

INTL 4000	Research Design and Analysis	Spring 2020
M, W, F 10:20-11:10	Caldwell Hall 107	Pre/Corequisites: None
Danny Hill	Dept. of International Affairs	dwhill@uga.edu
Office Hrs: By appointment	Office: IA Building 319	

Course Description

This course introduces students to philosophy of science, research design, and quantitative analysis as applied to the study of comparative and international politics. Broad topics covered include epistemology, conceptualization, measurement, causal theories in social science, basic descriptive and inferential statistics, data visualization, measures of bivariate association, and multivariate linear regression.

Course Objectives

This course exposes students to basic concepts related to theory, research design, and quantitative analysis in the social sciences. The first few weeks of the course examine topics from the philosophy of science and their relation to research on international and comparative politics. The rest of the course familiarizes students with basic concepts from statistics, and introduces them to the use of statistical software for data analysis and visualization. Students will develop an understanding of the basic components of social scientific research, including conceptualization and quantitative measurement, as well as how causal theories are constructed and tested in the social sciences. In the latter part of the course students will learn to perform data analysis, beginning with practical issues of data management. By the end of the course students will be comfortable performing analysis to examine relationships between variables, including cross-tabulation and linear regression. A large portion of students' grades will be determined by lab exercises that involve data analysis.

Course format

University guidelines currently allow for a maximum of 14 students to attend class in-person.* this means that at least 4 students will not be able to be physically present on any given day. I will contact students via email to let them know when they will need to attend class online.

*Everyone who is in the room must wear a face covering and remain at least 6 feet from everyone else at all times. See the “COVID-19 Information for Students” section at the end of the syllabus.

I will emphasize that *no one is required to attend class in-person*. Students may access and complete all components of this course online through the ELC course site. I will try to make sure students' experiences in the course are as uniform as possible. Students who choose to attend remotely may do so asynchronously (you don't have to watch the class live, but you can if you want to). I will record each in-person meeting so that students who choose not to attend that day may watch a video later instead of logging into Zoom when class starts.

Required Texts

Agresti, Alan and Barbara Finlay. 1997. *Statistical Methods for the Social Sciences*. 3rd ed. Prentice Hall (this is an older edition of the book)

Grades

Your grades will be based on three exams (including the final exam) and four lab exercises/homework assignments. Your final grade will be determined as follows:

Exam 1: 20%

Exam 2: 20%

Final Exam: 20%

Lab Assignment 1: 10%

Lab Assignment 2: 10%

Lab Assignment 3: 10%

Lab Assignment 4: 10%

Grade Distribution:

90-100: A	80-89: B	70-79: C
60-69: D	59 and below: F	

Examinations

Exams will consist of 10-15 questions that will usually involve some quantitative reasoning and math. For exams I will provide necessary handouts, and you will be allowed to use

a calculator. All exams will cover the lecture as well as assigned readings. Exams will be completed online through the ELC course site. The exam schedule is as follows:

Exam 1: Wednesday March 3

Exam 2: Wednesday April 7

Final Exam: Wednesday May 5

On each of these dates an online “quiz” will be available on the ELC course site beginning at 8 a.m. and will close at 8 p.m. There are no time restrictions once you begin the quiz, other than the 8 p.m. deadline. The final exam will also be online and the format will be the same as the other exams. The final exam is not cumulative.

Lab Exercises/Homework Assignments

We will have several lab sessions throughout the semester and four lab assignments (one of the assignments will be spread out across two lab sessions). The assignments will require you to conduct statistical analysis using a (free) software program called [R](#). You will begin each assignment during a lab session, and I will be available during the lab to answer questions. You will have at least 3 days to complete assignments, so you will have some time outside of class to complete them if necessary. Check the schedule below for start/due dates for lab assignments.

Lab Exercises during COVID

Normally we would meet in an actual computer lab to begin your lab assignments, but since we cannot do that safely at the moment you will need your own laptop computer to complete lab assignments, and should you choose to attend class in-person will need to bring a laptop and log in to Zoom. Being able to share screens and show you what I am doing will allow me to help you while staying at a safe distance. If you attend online I strongly advise that you attend these meetings synchronously so that you can ask questions in real time.

Course Website and Email

Can be accessed through www.elc.uga.edu. You will need to check this site regularly for any syllabus updates, posted readings, and other materials I will post. Announcements may also be sent out via email.

Office Hours

I won't be meeting anyone in my office anytime soon, but feel free to contact me to schedule an online meeting.

Syllabus Change Policy

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Students with Disabilities

Students with disabilities who require reasonable accommodations in order to participate in course activities or meet course requirements should contact the instructor or designate during regular office hours or by appointment.

University Honor Code/Academic Honesty Policy

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at www.uga.edu/honesty. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

Withdrawal Policy

Students who withdraw from the class before the withdrawal deadline are assigned a grade based on their performance (pass/fail) in the class up the point of withdrawal. This means that students who are failing will be assigned a "WF" grade even if they withdraw before the deadline. Students who withdraw from the class after the withdrawal deadline are automatically assigned a "WF" grade upon withdrawal.

Reading Schedule

Course introduction

Wed. Jan 13: Syllabus review, class overview. No reading.

Concepts and measurement

Friday Jan 15: Munck, Gerardo L. and Jay Verkuilen. 2002. "Conceptualizing and Measuring Democracy: Evaluating Alternative Indices." *Comparative Political Studies* 35(1): 5-34.

Monday Jan 18: Martin Luther King Jr. Day, no class

Deductive and inductive inference

Wednesday Jan 20: Russell, Bertrand. 1912. *The Problems of Philosophy*. Chap 6 (available on course website)

Friday Jan 22: Oneal, John R. and Bruce M. Russett. 1997. "The Classical Liberals Were Right Democracy, Interdependence, and Conflict, 1950-1985." *International Studies Quarterly* 41(2): 267-293.

Monday Jan 25: Platt, John R. "Strong Inference." *Science* 16 October 1964, Vol. 146, Number 3642.

Wednesday Jan 27: Schultz, Kenneth A. 1999. "Do Democratic Institutions Constrain or Inform? Contrasting Two Institutional Perspectives on Democracy and War." *International Organization* 53(2): 233-266.

Measurement and descriptive statistics

Friday Jan 29: Agresti and Finlay, chap 1.

Monday Feb 1: Agresti and Finlay, chap 1.

Wednesday Feb 3: Agresti and Finlay, pp. 11-15, chap 3.

Lab session, Exercise 1 begins

Friday Feb 5: Agresti and Finlay, pp. 11-15, chap 3.

Lab session, Exercise 1 due by 5 p.m.

Probability distributions and hypothesis tests

Monday Feb 8: Agresti and Finlay, chap 4.

Wednesday Feb 10: Agresti and Finlay, chap 4.

Friday Feb 12: Agresti and Finlay, chap 5

Monday Feb 15: Agresti and Finlay, chap 5.

Wednesday Feb 17: **Instructional break, no class**

Friday Feb 19: Agresti and Finlay, chap 5.

Monday Feb 22: Agresti and Finlay, chap 6.

Wednesday Feb 24: Agresti and Finlay, chap 6.

Friday Feb 26: Agresti and Finlay, chap 6.

Monday Mar 1: No reading, review for Exam 1

Wednesday Mar 3: **Exam 1 (online)**

Friday Mar 5: No reading

Lab session

Monday Mar 8: No class

Wednesday Mar 10: No class

Friday Mar 12: **Instructional break, no class**

Monday Mar 15: No reading

Lab session

Tests for statistical association - comparisons between groups

Wednesday Mar 17: Agresti and Finlay, chap 7

Friday Mar 19: Agresti and Finlay, chap 7

Monday Mar 22: Agresti and Finlay, chap 7

Lab session, Exercise 2 begins

Wednesday Mar 24: Agresti and Finlay, chap 7

Lab session, Exercise 2 due Thursday, Mar 25 by 5 p.m.

Tests for statistical association - contingency tables

Friday Mar 26: Agresti and Finlay, chap 8

Monday Mar 29: Agresti and Finlay, chap 8

Wednesday Mar 31: Agresti and Finlay, chap 8

Lab session, Exercise 3 begins

Friday Apr 2: No reading

Lab session, Exercise 3 due by 5 p.m.

Monday Apr 5: No reading, review for Exam 2

Wednesday Apr 7: Exam 2 (online)

Linear regression analysis

Friday Apr 9: Agresti and Finlay, chap 9

Monday Apr 12: Agresti and Finlay, chap 9

Wednesday Apr 14: Agresti and Finlay, chap 9

Friday Apr 16: Agresti and Finlay, chap 10

Monday Apr 19: Agresti and Finlay, chap 10

Wednesday Apr 21: Agresti and Finlay, chap 11

Friday Apr 23: No reading

Lab session, Exercise 4 begins

Monday Apr 26: Agresti and Finlay, chap 14

Lab session

Wednesday Apr 28: Agresti and Finlay, chap 14

Lab session, Exercise 4 due at 5 p.m.

Friday Apr 30: No reading, review for Final Exam

Monday May 3: No reading, review for Final Exam

FINAL EXAM: Wednesday May 5, 8 a.m. – 8 p.m. (online)

COVID-19 Information for Students

Face Coverings

Effective July 15, 2020, the University of Georgia (along with all University System of Georgia (USG) institutions) requires all faculty, staff, students and visitors to wear an appropriate face covering while inside campus facilities/buildings where six feet social distancing may not always be possible. Face covering use is in addition to and is not a substitute for social distancing. Anyone not using a face covering when required will be asked to wear one or must leave the area. Reasonable accommodations may be made for those who are unable to wear a face covering for documented health reasons. Students seeking an accommodation related to face coverings should contact Disability Services at <https://drc.uga.edu/>.

DawgCheck

Please perform a quick symptom check each weekday on DawgCheck the UGA app or website whether you feel sick or not. It will help health providers monitor the health situation on campus: <https://dawgcheck.uga.edu/>

What do I do if I have symptoms?

Students showing symptoms should self-isolate and schedule an appointment with the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m.-5 p.m.). Please DO NOT walk-in. For emergencies and after-hours care, see <https://www.uhs.uga.edu/info/emergencies>.

What do I do if I am notified that I have been exposed?

Students who learn they have been directly exposed to COVID-19 but are not showing symptoms should self-quarantine for 14 days consistent with Department of Public Health (DPH) and Centers for Disease Control and Prevention (CDC) guidelines. Please correspond with your instructor via email, with a cc: to Student Care & Outreach at sco@uga.edu, to coordinate continuing your coursework while self-quarantined. If you develop symptoms, you should contact the University Health Center to make an appointment to be tested. You should continue to monitor your symptoms daily on DawgCheck.

How do I get a test?

Students who are demonstrating symptoms of COVID-19 should call the University Health Center. UHC is offering testing by appointment for students; appointments may be booked by calling 706-542-1162.

UGA will also be recruiting asymptomatic students to participate in surveillance tests. Students living in residence halls, Greek housing and off-campus apartment complexes are encouraged to participate.

What do I do if I test positive?

Any student with a positive COVID-19 test is required to report the test in DawgCheck and should self-isolate immediately. Students should not attend classes in-person until the isolation period is completed. Once you report the positive test through DawgCheck, UGA Student Care and Outreach will follow up with you.

What do I do if I am notified that I have been exposed?

Revised Guidelines for COVID-19 Quarantine Period

Effective Jan. 4, 2021, students who learn they have been directly exposed to COVID-19 but are not showing symptoms should self-quarantine for 10 days (consistent with updated Department of Public Health (DPH) and Centers for Disease Control and Prevention (CDC) guidelines). Those quarantining for 10 days must have been symptom-free throughout the monitoring period. Please correspond with your instructor via email, with a cc: to Student Care & Outreach at sco@uga.edu, to coordinate continuing your coursework while self-quarantined.

We strongly encourage students to voluntarily take a COVID-19 test within 48 hours of the end of the 10-day quarantine period (test to be administered between days 8 and 10). Students may obtain these tests at Legion Field (<https://clia.vetview.vet.uga.edu/>) or at the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m. – 5 p.m.). Please DO NOT walk-in the University Health Center without an appointment. For emergencies and after-hours care, see: <https://www.uhs.uga.edu/info/emergencies>

If the test is negative, the individual may return to campus, but MUST continue to closely monitor for any new COVID-19 symptoms through 14 days. DawgCheck is the best method for monitoring these symptoms. If new symptoms occur, the individual must not come to campus and must seek further testing/evaluation.

If the test is positive at the end of the 10-day period, the individual must begin a 10-day isolation period from the date of the test.

How do I participate in surveillance testing if I have NO symptoms?

We strongly encourage you to take advantage of the expanded surveillance testing that is being offered from January 4 - 22: up to 1,500 free tests per day at Legion Field and pop-up locations. Testing at Legion Field can be scheduled at <https://clia.vetview.vet.uga.edu/>. Walk-up appointments can usually be accommodated at Legion Field, and pop-up saliva testing does not require pre-registration. For planning purposes, precise sites and schedules for the pop-up clinics are published on the UHCs website and its social media as they are secured: <https://www.uhs.uga.edu/healthtopics/covid-surveillance-testing>.