

CGU School of Social Science, Policy & Evaluation  
CGU Department of Politics and Government  
PP 482: Advanced Quantitative Research Methods  
Tuesdays, 4:00-6:50 PM. ACB 126. Spring, 2019

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Course description

Regression analysis is a universal tool in social science research; it appears in every-day TV news, on the radio, in policy reports and the scientific literature... But, what exactly is a regression? What exactly does it do and how does it do it? What is it good for?

This course is an introduction to social science research through the lenses of regression analysis—in plain English. Statistics is the science of learning from data, and regression is the statistical method to properly quantify the association between two or more events. Accordingly, one key goal of this course is to equip students with sound statistical understanding—one that will help them identify the uses and abuses of statistical reasoning. It will also cultivate rigorous critical judgment for evaluating quantitative studies of real-world political, economic, and social problems. Students will learn about political surveys, social experiments, electoral forecasting, and policy analysis by doing it themselves. This course offers, therefore, a great opportunity to students to finally nail down a critical set of statistical and analytical skills they will continue to apply for the rest of their academic and professional lives.

By the end of this course, students will have a solid understanding of the fundamental concepts of regression analysis and will be able to apply them in their daily lives—analytically and on their own research. Students will also be able to interpret results from statistical analysis, effectively communicate these results to wider audiences, think for themselves in statistical terms, and use key statistical tools for solving real-world problems and answering research questions. This course is designed to improve the analytic skills of students pursuing the advancement of their overall economic, social, and political understanding of how the world works.

Class format, course requirements, and grading

This course involves hands-on data analysis. Our philosophy is learning-by-doing. As the course progresses, each class will be increasingly typically divided into lecture and practice. For that purpose, we will meet for class in a computer lab. Separate data analytic TA sessions will be offered, as well. Students will be evaluated via homework (10% of the course grade), three mini-projects (20%), a midterm (15%) and a final exam (20%), and a maxi-project (35%).

**1. Homework (10%)**

Homework: Students will complete exercises that reaffirm or expand material from class.  
NOTE: For classwork dates and homework due dates see our schedule below.

2. **Mini-projects (20%)**

- Each mini-project consists of a data analytic exercise that will help students solidify basic concepts and learn how to use statistical software.
- For each mini-project, students will write a report of roughly 4 pages. Students can collaborate with other students on these mini-projects, but they will have to submit their own write-up for credit. No write-up should look similar to another one; students should make their own, independent analysis of the problem under study.
- Students will deliver a 5-minute Power Point presentation of their mini-project results, which will be followed by a 5-minute feedback and Q&A section.

NOTE: For due dates and presentation dates see our schedule below.

3. **Midterm exam (15%)**

An open-book exam, in the computer lab on March 12, 2019. This midterm exam will include multiple choice and open-ended questions, both conceptual and methodological. It will also ask the student to run statistical analyses, generate visualizations, and interpret results.

4. **Final exam (20%)**

An open-book exam, in the computer lab, on May 14, 2019. It will follow a format similar to the midterm exam; however, in the most important component of the final exam, students will be presented with a research question and asked to carry out a complete statistical analysis and generate a brief report on their methodological decisions, overall strategy, findings, and interpretation of results.

5. **Maxi-project (35%)**

- The maxi-project is the *most important* evaluation criteria for the course.
- Students will be given a research scenario and they will write a short, journal-style research paper. The maxi-project is due on April 30, 2019.
- Students will write a research paper of roughly 8 pages—excluding abstract, tables, figures, and references. The research paper will be focused on the methods implemented and discussion of results. Students will collaborate with other students on this maxi-project, and they will submit a single coauthored article for credit.
- Student groups will also generate Power Point slides of their research paper and will deliver a full presentation (approximately a 20-minute presentation followed by a 15-minute Q&A section).

**Required texts, course requirements, and assignments**

All reading assignments are available either online, Canvas, or through our library system. Please make sure you are *logged into your library account* when clicking on the hyperlinks below.

Date	Topic	Reading and class activity	Assignment due
Jan 22 Class1	Class introduction.	No assignments are due.  Class	N/A.

	- Demystifying the underlying mathematics of variation	In this class, the professor will provide: <ul style="list-style-type: none"> <li>o An overview of the class and its format.</li> <li>o An overall assessment of students' level of previous statistical training.</li> <li>o An introduction to, and review of, general concepts and ideas in statistical analysis.</li> </ul>	
Jan 29 Class2	- Demystifying the underlying mathematics of variation -Estimators and estimates. -Random variables and probabilities -Variables and units of measurement -Rules of summation -Rules in the algebra of expectations	Assigned readings <ul style="list-style-type: none"> <li>o Gould, Stephen J., 1996. <i>Full house: The spread from excellence from Plato to Darwin.</i> Chapters 3, 4, 5, and 13. [On Canvas.]</li> <li>o Savage, Sam, 2003. "The flaw of averages." <i>Forum.</i></li> <li>o Grimes, William, 2005. "Winnowing the field of America to one representative." <i>The New York Times</i> book review of <i>The Average American: Who is the "average" American?</i></li> <li>o Ehrenberg, A.S.C., 1977. "Rudiments of numeracy." <i>Journal of the Royal Statistical Society.</i></li> <li>o Hofstadter, Douglas R., 1982. "Number numbness, or why innumeracy may be just as dangerous as illiteracy." <i>Scientific American—Mathematical Themes.</i></li> </ul>	- Hwk 1
TBD			TA Session #1
Feb 5 Class3	- Foundations of data analysis. - Standard deviation. - The geometry of the variance and the covariance. - Asymptotic theory and probabilities. - Central Limit Theorem. - Multivariate displays. - Side-by-side displays. - Pattern recognition.	Assigned readings <ul style="list-style-type: none"> <li>o Ioannidis, John P.A., 2005. "Why most published research findings are false." <i>PLoS Medicine.</i></li> <li>o Goodman and Greenland. 2007. "Why most published research findings are false: Problems in the analysis." <i>PLoS Medicine, page 168.</i></li> <li>o Gould, Robert, 2011. "Variability: One statistician's view." <i>UCLA Department of Statistics papers.</i></li> <li>o Gould, Stephen J., 2013. "The median isn't the message." <i>American medical association journal of ethics.</i></li> <li>o Siegfried, Tom, 2010. "Odds are, it's wrong: Science fails to face the shortcomings of statistics." <i>Science news</i></li> <li>o Achen, Christopher H., 1977. "Measuring representation: Perils of the correlation coefficient." <i>AJPS.</i></li> <li>o Anscombe, F. J., 1973. "Graphs in statistical analysis." <i>The American statistician.</i></li> </ul>	- Hwk 2
TBD			TA Session #2
Feb 12 Class4	- The regression model. - Actual = Fit + Residual.	Assigned readings	- Mini-project 1, 5-page report.

	<ul style="list-style-type: none"> <li>- Fits and observed data.</li> <li>- Measurement error.</li> <li>- Ignored factors.</li> <li>- Inherent noise.</li> <li>- Gauss-Markov assumptions.</li> <li>- The geometry of regression and how it maps into the algebra of probabilities.</li> </ul>	<ul style="list-style-type: none"> <li>o Cleveland and McGill, 1984. "<a href="#">The many faces of a scatterplot.</a>" <i>Journal of the American Statistical Association.</i></li> <li>o Drummond and Tom, 2011. "<a href="#">How can we tell if frogs jump further?</a>" <i>British journal of pharmacology.</i></li> <li>o Drummond and Vowler, 2011. "<a href="#">Show the data, don't conceal them.</a>" <i>Statistical perspectives.</i></li> <li>o Tufte, Edward E., 1974. <i>Data analysis for politics and policy.</i> Chapter 1, "Introduction to data analysis." [On Canvas.]</li> <li>o Moore, David S. 2000. <i>The basic practice of statistics.</i> Sections 1.1 and 1.2. [On Canvas.]</li> </ul>	<ul style="list-style-type: none"> <li>- Power Point presentation of mini-project results.</li> </ul>
Feb 19 Class5	<ul style="list-style-type: none"> <li>- Regression analysis.</li> <li>- Interpreting regression coefficients.</li> <li>- Residuals analysis.</li> <li>- Goodness of fit.</li> <li>- The mathematics of OLS.</li> <li>- Hypothesis testing using OLS.</li> </ul>	<p>Assigned readings</p> <ul style="list-style-type: none"> <li>o McCloskey and Ziliak. 1996. "<a href="#">The standard error of regressions.</a>" <i>Journal of economic literature.</i></li> <li>o Sterne and Davey-Smith, 2001. "<a href="#">Sifting the evidence—what's wrong with significance tests?</a>" <i>BMJ</i></li> <li>o Johnson, Douglas H., 1999. "<a href="#">The insignificance of statistical significance.</a>" <i>The journal of wildlife management.</i></li> <li>o Beck, Nathaniel, 2009. "<a href="#">Making regression and related output more helpful to users.</a>" <i>The political methodologist.</i></li> <li>o Gujarati and Porter, 2009. <i>Basic econometrics.</i> Chapters 1 and 2, "The nature of regression analysis" and "Two-variable regression analysis: Some basic ideas." [On Canvas.]</li> </ul>	No homework
Feb 26 Class6	<ul style="list-style-type: none"> <li>- Multiple regression analysis.</li> <li>- Statistical control.</li> <li>- The geometry (and visualization) of statistical control.</li> <li>- Residual analysis from multiple regression.</li> <li>- The statistical specification of the model.</li> </ul>	<p>Assigned readings</p> <ul style="list-style-type: none"> <li>o King, Gary, 1991. "<a href="#">Stochastic variation: A comment on Lewis-Beck and Skalaban's "The R-squared"</a>." <i>Political analysis.</i></li> <li>o Alexopolous, E. C. 2010. "<a href="#">Introduction to multivariate regression analysis.</a>"</li> <li>o Mosteller and Tufte, 1974. <i>Data analysis and regression.</i> Chapter 12, "Regression for fitting." [On Canvas.]</li> <li>o Gujarati and Porter, 2009. <i>Basic econometrics.</i> Sections 7.1 and 7.2. [On Canvas.]</li> </ul>	- Hwk 3
TBD			TA Session #3
Mar 5 Class7	<ul style="list-style-type: none"> <li>- Strategies for statistical control.</li> <li>- Further notes on estimated residuals and residualization.</li> </ul>	<p>Assigned readings</p> <ul style="list-style-type: none"> <li>o Mosteller and Tufte, 1974. <i>Data analysis and regression.</i> Chapter 13, "Woes of regression coefficients." [On Canvas.]</li> </ul>	<ul style="list-style-type: none"> <li>- Mini-project 2, 5-page report</li> <li>- Power Point presentation of mini-project results.</li> </ul>

	<ul style="list-style-type: none"> <li>- Inferential results in OLS theory (using the Gauss-Markov scenario).</li> <li>- Tests of structural change (and research design for structural changes).</li> </ul>	<ul style="list-style-type: none"> <li>o Agresti, Alan, 2018. <i>Statistical methods for the social sciences</i>. Sections 10.2 through 10.5. [On Canvas.]</li> <li>o Ross, Michael, 2006. "<a href="#">Is democracy good for the poor?</a>" <i>AJPS</i>.</li> <li>o Bickel et al., 1975. "<a href="#">Sex bias in graduate admissions: Data from Berkeley.</a>" <i>Science</i></li> <li>o Alford et al., 2005. "<a href="#">Are political orientations genetically transmitted?</a>" <i>APSR</i></li> </ul>	
Mar 12	Midterm exam.	Midterm exam.	Midterm Exam
Mar 19	<b>Spring break. No class.</b>	<b>Spring break. No class.</b>	<b>Spring break. No class.</b>
Mar 26 Class8	<ul style="list-style-type: none"> <li>- Multicollinearity.</li> <li>- Understanding each component of the regression model.</li> <li>- Understanding the underlying principles of statistics.</li> <li>- Case study: A brief look at instrumental variables and the principles behind them.</li> </ul>	<p>Assigned readings</p> <ul style="list-style-type: none"> <li>o King, Gary, 1991. "<a href="#">"Truth" is stranger than prediction, more questionable than causal inference.</a>" <i>AJPS</i>.</li> <li>o King, Gary, 1986. "<a href="#">How not to lie with statistics: Avoiding common mistakes in quantitative political science.</a>" <i>AJPS</i>.</li> <li>o Kim, Daniel, 2017. "<a href="#">Projected impacts of federal tax policy proposals on mortality burden in the United States: A microsimulation analysis.</a>" <i>Preventive medicine</i></li> <li>o Levitt and Dubner, 2005. "<a href="#">Where have all the criminals gone?</a>" <i>Freakonomics</i>.</li> <li>o Ross, Michael, 2008. "<a href="#">Oil, Islam, and women.</a>" <i>APSR</i></li> </ul>	No homework
Apr 2 Class9	<ul style="list-style-type: none"> <li>- Residual analysis.</li> <li>- Gauss-Markov assumptions: revisited.</li> <li>- Research practice with multiple regression.</li> <li>- Non-linear functions.</li> <li>- Simulation.</li> <li>- Robustness checks.</li> <li>- Sensitivity analysis.</li> <li>- Experimental design and causal inference.</li> <li>- Internal and external validity.</li> <li>- Controlled comparison.</li> <li>- Randomization of treatment status.</li> <li>- Experimental data in regression models.</li> </ul>	<p>Assigned readings</p> <ul style="list-style-type: none"> <li>o Pearl, Judea, 2009. "<a href="#">Causal inference in statistics.</a>" <i>Statistics surveys</i>. Read Sections 1 and 2.1, 2.2, and 2.3.</li> <li>o Guha, Amal, 2006. "<a href="#">Where is causality?</a>" <i>Proceedings of the Annual Meeting of the Cognitive Science Society</i>.</li> <li>o Green, Ha, and Bullock, 2010. "<a href="#">Enough already about "black box" experiments: Studying mediation is more difficult than most scholars suppose.</a>" <i>The annals of the American Academy of Political and Social Science</i>.</li> <li>o Sears, David O., 1986. "<a href="#">College sophomores in the laboratory: Influences of a narrow data base on social psychology's view of human nature.</a>" <i>Journal of personality and social psychology</i>.</li> <li>o Jan E. Leighley. 2010. <i>The Oxford Handbook of American Elections and Political Behavior</i>: <ul style="list-style-type: none"> <li>* Fridkin, Kim L. and Patrick J. Kenney. 2010. "Laboratory Experiments in American Political Behavior." [On Canvas.]</li> </ul> </li> </ul>	- Hwk 4

		* Davenport, Tiffany C., Alan S. Gerber, and Donald P. Green. 2010. "Field Experiments and the Study of Political Behavior." [On Canvas.]	
TBD			TA Session #4
Apr 9 Class10	<ul style="list-style-type: none"> <li>- Quasi-experimental designs using regression.</li> <li>- Control by design.</li> <li>- Subgroup regression analyses.</li> <li>- Interactive effects.</li> <li>- Simulation of interactive effects.</li> <li>- pre- and post-treatment designs.</li> <li>- Simulations of difference-in-differences estimates.</li> </ul>	<u>Assigned readings</u> <ul style="list-style-type: none"> <li>o Altman, Douglas G. and Patrick Royson. 2006. "<a href="#">The cost of dichotomising continuous variables.</a>" <i>BMJ</i></li> <li>o Cohen et al., 2013. <i>Applied multiple regression/correlation analysis for the behavioral sciences</i>. Chapters 7 and 9, "<a href="#">Interactions among continuous variables,</a>" and "<a href="#">Interactions with categorical variables.</a>"</li> <li>o Gertler et al., 2011. <i>Impact evaluation in practice</i>. Chapter 6, "<a href="#">Difference-in-differences.</a>" <i>The World Bank</i>.</li> </ul>	<ul style="list-style-type: none"> <li>- Mini-project 3, 5-page report.</li> <li>- Power Point presentation of mini-project results.</li> </ul>
Apr 16 Class11	<ul style="list-style-type: none"> <li>- Introduction to categorical data analysis.</li> <li>- Homogenization.</li> <li>- Scaling.</li> <li>- Counterfactuals.</li> <li>- Heteroskedastic disturbances and Weighted Least Squares.</li> </ul>	<u>Assigned readings</u> <ul style="list-style-type: none"> <li>o Altman, Douglas G. and Patrick Royson. 2006. "<a href="#">The cost of dichotomising continuous variables.</a>" <i>BMJ</i></li> <li>o Agresti, Alan, 2013. <i>Categorical data analysis</i>. <a href="#">Sections 1.1 through 1.2.4.</a></li> <li>o Upton, Graham, 2016. <i>Categorical data analysis by example</i>. <a href="#">Sections 1.1 through 1.5.</a></li> </ul>	No homework
TBD			TA Session #5
Apr 23 Class12	<ul style="list-style-type: none"> <li>- OLS and Maximum Likelihood estimation: A comparative approach.</li> <li>- Generalized Least Squares estimation.</li> <li>- Link functions.</li> <li>- The deviance measure.</li> <li>- Logistic model as an auxiliary model for regression analysis.</li> </ul>	<u>Assigned readings</u> <ul style="list-style-type: none"> <li>o Pampel, Fred C., 2000. <i>Logistic regression: A primer</i>. Chapter 1, "<a href="#">The logic of logistic regression.</a>"</li> <li>o Aldrich and Nelson, 1984. <i>Linear probability, logit, and probit models</i>. Chapter 2, "<a href="#">Estimation of probit and logit models for dichotomous dependent variables.</a>"</li> <li>o Austin, Peter. 2011. "<a href="#">An introduction to propensity score methods for reducing the effects of confounding in observational studies.</a>" <i>Multivariate behavioral research</i>.</li> </ul>	No homework
TBD			TA Session #6
Apr 30	Maxi-project.	Maxi-project.	<ul style="list-style-type: none"> <li>- Maxi-project, 10-12 page research paper.</li> <li>- PPTX presentation of maxi-projects.</li> </ul>
May 7 Class13	<ul style="list-style-type: none"> <li>- Introduction to regression strategies for binary data.</li> </ul>	<u>Assigned readings</u> <ul style="list-style-type: none"> <li>o Long and Freese, 2006. <i>Regression models for categorical dependent variables using Stata</i>.</li> </ul>	No homework

	- Binary and binomial data. - the Logistic model and contingency tables.	Chapters 4, 5, and 6 " <a href="#">Models for binary outcomes</a> ," " <a href="#">Models for ordinal outcomes</a> ," and " <a href="#">Models for nominal outcomes</a> ." o Norton et al., 2004. " <a href="#">Computing interaction effects and standard errors in logit and probit models</a> ." <i>The Stata journal</i> o	
May 14	Final exam.	Final exam.	Final exam

## Grading

Your grade will be calculated using the following scale:

Letter Grade	Grade Point	Percentages (%)	Description	Learning Outcome
A+	4.0	96-100	<i>The student has acquired additional insight, far beyond the standards set forth for the course material.</i>	<i>Exceptional</i>
A	3.8	92-95	<i>The student has done an excellent work, developing a complete mastery of the material as intended for the course.</i>	<i>Superior</i>
A-	3.5	88-91	<i>The student has acquired a very good mastery of the course material and the necessary ability to use this ability elsewhere.</i>	<i>Commendable</i>
B+	3.2	84-87	<i>The student has demonstrated proficient mastery of course material yet partial success on some assessments.</i>	<i>Proficient</i>
B	3.0	80-83	<i>The student has demonstrated a foundational level of understanding about the course material and partial success on some of the assessments.</i>	<i>Satisfactory</i>
B-	2.7	66-79	<i>The student approaches mastery of course material and, accordingly, needs extra assistance to achieve a foundational understanding and to apply the main course skills.</i>	<i>Approaching</i>
C	2.0	<66%	<i>Gaps in mastery of course material. The student shows difficulties understanding at least some of the main concepts and with applying the skills of the course as expected by the program.</i>	<i>Developing</i>
U	0	0	<i>Unsatisfactory</i>	<i>Ineffective</i>

Note: Continual matriculation at CGU requires a minimum GPA of 3.0 in all coursework taken at CGU. Students may not have more than two incompletes. Details of the policy are found on the [Student Services webpage](#).

## Other content on expectations and logistics:

- *Focus:* This course—taught through the Department of *Politics* and Government—will make use of political data. Even though the course is in line with Political Science as a discipline, it is not focused on the “political” but rather on the “science” aspect of it. Accordingly, this is neither a partisan nor an ideological course. What concerns us is the data and the rigorous statistical

analysis of the data; nothing less; nothing more. We are here to improve our understanding of how the world works, and not to reaffirm our personal views of the world and opinions.

- *Due dates:* All course assignments should be submitted not later than midnight of the day before class. Late submissions will be penalized with a 20% grade reduction, and no assignments will be accepted after 24 hours late. The grade for such late assignments will be zero. Exceptions will be made only under truly exceptional circumstances.
- *Statistical software:* We will use Stata. Stata is known for being an intuitive, easy-to-use statistical software. Stata is accessible at CGU, so you will not have to buy it. We will run a plethora of data processing, analyses and visualizations. All codes, commands, and guides will be in Stata, too. This is a great opportunity to learn how to use a statistical software in a very short period of time.
- *Assignment submission format:*
  - All assignment instructions will be posted on Canvas, and students are required to submit them through our Canvas platform, as well.
  - Assignments should include your name, e-mail, and the title of the assignment (e.g., Homework #4; Mini-project #2).
  - Please submit your assignments in a *single* Word document.
- *Working in teams:*
  - *Coauthored assignments:* Many times, students will work in teams. For example, Celia Lacayo and Mark Sawyer will work together. It is Celia's and Mark's responsibility to submit a *single Word* document. It is their responsibility to split the work equally, and to be ethical and assume equal responsibility on the quality of their work. It is expected that each student will help the other with editing, such that the complete document will be written professionally. Both, Celia and Mark, will receive the same grade for the assignment.
  - *Separate assignments:* If the assignment allows you to work in teams but each student is required to submit her/his own Word document, final assignments should be *absolutely independent*. They should not look alike, at all.
  - *Professionalism:* Be professional with your classmates. They are, and will be for years to come, your professional network. Thus, if for example, you will miss class or cannot attend a meeting, you should notify your group members (as well as the professor).
  - *Presentations:* Presentations can be submitted as one Power Point document, but it is expected that each student will present their part independently. Presentations are graded separately.
- *High writing quality:*
  - All written work should be double-spaced, using 12-point fonts, one-inch margins, numbered pages, and *professionally written*. You are Master's and Ph.D. degree students, and that is what is expected from you: Top, graduate-level writing.
  - Throughout your professional and academic lives, you will always be evaluated, and will advance, on the basis of your writing. Researchers are, in essence, writers. To write is not a

- component of research or of policy and program evaluation. To write *is* to do research. To write *is* to re-write. Edit. Edit. Edit.
- You came to grad school to acquire three main skills: (1) Self-teaching skills, (2) Technical skills, and (3) Writing. If you do not like writing, you should reconsider your career. If you are an excellent writer, you are overpaying the costs of your graduate education.
    - After you graduate you will be presented with a problem and then you will do three things: (1) *Understand* the mess you are in, (2) *Teach yourself* how to get out of it, and (3) *Write* what you did. One and two above are not observable to neither the reviewers of your work nor to yourself after some time passes: Only your writing outlives the research/analytic process.
  - To write well is a powerful skill to have: I've seen a lot of bad research published just because it was well written. The opposite is also true: There is a lot of useful, informative, expensive research out there with stunning research designs that are not published because of low-quality writing.
  - ~~It sucks~~ It is frustrating to read assignments that could have been much better with just some editing. All students may not be good writers, but through the re-writing process, all students have the potential to be good editors of their writing.
    - Given the centrality of writing to the academic experience, your academic performance will also be evaluated on the basis of your writing. Good writing will be rewarded; poor writing will be penalized.
  - For some mysterious reason, I've noticed that CGU's Writing Center is one of the most underutilized resources at CGU. I highly recommend that you seek assistance from the Writing Center—even if you are a good writer. (Interestingly, the same set of skills that make students good writers make them also go to the Writing Center—that is, good writers are the ones who tend to more regularly visit the Writing Center; students who need to improve their writing skills tend not to.)
    - Presenting well is also a professional necessity. And guess what—the Writing Center recently added a presentation-assistance option!
    - The Writing Center is located in a blue-grey house at 141 E. 12<sup>th</sup> St, and you can also get their [assistance online](#). You do not need a referral to go to the Writing Center; you just need to grab your stuff and walk there.
- *Attendance:*
- Students are expected to attend all classes. It is my experience that when students miss one class, especially in courses that relate to research methods, like this one, they will struggle for the rest of the course. It is also my experience that students who survived the course after missing one class, they did it by investing about 10-12 additional hours of study aside from acquiring an additional 3-4 hours of my time and about 1-2 additional hours of the TA's time. That is why, if you ask any of my past students in PP482, they will tell you it would be CRAZY to miss one of my classes.
    - (If you ever see yourself stuck in a situation that leads you to contemplate the remote possibility of missing one class, [please go to "attendance," page 9 of the syllabus.](#))
  - Students who are unable to attend class must seek permission for an excused absence from the Professor or the program director.

- Unapproved absences or late attendance for three or more classes may result in a lower grade or an “incomplete” for the course.
  - If a student has to miss a class, s/he should arrange to get notes from a fellow student and it is strongly encouraged to meet with the professor and the Teaching Assistant to go over the missed material.
    - ◆ Missed extra-credit homework, mini-projects, and examinations will not be available for re-taking.
- *Scientific and Professional Ethics:*
- The work you do in this course must be your own. Feel free to build on, criticize, and analyze the ideas of others but, when you do, make it known whose ideas you are working with. You must explicitly acknowledge when your work builds on someone else’s ideas, including ideas of classmates, professors, and authors you read. If you ever have questions about drawing the line between others’ work and your own, ask the course professor who will give you guidance.
  - The midterm and the final exam must be completed independently. Any collaboration on answers to exam, unless expressly permitted, may result in an automatic failing grade and possible expulsion from the Program. Additional information on CGU academic honesty is available on the [Student Services webpage](#).
  - Do NOT plagiarize. Please note that plagiarism is determined by the *act*, not the *intent*. Be careful to keep good records and give good citations and references.
    - Both CGU and I take academic integrity very seriously. Cheating is grounds for failure. One form of cheating is plagiarism.
    - The basic rule to avoid plagiarism is **very simple**: just give credit where credit is due. Always give a citation when you use the ideas, words, figures, or data of others. It is better to use too many citations than to use too few.
      - ◆ Many people (like Steven Wright and Tom Lehrer) have talked about this issue: To steal the ideas of others without citing them, is called plagiarism; to steal the ideas of others and cite them, is called research!
      - ◆ So, let’s be clear about this: It is not that we don’t want you to use and benefit from the ideas of others. No. Please do! But don’t forget that correctly citing the origin of the ideas you are using is the desirable, and ethic way to “plagiarize”!
    - In the “good old days,” had I stole the ideas of others, my hands were cut off and I had to carry them everywhere hanging as a macabre necklace (reminding others you should not steal the ideas of others). But things have changed for the worse. Nowadays, faculty are boringly required by university policy to report all cases of plagiarism—even if they are *simply apparent*—to the office of the Vice President of Academic Affairs. I follow this requirement—no joke!
- *Feedback and Communication:*
- The best way to get in touch with me is via e-mail: [javier.rodriguez@cgu.edu](mailto:javier.rodriguez@cgu.edu) If I don’t respond, please try again with a quick reminder.

- I usually respond to e-mail within two weeks. If by the third week I have not responded, please pass by my office. If I have not responded to e-mails and you don't find me in my office, please call the police.
    - ◆ Okay, I am joking: I usually do respond to e-mail by the third week.
      - (I am very good at answering e-mail, very usually within 18 hours.)
  - Always be professional in your communication with the Teaching Assistant and the professor.
    - This is graduate school. Always take into consideration that an e-mail thread, a formal or informal conversation, or a class discussion between you and the professor or between you and the Teaching Assistant, is a communication exchange between two experts on a subject matter. Please behave accordingly.
      - ◆ E-mail: You can e-mail the professor or your TA with [simple] questions. Questions via e-mail are NOT a substitute neither for attending class or the TA session nor for meetings during office hours or appointments. Please state that the nature of your e-mail is in regard to this course by including the abbreviation PP482 in the subject space of your message.
  - Now that we are getting to know each other, students tend to ask me how to call me. And that is fine. In this regard, I do not feel challenged and I will not think you are being disrespectful if you don't call me "Doctor" or "Professor". Just please feel free to call me "Your Excellency."
    - (Please call me "Javier.")
- *Teaching Assistant:*
    - Please always be *very respectful* of the Teaching Assistant's time. Keep in mind that your Teaching Assistant, just as you are, is also a graduate student—with courses to attend, exams to present, and papers to write aside of being your Teaching Assistant.
    - CGU pays your Teaching Assistant the big bucks to do two things: Teach TA Sessions and hold office hours. For everything else, please contact your professor.
      - TA Sessions: You can interpret each session (a total of 6 in the semester) as a time prepared for extra practice activities, clarification of concepts and procedures, test preparation, and reviewing and pre-correcting assignments (e.g., mini-projects).
      - Office hours: Please prepare your question(s) with anticipation. Office hours are not only useful to clarify your doubts but also to further explore your curiosity about statistics, research methods, and/or concepts covered in class. You can also set up additional meeting times with the professor by appointment.
- *Your Role as Student:*

Education has consistently been the institution at the core of human wellbeing and development. Throughout history, across nations and cultures, education has correlated with the access, acquisition, and maintenance of the benefits of human civilization. The correlation between educational attainment and higher levels of health, wealth, knowledge, prestige, institutional and human resources, and ultimately of power, is perhaps one of the most reliable across disciplines. Since this course, and college in general, is an investment in your own human capital, you are expected to put in at least as much effort as the professor does. This means keeping up with assignments and being proactive when you don't understand. Failure to do this will limit what you

learn, set you up for a mediocre grade, and generally waste my time, your time, and the tuition you have paid to be here. If you fail to do this, you are simply failing to differentiate yourself from those who don't have an education. Finally, consider that it is natural to reward effort with effort. Time outside of the classroom is limited, and outside assistance will always be available to those who regularly attend and participate in class and TA session. However, office hours cannot be a substitution or replacement for class or TA session discussions.

### **Additional important content**

**Course Policies:** The CGU institutional policies apply to each course offered at CGU. Students are encouraged to review the student handbook for the program as well as the policy documentation within [the bulletin](#) and on the Registrar's pages.

**Accommodations for Students with Disabilities:** If you would like to request academic accommodations due to temporary or permanent disability, contact the CGU Dean of Students and Coordinator for Student Disability Services at [DisabilityServices@cgu.edu](mailto:DisabilityServices@cgu.edu) or 909-607-9448. Appropriate accommodations are considered after you have conferred with the Office of Disability Services (ODS) and presented the required documentation of your disability to the ODS.

**Mental Health Resources:** Graduate school is a context where mental health struggles can arise or be exacerbated. If you ever find yourself struggling, please ask for help. If you wish to seek out campus resources, here is some basic information: <https://www.cuc.claremont.edu/mcaps/>

Monsour Counseling and Psychological Services (MCAPS) is committed to promoting psychological wellness for all students at the Claremont Colleges. Professional and well-trained psychologists, psychiatrists, and post-doctoral and intern therapists offer support for a range of psychological issues in a confidential and safe environment. Ph: (909) 621-8202; after hours emergency (909) 607-2000.

Tranquada Student Services Center, 1st floor  
757 College Way  
Claremont, CA 91711

**Title IX:** If I learn of any potential violation of CGU's gender-based misconduct policy (e.g., rape, sexual assault, dating violence, domestic violence, or stalking) by any means, I am required to notify the CGU Title IX Coordinator at [Deanof.Students@cgu.edu](mailto:Deanof.Students@cgu.edu) or (909) 607-9448. Students can request confidentiality from the institution, which I will communicate to the Title IX Coordinator. If students want to speak with someone confidentially, the following resources are available on and off campus: EmPOWER Center (909) 607-2689, Monsour Counseling and Psychological Services (909) 621-8202, and The Chaplains of the Claremont Colleges (909) 621-8685. Speaking with a confidential resource does not preclude students from making a formal report to the Title IX Coordinator if and when they are ready. Confidential resources can walk students through all of their reporting options. They can also provide students with information and assistance in accessing academic, medical, and other support services they may need.

**Campus Security:** Campus security can be reached 24 hours/day at (909) 607-2000.