



# Political Science UNIVERSITY OF TORONTO

MISSISSAUGA

## POL242Y5Y: METHODS

SUMMER 2022

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<b>Office Location:</b>	MN 5183 (In-Person)
<b>Office Hours:</b>	Wednesdays and Fridays 11:30am–12.30pm (Eastern Time)
<b>Extra Office Hours:</b>	Upon Request or by Appointment

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<b>Class Location:</b>	CC 2130 (In-Person)
<b>Class Time:</b>	Wednesdays and Fridays 09:00am–11:00am (Eastern Time)
<b>Teaching Assistants</b>	Ayub Khan. E-mail: <a href="mailto:ayub.khan@mail.utoronto.ca">ayub.khan@mail.utoronto.ca</a> Zain Asaf. E-mail: <a href="mailto:zain.asaf@mail.utoronto.ca">zain.asaf@mail.utoronto.ca</a>
<b>Tutorial Location:</b>	CC 2130 (In-Person)
<b>Tutorial Time:</b>	Wednesdays and Fridays 11:00am–12:00pm (PRA0101) 12:00pm–01:00pm (PRA0102)

## 1 Course Description and Objectives

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This course offers an introduction to political science research methods. The course will cover basic approaches to political science, the choices that researchers need to make when designing their research and basic methods of analyses for both qualitative and quantitative data. It will cover a wider range of topics including validity and reliability, levels of measurement, questionnaire design, experiments, elite interviews, participant observation, policy evaluation and multivariate regression analysis. By the end of the semester, students are expected to have a better acquaintance with quantitative and qualitative data and methods that are employed in political science and policy research. Students are also expected to be able to comprehend and critique the techniques employed by others. The course *does not assume any prior knowledge of statistics* and will make every effort to address concepts both quantitatively and theoretically. Furthermore, the course will employ most important quantitative concepts through hands-on application using R/RStudio. The objectives of this course are not only to produce informed consumers of quantitative and qualitative research but to provide the required skills for students to conduct their own empirical research independently with minimum guidance.

## 2 Required Textbooks

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You will read the following two books in their entirety. You are expected to complete the assigned chapters from these books before they are covered in the lectures. The books are available in the [UTM Bookstore](#). You may want to order these books in advance so that you can get them before the class starts. Other required articles will be posted on Quercus although you can download them directly following the link provided.

- Paul M. Kellstedt and Guy D. Whitten. [The Fundamentals of Political Science Research](#). Third Edition, Cambridge University Press, 2018.
- Philip H. Pollock III and Barry C. Edwards. [An R Companion to Political Analysis](#). 2nd Edition, CQ Press, 2017.

## 3 Recommended Textbooks

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The following books are recommended textbooks on methods and you may find them useful as well. You may collect them as well if you can!

- Brian Fogarty. [Quantitative Social Science Data with R: An Introduction](#). SAGE Publications Ltd, 2018.
- Jeffrey Wooldridge. [Introductory Econometrics: A Modern Approach](#). Seventh Edition, New York: South-Western, 2020.
- Mark R. Sirkin. [Statistics for the Social Science](#). 3rd edition. Sage Publications, Inc. 2006.
- Hadley Wickham, and Garrett Grolemund. [R for Data Science: Import, Tidy, Transform, Visualize, and Model Data](#). O'Reilly Media, Inc, 2016.
- David M Diez., Christopher D. Barr, and Mine Çetinkaya-Rundel. [Open- Intro Statistics..](#) 4th Edition, 2019. You can download this book for free by clicking the link [here](#).
- Kosuke Imai. [Quantitative Social Science: An Introduction](#). Princeton University Press, 2018.
- John Fox and Sanford Weisberg. [An R Companion to Applied Regression](#). 3rd Edition, Sage Publication, 2019.

## 4 Required Software for Computing

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You will be required to use **R** that is widely used in political science and policy analysis. R is a free, open source language and available to download for different operating systems (Windows, Mac, Linux, Ubuntu). If you are a Windows user, you can download R from [here](#). You can download R from [here](#) if you are a Mac user. You can also remotely get an access to R hosted on the UTM's web-based (Citrix) learning platform by simply following the steps mentioned [here](#). Next, after installing R in your machine, you can install **RStudio** which is a unified expanded environment for R. RStudio can be downloaded according to your operating systems for free from [here](#) as well. Combining R with RStudio is an easy way to work with R language and allows you to execute your codes straightforwardly for statistical computing and visualization. **Please note that to be successful in this course, you must have access to R/RStudio.**

There are plenty of resources on the internet for learning R. You can start off practicing INTRODUCTION TO R tutorials for free from [DataCamp](#) and [PLURALSIGHT](#). You may be interested in trying this [Getting Started With R](#) site as well. Your textbook, [An R Companion to Political Analysis](#), also has step-by-step instructions for statistical analysis using R.

Please note that you do not need to rush through all these resources at a time. We will learn R slowly but steadily (so no rush!). This course will equip you with the skills that you need to get started with the language for statistical computing.

## 5 Learning Platform: Quercus

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The course related materials will primarily be posted on Quercus (<https://portal.utoronto.ca>). Please check the portal regularly for assignments, readings, lecture slides, and important announcement updates. You can ask course related questions on **Discussion Board** of Quercus and we will answer your questions within 1 working day. *Please note that it is your responsibility to gain access to Quercus as all course updates will be posted there.*

## 6 Class Structure and Attendance

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The class structure aims to create a learning experience that is mutually beneficial for every student. All students must take an initiative to broaden their understanding of the lecture materials. Homework assignments, and exams have been designed to help students gaining deeper knowledge and understanding of the course. Students are welcomed and urged to ask questions and discuss course materials during in-person lecture hours and office hours. Peer-to-peer discussions outside of lecture hours and on the discussion board in Quercus are highly encouraged. You are encouraged to form a small study group and regularly brainstorm with each other regarding important concepts taught in the class. Attendance in both lecture and tutorial labs is mandatory. Although you can miss only one lecture and lab without penalty, I urge all of you to attend all the classes and labs and keep up with the readings since the information in this class is highly cumulative.

## 7 Lecture Slides

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A summary of the lecture slides will be uploaded on Quercus after each lecture to allow you to review the lecture materials. Please be advised that some lecture slides may vary from the ones during the lecture and you will be notified of such during the lecture.

## 8 Grading and Evaluation

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- **Grades and Assessment:** You may refer to the following table to understand the weights for each assessment area.

Assessment	% of the Total Grade
Participation	10 %
Homework assignment 1 (due on May 27)	5 %
Homework assignment 2 (due on June 10)	5 %
Homework assignment 3 (due on July 29)	5 %
Test 1 (in-person, June 17)	20 %
Research Proposal (due on July 22)	10 %
Test 2 (in-person, August 12)	20 %
Empirical Research Paper (due on August 15)	25 %

- **Participation, 10%:** All students are required to be present in-person and prepared for every class session. Active participation during lectures and tutorials is essential. Your participation marks will be evaluated based on your attendance and the quality and frequency of your questions, comments and observations in lectures and tutorials. You can miss one lecture and tutorial, if circumstance arises, without penalty.

- **Homework assignments, 15% (3 equally weighted:)** You are required to submit 3 homework assignments. Each homework assignment weighs 5% of the total grade. The first homework assignment will be a theoretical homework and the two other assignments will be on data analysis where you will apply the concepts learnt in lecture and tutorial using *R* software. You will submit your homework assignments electronically on Quercus. Details will be provided in class.

It is your responsibility to inform your TA of any absence, so as to make alternate arrangements for homework submission and participation marks. Note that official documentation for your absence is required to allow you to gain homework and participation marks.

- **Tests, 40% (2 equally weighted:)** The tests will focus on terms, concepts, theories, methods and interpretation of descriptive and inferential statistics discussed in lecture, lab and readings. There will be two tests, each with 20% of the total grade. For each test, you will answer 10 multiple choice questions, 2 short questions and 1 broad question within 2 hours. Your answer for each short question needs to be within one paragraph and for broad question within 500 words. From the time you start the exam, you would have exactly 2 hours. You will write each test **in-person** and submit your exams to your instructor directly. Details will be provided in class.

*University policy regarding makeup tests are as follows:*

Students who miss a term test for reasons entirely beyond their control may, within 3 days of the missed test, submit to the instructor a written request for special consideration explaining the reason for missing the test, and attaching appropriate documentation, such as a medical certificate.

If a written request with documentation cannot be submitted within 3 days, the instructor may consider a request to extend the time limit.

... no student is automatically entitled to a second makeup test.

Note: If a student is granted to write the make-up test and misses it, the student will receive a zero.

- **Research Proposal (RP), 10%:** You will write an empirical RP. You will concisely ask a research question, review existing literature, and formulate a theoretically informed testable hypothesis. You will submit your proposal electronically on Quercus. Details will be provided in class.
- **Empirical Research Paper (ERP), 25%:** In light with your proposed research, you will write an empirical research paper and test the hypothesis using any of the datasets available in Pollock and Edwards's book. You will run a multiple regression analysis of a dependent variable of your choice with *R* software. You will submit your paper electronically on Quercus. Details will be provided in class.

**Missed Term Work:** Late essays will be subject to a late penalty of **5 percentage point per day (including weekends)** of the total marks for the assignment. Essays submitted five calendar days beyond the due date will be assigned a grade of zero. Essays handed in AFTER the work has been returned to the class cannot be marked for credit. Accommodations due to late registration into the course will NOT be approved.

**Extensions on the Essay Deadlines:** Current University of Toronto policy on essay extensions is as follows (<https://q.utoronto.ca>):

#### **Attention Students: Absence Declaration**

The University is temporarily suspending the need for a doctor's note or medical certificate for any absence from academic participation. Please use the Absence Declaration tool on ACORN (<https://www.acorn.utoronto.ca>) to formally declare an absence from academic

participation in the University. The tool is to be used if you require consideration for missed academic work based on the procedures specific to your faculty or campus. *In addition to this declaration, you are responsible for contacting your instructors to request the academic consideration you are seeking.*

Record each day of your absence as soon as it begins, up until the day before you return to classes or other academic activities. The University will use this information to provide academic considerations and to monitor overall absences.

Please note, under this policy you cannot self-declare yourself too sick to work on an essay. ACORN self-declaration does *not* automatically entitle a student to any extension. The Academic Calendar makes clear that every department may require additional documentation (see the *2019-20 Academic Calendar*, at section 12.7, pp. 33-34). The documentation required in this course is set out here.

**To repeat:** ACORN self-declarations do not excuse you from late penalties on the essay assignment. Extensions will be granted for the essays only in cases of documented Absence Declarations, or for emergencies over which the student has no control.

To get an extension you must follow the procedure below:

If you need an extension you must ask me (not the TA) for it as soon as possible.

Feel free to contact me to request an extension. All requests must be formally submitted in writing (by e-mail). An extension is formally granted by me in writing, with the time-period indicated. Extensions are for fixed time periods. There is no such thing as an open-ended extension.

You cannot get an approved extension after an essay is due and you have already missed the due date. The purpose of the extension policy is to assist students facing an imminent deadline. Once an essay deadline has passed, the rationale for an extension expires.

If your extension runs out and you still have not submitted your essay, your extension has expired. Your late penalty will resume on the day after your extension expired and will continue to accumulate until the date you do submit your essay.

This policy applies to all students taking this course.

- **Group Work and Collaboration:** Group work and collaboration are strongly encouraged for some assignments and it will be notified during class. Students may work together and complement each others strengths and weaknesses; however, making sure that at the end of the exercise each one benefits and learns from the other. The tests will be closed book and students will be assessed individually, so it is essential that all students know important concepts taught thoroughly.

## 9 Plagiarism Detection Tool

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Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (<https://uoft.me/pdt-faq>).

In this course your essay(s) will all be submitted through the plagiarism detection tool inside the Quercus site for this course. If a student does not wish to participate in the University's plagiarism detection tool, the student **MUST** advise me immediately via e-mail. Ideally, students should do so in the first two weeks of class. You will be required to agree to alternate arrangements for vetting your work, as well as to an alternate method for submitting your essay(s). Such arrangements could include some or all of the following: submission of your drafts, rough work and notes; submission of photocopies of the sources you used; submission of the URLs of all sources you used in your research.

## 10 Teaching Assistant and Tutorials

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Students will have a TA for the course who will conduct tutorials. Please see the tutorials schedule below:

1. 25th May from 11am to 12pm (PRA0101) and 12pm to 1pm (PRA0102) EST (Zain)
2. 10th June from 11am to 12pm (PRA0101) and 12pm to 1pm (PRA0102) EST (Zain)
3. 15th June from 11am to 12pm (PRA0101) and 12pm to 1pm (PRA0102) EST (Zain)
4. 17th June from 11am to 12pm (PRA0101) and 12pm to 1pm (PRA0102) EST (Zain)
5. 6th July from 11am to 12pm (PRA0101) and 12pm to 1pm (PRA0102) EST (Zain)
6. 8th July from 11am to 12pm (PRA0101) and 12pm to 1pm (PRA0102) (Ayub)
7. 13th July from 11am to 12pm (PRA0101) and 12pm to 1pm (PRA0102) EST (Ayub)
8. 15th July from 11am to 12pm (PRA0101) and 12pm to 1pm (PRA0102) (Ayub)
9. 20th July from 11am to 12pm (PRA0101) and 12pm to 1pm (PRA0102) EST (Ayub)
10. 22nd July from 11am to 12pm (PRA0101) and 12pm to 1pm (PRA0102) EST (Ayub)

Please note that the TA will be responsible for grading assignments. Queries regarding homework assignments, tests, research papers or other course related issues could be directed towards both the course instructor and the TA.

## 11 Grade Appeals

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Students not satisfied with their grades may approach the concerned TA and have a discussion. Following that, if the student is still unsatisfied then the student may approach the instructor with proper documentation to support his/her claim. The assignment/essay/paper will be re-graded by someone other than the original grader and that grade will be the final grade regardless of whether the re-graded mark is lower or higher than the original mark.

## 12 Outside Class Communication Policy

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- **Office Hours:** Students are encouraged to visit the instructor in-person during the mentioned office hours for clarification of any course material. Students may also get in touch with the TA during TA office hours which will be announced on Quercus.
- **Discussion Board** Students are encouraged to post questions about class materials on the discussion board, so that answers can be given quickly and easily by your peers, TA and instructor. Consequently, other students will also benefit, as they may have same queries.
- **Email Communications:** Email should be used when addressing a personal query such as requesting for submission extension with a valid reason. As mentioned, other class related questions can be posted on the discussion board. Students should allow for one working day for emails to be answered. If you do not hear from us within one working day, please feel free to send a reminder. All emails subject should start with **POL242:** for this course related communication.

## 13 Academic Integrity: A Warning about Plagiarism

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Academic integrity and honesty is of the utmost importance in your learning journey at the University of Toronto. Students are expected to maintain the highest level of academic ethics during their studies to ensure that their academic achievements are genuine. Students are to familiarize themselves with [the Code of Behaviour on Academic Matters](#). Some academic misconducts are: cheating on exams/tests, plagiarism, submitting fraudulent documentation and false credentials, and fabricating data among others. For particular examples and scenarios you may go through [Academic Misconduct](#) at the Office of Student Academic Integrity's website. Further information on academic integrity and plagiarism can be found [here](#).

## 14 Accessibility

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Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Resource Centre as soon as possible.

AccessAbility staff (located in Rm 2047, South Building) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. Please call 905-569-4699 or email [access.utm@utoronto.ca](mailto:access.utm@utoronto.ca). The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

## 15 Respect for Equity, Human Rights and Diversity

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The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

## 16 Notice of Collection

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The University of Toronto respects your privacy. The information on medical certificates is collected pursuant to section 2(14) of the University of Toronto Act, 1971. It is collected for the purpose of administering accommodations for academic purposes based on medical grounds. The department will maintain a record of all medical certificates received. At all times it will be protected in accordance with the Freedom of Information and Protection of Privacy Act.

If you have questions, please refer to [www.utoronto.ca/privacy](http://www.utoronto.ca/privacy) or contact the University's Freedom of Information and Protection of Privacy Office at 416-946-5835. Address: Room 201, McMurrich Bldg., 12 Queen's Park Crescent, Toronto, ON, M5S 1A1.

## 17 Syllabus Change Policy

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Any changes in the syllabus will be notified in advance during lecture hours, as well as announced and updated on Quercus. You are requested to keep abreast of changes in the syllabus, and important dates.

## 18 Course Outline and Exams at a glance

Please refer to the table below for an overview of class schedule and readings for each week. Note that the schedule may be adjusted during the semester according to the actual pace with which the class progresses and assignment deadlines will also be modified. Any and all changes will be announced during the lecture and also on Quercus.

Week	Date	Topic	Assignment and Exam
1	11 <sup>th</sup> May, 13 <sup>th</sup> May	Introduction: Motivation and Overview; Levels of Measurement	
2	18 <sup>th</sup> May, 20 <sup>th</sup> May	Research Design: Theory, Variables, Measures and Hypotheses	HW 1, assigned on May 20
3	25 <sup>th</sup> May, 27 <sup>th</sup> May	Descriptive Statistics: Measures of Central Tendency; Measures of Dispersion, Skewness, Frequency Distributions	HW 1 due on May 27
4	1 <sup>st</sup> June, 3 <sup>rd</sup> June	Data Gathering Methods: Questionnaire design, Experiments, Elite interviews, Participant observation	HW 2, assigned on June 3
5	8 <sup>th</sup> June, 10 <sup>th</sup> June	Categorical Variable Analysis: Crosstabs, Chi-square, Categorical Variable Analysis: Controlling for a third variable	HW 2 due on June 10
6	15 <sup>th</sup> June, 17 <sup>th</sup> June	Probability I: The Standard Normal (Z) Distribution, Binomial Probability Distribution	Test 1 (in-person, June 17),
	20 <sup>nd</sup> June, 4 <sup>th</sup> July	Study break	
7	6 <sup>th</sup> July, 8 <sup>th</sup> July	Probability II: Sampling and Inference; The t-distribution; Statistical Significance and Confidence Intervals	
8	13 <sup>th</sup> July, 15 <sup>th</sup> July	Regression: Correlation, Bivariate Regression; Goodness of fit & OLS Assumptions	HW 3, assigned on July 15
9	20 <sup>th</sup> July, 22 <sup>nd</sup> July	Multivariate Regression: Dummy Regression & Influential Observations	RP is due on July 22
10	27 <sup>th</sup> July, 29 <sup>th</sup> July	Regression Diagnostics: Multicollinearity, Heteroskedasticity, & Correlated Disturbances	HW 3 is due on July 29
11	3 <sup>rd</sup> August, 5 <sup>th</sup> August	Model Specification, Interactions, & Polynomial Regression.	
12	10 <sup>th</sup> August, 12 <sup>th</sup> August	Research Ethics, Overview and Review	Test 2 (in-person, August 12)
			ERP is due on 15 <sup>th</sup> August



## 19 Detailed Course Outline and Required Readings

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### PART 1: FUNDAMENTALS OF CAUSAL EXPLANATIONS

#### Week 1 - (11<sup>th</sup> May) - Motivation and Overview: Studying Politics Scientifically

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- **Required reading:** Kellstedt and Whitten, Chapter 1
- **Required task:** Install R and Rstudio. Install ‘*poliscidata*’ package from Pollock and Edward’s R companion (hereafter, R Companion), Introduction: Getting Acquainted with R

#### Week 1 - (13<sup>th</sup> May) - Theories, Concepts, Variables and Level of Measurements

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- **Topics to be covered:**
  - Theory and concepts
  - Hypotheses and variables
  - Variables: causal/independent variable, response/dependent variable and control variable(s)
  - Levels of measurement: nominal, ordinal and interval
  - Qualities of a good hypothesis
- **Required reading:** Kellstedt and Whitten, Chapter 5 and 6
- **R Companion:** Chapter 2 again!

#### Week 2 - (18<sup>th</sup> May) - Research Design and Hypothesis

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- **Required reading:** Kellstedt and Whitten, Chapter 2 and 3
- **R Companion:** Chapter 2

### PART 2: APPROACHES TO CAUSAL EXPLANATIONS

#### Week 2 - (20<sup>th</sup> May) - The Fundamentals of Research Design for an Experimental Study

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- **Required reading:** Kellstedt and Whitten, Chapter 4 (pp. 77-88)
- **R Companion:** Chapter 2 again!
- Loewen, P. J., Koop, R., Settle, J., & Fowler, J. H. (2014). A natural experiment in proposal power and electoral success. *American Journal of Political Science*, 58(1), 189-196.
- Posner, D. N. (2004). The political salience of cultural difference: Why Chewas and Tumbukas are allies in Zambia and adversaries in Malawi. *American Political Science Review*, 98(4), 529-545.
- HW 1 will be assigned on this date.

### Week 3 - (25<sup>th</sup> May) - The Fundamentals of Research Design for an Observational Study

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- **Required reading:** Kellstedt and Whitten, Chapter 4 (pp. 92-100)
- **R Companion:** Get familiar with Chapter 3 (lightly)
- Kayser, M. A., & Peress, M. (2012). Benchmarking across borders: electoral accountability and the necessity of comparison. *American Political Science Review*, 106(3), 661-684.
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### Week 3 - (27<sup>th</sup> May) - The Fundamentals of Research Design for an a Case Study: Small *N* Versus Large *N*

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- Gerring, J. (2004). What is a case study and what is it good for?. *American political science review*, 98(2), 341-354.
- Geddes, B. (1990). How the cases you choose affect the answers you get: Selection bias in comparative politics. *Political analysis*, 2, 131-150.
- HW 1 is due on this date.

### Week 4 - (1<sup>st</sup> June) - The Fundamentals of Research Design for a Textual Study

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- Laver, Michael, Kenneth Benoit, and John Garry. 2003. "Extracting Policy Positions from Political Texts Using Words as Data." *American Political Science Review* 97(2): 311-331.
- Grimmer, J., & Stewart, B. M. (2013). Text as data: The promise and pitfalls of automatic content analysis methods for political texts. *Political analysis*, 21(3), 267-297.

### Week 4 - (3<sup>rd</sup> June) - Data Collection Methods: Surveys, Experiments, Interviews and More

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- **R Companion:** Get familiar with Chapter 2 and 3 again!
- King, G., Murray, C. J., Salomon, J. A., & Tandon, A. (2004). Enhancing the validity and cross-cultural comparability of measurement in survey research. *American political science review*, 98(1), 191-207.
- Hermanowicz, J. C. (2002). The great interview: 25 strategies for studying people in bed. *Qualitative sociology*, 25(4), 479-499.
- HW 2 will be assigned on this date.

### Week 5 - (8<sup>th</sup> June) - Sampling: Random (Representative) Versus Selective (bias) sampling

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- King, G., Keohane, R. O., & Verba, S. (1995). The importance of research design in political science. *American Political Science Review*, 89(2), 475-481.

- Verba, S. (1996). The citizen as respondent: sample surveys and American democracy presidential address, American Political Science Association, 1995. American Political Science Review, 90(1), 1-7. (Carefully read pages 1 to 4)

### PART 3: DESCRIPTIVE STATISTICS

#### Week 5 - (10<sup>th</sup> June) - Descriptive Statistics: Visualization and Interpretation

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- **Required reading:** Kellstedt and Whitten, Chapter 6.
- **R Companion:** Chapter 2 and 3 again!
- HW 2 is due on this date.

#### Week 6 - (15<sup>th</sup> June) - Controlled Comparisons and Cross-tabulation

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- **Required reading:** Pollock and Edwards, Chapter 4 and 5
- **R Companion:** Chapter 4 and 5

#### Week 6 - (17<sup>th</sup> June) - Probability 1: Statistical Inference

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- **Required reading:** Kellstedt and Whitten, Chapter 7
- **R Companion:** Chapter 6
- Test 1, See **Tests** section for details.

#### 20<sup>th</sup> June to 4<sup>th</sup> July: Study Break (No classes!)

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#### Week 7 - (6<sup>th</sup> July) - Probability 2: The t-distribution, Confidence Intervals and Sample Proportions

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- **Required reading:** Kellstedt and Whitten, Chapter 8
- **R Companion:** Chapter 6 again!

### PART 4: INFERENCE STATISTICS

#### Week 7 - (8<sup>th</sup> July) - Bivariate (Two-Variable) Regression Analysis I

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- **Required reading:** Kellstedt and Whitten, Chapter 9
- **R Companion:** Chapter 8

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**Week 8 - (13<sup>th</sup> July) - Bivariate (Two-Variable) Regression Analysis II**

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- **Required reading:** Kellstedt and Whitten, Chapter 9 again!
- **R Companion:** Chapter 8 again!

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**Week 8 - (15<sup>th</sup> July) - Multivariate Regression Analysis I**

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- **Required reading:** Kellstedt and Whitten, Chapter 10
- **R Companion:** Chapter 9
- HW 3 will be assigned on this date.

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**Week 9 - (20<sup>th</sup> July) Multivariate Regression Analysis II**

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- **Required reading:** Kellstedt and Whitten, Chapter 10 again!
- **R Companion:** Chapter 9 again!

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**Week 9 - (22<sup>nd</sup> July) - Multivariate Regression Analysis III: Model Specification and Practical Problems**

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- **Required reading:** Kellstedt and Whitten, Chapter 9 and 10 again!
- **R Companion:** Chapter 8 and 9 again!
- Research proposal (RP) is due on this date.

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**Week 10 - (27<sup>th</sup> July) - Interactions**

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- **Required reading:** Kellstedt and Whitten, Chapter 11
- **R Companion:** Chapter 9 again!

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**Week 10 - (29<sup>th</sup> July) - Interactions with Dummy Variables**

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- **Required reading:** Kellstedt and Whitten, Chapter 11 again!
- **R Companion:** Chapter 9 again!
- HW 3 is due on this date.

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**Week 11 - (3<sup>rd</sup> August) - Regression Diagnostics: Multi-collinearity, Heteroskedasticity, & Correlated Disturbances**

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- **Required reading:** Kellstedt and Whitten, Chapter 11 again!
- **R Companion:** Chapter 8 and 9 again!

## Week 11 - (5<sup>th</sup> August) - Binary Logistic Regression: Concepts & Terminology

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- **Required reading:** Kellstedt and Whitten, Chapter 12
- **R Companion:** Chapter 10

## Week 12 - (10<sup>th</sup> August) - Research Ethics

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- Fujii, L. A. (2012). Research ethics 101: Dilemmas and responsibilities. *PS: Political Science & Politics*, 45(4), 717-723.
- Wood, E. J. (2006). The ethical challenges of field research in conflict zones. *Qualitative sociology*, 29(3), 373-386.

## Week 12 - (12<sup>th</sup> August) - Overview and Review

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- **R Companion:** Chapter 11
- Test 2 will be held in-person on this date, See **Tests** section for details.
- **Empirical Research Paper (ERP) is due on 15<sup>th</sup> August**

### A WARNING ABOUT PLAGIARISM

#### Plagiarism is an academic offence with a severe penalty.

It is essential that you understand what plagiarism is and that you do not commit it. In essence, it is the theft of the thoughts or words of others, without giving proper credit. You must put others' words in quotation marks and cite your source(s). You must give citations when using others' ideas, even if those ideas are paraphrased in your own words. Plagiarism is unacceptable in a university. What the university calls "plagiarism", non-university institutions might call "fraud".

The University of Toronto provides a process that faculty members must initiate when they suspect a case of plagiarism. In the Department of Political Science, suspected evidence of plagiarism must be reported to the Chair; in most cases, the Chair passes the case on to the Dean.

A faculty member may not mark an assignment or assess a penalty if he or she finds evidence of plagiarism – the matter must be reported. Penalties are assigned by the Chair, by the Dean or by the University of Toronto Tribunal.

The following are some examples of plagiarism:

1. Submitting as your own an assignment written by someone else.
2. Quoting an author without indicating the source of the words.
3. Using words, sentences, or paragraphs written by someone else and failing to place quotation marks around the material and reference the source and author. **Using either quotation marks or reference alone is not sufficient. Both must be used!**
4. Adapting an author's ideas or theme and using it as your own without referencing the original source.
5. Seeking assistance from a friend or family member in respect to work you claim as your own.

Ignorance of the rules against plagiarism is not a defense; students are presumed to know what plagiarism is and how to avoid it.

Students are especially reminded that material taken from the web **must** be quoted and cited in the same manner as if it came from a book or printed article.

If you are not sure whether you have committed plagiarism, it is better to ask a faculty member or teaching assistant than risk discovery and be forced to accept an academic penalty.

Plagiarism is **cheating**. It is considered a **serious offence** against intellectual honesty and intellectual property. Penalties can be severe, ranging from a mark of "0" for the assignment or test in question, **up to and including expulsion from the university**.

#### Some website listed below on avoiding plagiarism:

'How to Use Sources and Avoid Plagiarism' - available at: <http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize> Other Advisory Material available at: <http://www.writing.utoronto.ca/home>

Good Luck!