philip H. Pollock III. 2018. An R Companion to Political Analysis. Second Edition. Washington D.C. CQ Press. (Required).

(The two above books can also be bought bundled in the bookstore: isbn 9781506393742)

You cannot use earlier versions as the content has changed and you cannot do the online homework without the correct version.

Statistical software Resources

You will be using the statistical software R in this course. R is FREE and works with any operating system. There are instructions on how to download R and the associated data files/packages for the homeworks in the workbook.

(downloadable at https://www.r-project.org/).

You will be using the interface called R studio (downloadable at https://www.rstudio.com/)

We have several resources to assist you in learning the software.

- We have recorded videos to help you cover the material in each chapter in the R workbook. These videos are available on <u>https://www.youtube.com/channel/UCScykProzjXmbb8_8HasjhQ?view_as=subsc</u> <u>riber</u>
- 2) The professor will be holding office hrs every week with emphasis on R.
- 3) In Friday sections the TA's will cover the R homework due the following Monday.
- 4) We have arranged for free access for the semester to DataCamp course curriculum for the semester (6 months) starting on the start date. We will be sending you an email through CANVAS for access.

However, 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 University tech support.

Requirements and Grading:

Final grades are determined by homework assignments, two midterms, a survey, participation in section and participation in a lab experiment. Note that the exams and the

final survey write-up are designated as Major Scheduled Grading Events. If you are going to miss class exam day or on the day the Final paper is due and would like your absence to be excused, you are required to contact your TA regarding your absence **BEFORE** the end of the schedule adjustment period and bring documentation to support your excused absence on the day you return. Similarly, if you are going to miss class on the day that homework is due you need to make arrangements with your TA **BEFORE** that day. The absence policy (one sick absence without a health center note) does not apply to days where we have scheduled homework, midterms or the final.

Note that if you have to reschedule one of the midterms because of an excused absence the makeup exam will not be the same exam that other students received and may contain elements from any material that has been covered in the class since the original test date.

The weight of each graded component is as follows:

Homework: 15%, Midterm 1: 20%, Midterm 2: 20%, Section Participation: 10% Survey: 30% (total)

- Pilot Design 2%
- Pilot Analysis: 3%
- Pilot Redraft: 3%
- Verification of Survey Distribution 2%
- Survey Analysis Practice 5%
- Final Survey write up: 15%

Subject pool: 5% (see last page of the syllabus)

Homework (15 percent):

- a) The textbook *The Essentials of Political Analysis*, is divided into chapters by statistical 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.
- b) The homework assignments are in the workbook *An* R *Companion to Political Analysis.* 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 in noted in the syllabus.

Each workbook chapter ends with an assignment. To complete the homework students use a dataset provided with the book.

Students must read the appropriate chapter and complete the assignment using the statistical package R. Students are expected to enter their answers in an assignment quiz on CANVAS unless otherwise instructed, by the deadline indicated in the syllabus. Late homework will not be accepted – no

exceptions. 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. Do not wait until the last minute to complete the homework – the exercises are involved and take time. Because of variance in length homework 4 weighs 2 times as much in your grade as each of the other homework.

NOTE THAT SOMETIMES THINGS ARE DUE FOR THE SURVEY AT THE SAME TIME THAT A HOMEWORK IS DUE. You need to look in both the "survey" and "homework" columns in the table below.

Midterms (20% each):

Midterms are based on material covered in the books, lecture and sections. Lectures sometimes do not overlap directly with the readings and many key concepts and cases will be discussed in lectures only. Exams will draw on materials from readings and from materials presented in lectures and section. Strictly speaking the midterms are not cumulative (i.e. 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.

Class Survey (30%)

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 several parts to the survey design and analysis:

- 1) Pilot Design 2%
- 2) Pilot Analysis: 3%
- 3) Pilot Redraft: 3%
- 4) Survey Distribution 2%
- 5) Survey Analysis Practice 5%

6) Final Survey write up (including variables, hypothesis, analysis): 15%

Parts 1-4 will be prepared in lecture and discussion. Students will then complete pertinent assignments to be found on CANVAS. Parts 5-6 are completed by students individually, as per further instructions available on CANVAS. The dates of each are noted in the table below.

Part 1: Pilot drafting: During lecture and discussion sections, students will work with the teaching staff (Professor and TA's) to design a battery of questions. Students will workshop these questions with each other and will read questions designed by other sections to form a complete draft of what they want the survey to look like. 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. In addition to the respondents' answers to the questions, the survey 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

work with the teaching staff and one another, to determine if any questions need to be rewritten or dropped in favor of new ones. Students will also do a preliminary set of analyses on the pilot data (e.g., sample means, etc) to get a sense of how responses are distributed.

Parts 3-4: Revision and distribution: After discussing the results of their preliminary analyses in both lecture and discussion, students will determine what they want the final survey instrument to look like. Once the sections have agreed on the final question wording, *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. The survey will be in the field for approximately two weeks. Students are expected to promote and distribute the survey during this time and are required to hand in to their TAs verification of distribution.

Part 5: Survey analysis practice focuses on practicing data manipulation and analysis of the type required for the final paper. Students will be asked to examine the collected survey data and complete some analysis using data from the survey. The practice is submitted on CANVAS in the same form as the homework.

Part 6: Analysis and final survey write up: The final survey write up will be a 10 page, double spaced, paper analyzing the data gathered via the class survey. Students will be given a continuous variable to explain but may choose any two explanatory variables – one of which should be continuous and the other dichotomous - to explain the variation in their dependent variable. The detailed rubric for the paper is available on CANVAS.

Students will submit their final paper to their TA via CANVAS and will receive an acknowledgement of receipt from their TA. If the student does not receive such receipt within 48 hrs the paper has not been received and the student needs to contact the TA again.

In the weeks prior to submission the teaching staff will be available for students who have questions about the research paper, but we will not review complete drafts. Students are expected to keep the papers within assigned length. Grades will be based on consistency of the analytical argument, demonstration of cumulative mastery of the material from the course, and clarity of writing.

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

Participation (10 percent):

Section: 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.

Subject pool assignment (5 percent):

See section at the end of syllabus.

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.

CANVAS (ELMS) - we are (almost) paperless!!!!!

Important communication regarding the class is conducted via CANVAS. This includes posting of the syllabus, announcements, and grades. Unless instructed otherwise, students will also turn in all individual assignments (homework, various components of the final project, and final project write-up) via CANVAS. Students are required to be proficient users of CANVAS and to ensure that their emails are registered with CANVAS, are up to date and checked regularly.

Additional (optional) materials

In an effort to further increase your numerical literacy and prepare you for a world that is allegedly teeming with "fake news", I include in some of my lectures material from the following sources:

University of Washington professors Carl T. Bergstrom and Jevin West. http://callingbull.org/

University of Chicago professor Steven D Levitt and journalist Stephen J. Dubner. <u>http://freakonomics.com/</u>

Smith, Gary. 2014. Standard deviations: Flawed assumptions, tortured data and other ways to lie with statistics. Overlook, Duckworth: New York, London.

Charles Wheelan. 2013. Naked Statistics. Stripping the dread from the data. WW Norton. New York and London.

Some good examples also come from reputable fact-checkers including The Annenberg Public Policy Center of the University of Pennsylvania: https://www.factcheck.org/

Poynter Institute for Media Studies https://www.politifact.com/

As noted in pertinent lectures I incorporate extensive examples from these sources (and in the case of Bergstrom and West large parts of their lectures) and I encourage you to explore these more fully on your own.

Let me know when you find other great resources.

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, including paperwork for student disability services, and 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 a least 24 hours to respond to emails (48 to 72 hours on weekends).

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. The assigned material is also appropriate in scope for completion within a single semester. Therefore, **no incompletes** will be given – *no exceptions*.

For University policies including:

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Attendance, Absences, or Missed Assignments: Read this prior to
Schedule Adjustment date.
Academic integrity
Accessibility
Code of conduct
Grade complaints
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See: http://www.ugst.umd.edu/courserelatedpolicies.html

Things I (unfortunately) must say

- 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 and contributing constructively, do not come to class.

- Please be on time for class and stay until the end, unless you have made special arrangements with me. I will make sure to end class promptly at 10 before the hour so that you have time to get to your next class. 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 labs. Some students may find some of the political events disturbing and political 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.

Schedule of assignments

Date	Day	Lecture	Topic	Homework	Survey
Week 1					
8/27/18	Μ	1	Introductions		

			Textbook: Intro	CANVAS	
8/29/18	W	2	Workbook: Intro	registration	
9/1/18	F		Intro. and installing R		
Week 2					
				Install R	
			Labor Day – NO	and R-	
9/3/18	Μ		CLASS	Studio	
			Textbook: Chapter 1		
9/5/18	W	3	Workbook: Chapter 1	Begin Pilot Design	
9/7/18	F		Workbook: Chapter 1		Draft pilot.
Week 3					
				Workbook:	
				Ch1 HW	Work on pilot
9/10/18	M	4	Textbook: Chapter 2	due	
0/40/40		_	Textbook: Chapter 2		Work on pilot
9/12/18	W	5	Workbook: Chapter 2		
0/44/40	Б			Pilot Design DUE 5 pm	
9/14/18	Г		Workbook: Chapter 2		
Week 4				Pilot coded	by Teaching Staff
				Workbook:	Pilot in the field
0/17/19	м	(Tartha ala Chartan 2	Cn2 HW	(internal)
9/1//18	IVI	0	Textbook: Chapter 5	due	
0/10/19	W	7	Workbook: Chapter 3		(internal)
9/19/18	W E	/	WORKDOOK: Chapter 3		(internar)
9/21/18	Г		Workbook: Chapter 3		
Week 5				Begin reading Workbook: Ch 4.	
				The homework is very long.	
				Workbook:	
				Ch 3 HW	
9/24/18	Μ	8	Textbook: Chapter 4	due	Pilot data back
			Textbook: Chapter 4		
9/26/18	W	9	Workbook: Chapter 4		
				Pilot analys	sis DUE at 5pm
9/28/18	F		Workbook: Chapter 4		EST.
Week 6					
				Workbook:	
				Ch 4 HW	Work on pilot
10/1/18	Μ	10	Textbook: Chapter 5	due	
			Textbook: Chapter 5		Work on pilot
10/3/18	W	11	Workbook: Chapter 5		work on phot
				Pilot re-dra	afting DUE 5pm
10/5/18	F		Workbook: Chapter 5		EST.
W 7 1 -				Final survey coded by	
Week 7				Teac	hing Statt
10/8/18	Μ		Review	Workbook:	Survey in field

			Ch 5 HW	
			due	
10/10/18	W	EXAM 1		Survey in field
10/12/18	F		Verification of survey	
		NO SECTION grading	distribution	DUE. 5pm EST.
Week 8				
10/15/18	Μ	Textbook: Chapter 6		Survey in field
		Textbook: Chapter 6		
10/17/18	W	Workbook: Chapter 6		Survey in field
10/19/18	F	Workbook: Chapter 6		Survey in field
Week 9				
			Workbook: Ch 6 HW	
10/22/18	Μ	Textbook: Chapter 7	due	Survey in field
10/51/		Textbook: Chapter 7		
10/24/18	W	Workbook: Chapter 7		Survey in field
10/26/18	F	Workbook: Chapter 7		Survey in field
Week 10				
			Workbook:	
10/20/10	м	BS correlations	Ch / HW	Survey in the
10/29/18	M	Textbook: Chapter 8	due	field
10/31/18	W	Workbook: Chapter 8		field
11/2/18	F	Workbook: Chapter 8		Survey closes
11/2/10	1	workbook. Ghapter o	Survey data	prepared by the
Week 11			Teac	hing Staff.
11/5/18	Μ	Workbook: Chapter 8		
11/7/18	W	Survey analysis		
		Variables and		
11/9/18	F	hypotheses		
Week 12				
			Workbook: Ch 8 HW	
11/12/18	Μ	Textbook: Chapter 9	due	
11/14/18	W	Textbook: Chapter 9 Workbook: Chapter 9		
11/16/18	F	Survey analysis		
Week 13	-			
			Workbook:	
11/19/18	М	Fake news?	Ch 9 HW due	
11/19/18	W	Thankseiving		
11/23/18	F	Thankspiving		
Week 14				

				Workbook:	
			Bad Graphs/Good	Ch 10 HW	
11/26/18	Μ		Graphs	due	
11/28/18	W		Survey analysis		
11/30/18	F		Survey analysis		
Week 15					
				Survey pra	ctice DUE. 5pm
12/3/18	М		Conclusions	EST.	
12/5/18	W		Review		
12/7/18	F		Review		
Week 16					
12/10/18	Μ		EXAM 2		
				Submit by 5 pm. EST. Get	
]	Final survey write-up	confirmation from TA within	
12/14/18	F		due	48hrs.	

Government and Politics Department Subject Pool

Scholar 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, wbishop@terpmail.umd.edu) 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 Heather Hicks 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.