# INTA 2010 Empirical Methods The Sam Nunn School of International Affairs Georgia Institute of Technology Fall 2012

Instructor: Dr. Murat Bayar E-mail: murat.bayar@inta.gatech.edu Office: Ivan Allen College 141 Office hours: M 2:30-3:30 p.m. or by appointment Section: A Class Time: MWF 13:05-13:55 p.m. Location: Instructional Center 109

#### **Objectives**

The purpose of this course is to provide you with empirical methods for applied political research. You will learn how to formulate a research question, place your topic in a theoretical context, develop hypotheses, and choose the appropriate quantitative and/or qualitative methods to investigate your topic. Accordingly, you will collect data, test those hypotheses using computer software (when applicable), and interpret your findings. The scientific investigation of your topic will enable you to communicate ideas in a systematic way. Furthermore, you will be able to differentiate between scientific findings, opinions, and normative arguments, an ability that is essential not only for a political researcher, but also for any citizen in a democratic polity.

This course gives a particular emphasis on relating our classroom knowledge to important political questions of our time. Thus, we will constantly apply our empirical tools to international affairs. The measurement of your performance will involve class participation, verbal and written presentation of a research paper (group assignment), homework assignments, and exams. By the end of the semester, you will have a thorough understanding of the strengths and weaknesses of different types of empirical methods and be able to pursue the appropriate one(s) for your future studies.

#### **Requirements**

Participation makes up 10% of your overall grade. You are expected to do the readings, follow news pertinent to international affairs, and contribute to class discussions. Sometime around the midterm, I will give you a letter grade for your participation so that you will have a clear idea about your standing and have time to improve your performance.

Your research assignment is a <u>group</u> project that involves quantitative methods and computer software. First, you will have your research question approved by the instructor by September 10. Since this is the deadline for *approval*, you need to contact the instructor and discuss your question as early as possible. Once your research question is approved, you will conduct the literature review. In this step you are expected to show your command of the major academic work written on your topic. The literature review is due on October 8 (around 5 pages plus references). You are required to cite the reviewed work in the text and in the references section at the end of the paper. Please bring a hard-copy to the class and also send it to the instructor on T-Square. The instructor will provide you with the reference format.

The third research assignment is the presentation of methodology and data sources. You will state your dependent and independent variables, develop hypotheses, explain how you will test these hypotheses, and state your data sources, which should be available or collectable for the intended spatial and temporal parameters. You will cite the data sources and other relevant work in the text and provide the extended references section at the end of the paper. The methodology-data section is due on October 29 (around 10 pages plus references). Please bring a hard-copy to the class and also send it to the instructor on T-Square.

The fourth assignment will be the presentation of your draft research paper, including your preliminary findings. The presentations will begin on November 19. The format of presentations will include PowerPoint and any other visual material you may need. The audience is expected to provide constructive criticisms to the presenters in order to improve their work.

Finally, your research paper will include introduction, literature review, methodology-data sources, findings, analysis (interpretation), and conclusion, and is due on December 9 (around 20 pages plus references). Please send the paper *and* data files to the instructor on T-Square on December 9 the latest, and bring a hard copy of the paper to the class on December 10.

The format of written assignments is double-space, Times New Roman, 12 font, with page numbers. The above page limitations are rough estimates, and the quality of your work is definitely more important than the quantity. You also need to do grammar and spell check before submitting any assignment. Please use either Word or PDF format when sending an electronic document to the instructor and to your classmates. You are encouraged to meet with the instructor during office hours and/or mutually-set appointments throughout the semester in order to coordinate your research and writing process.

The breakdown of your grade will be as follows:

Participation: 10% Homework Assignments: 10% (two assignments, 5% each) Midterm Exam: 10% (see the schedule below) Research Assignment I (Research question): 5% Research Assignment II (Literature review and references): 5% Research Assignment III (Methodology and data sources): 10% Research Paper Presentation: 10% Research Paper: 20% Final Exam: 20% (see the schedule below)

Grade Scale:

А	100-90	Excellent
В	89-80	Good
С	79-70	Satisfactory
D	69-60	Passing
F	Below 60	Failure

# **Required Books**

The following books are available for purchase at the campus bookstore. The instructor may send you additional readings on T-Square. You are expected to check T-Square for announcements <u>every day</u>.

Roselle, Lauren, and Sharon Spray. 2012. *Research and Writing in International Relations*. 2nd edition. Boston, MA: Longman. ISBN-13: 978-0-205-06065-8. (Roselle & Spray)

Pollock III, Phillip H. 2009. *The Essentials of Political Analysis*. 3rd edition. Washington, D.C.: CQ Press. ISBN-13: 978-1-60871-686-9. (Pollock Essentials)

Pollock III, Phillip H. 2011. A STATA Companion to Political Analysis. 2<sup>nd</sup> edition. Washington, D.C.: CQ Press. ISBN-13: 978-1-60871-671-5. (Pollock STATA)

### Software Requirement

We will use STATA 12. You may access the software on the VLab (with limitations) from your own computer. You may also buy a six-month (\$32) or one-year (\$49) student license (GradPlan) on the STATA website.

# **Other Rules**

If you miss an assignment and want to have a make-up exam, you need to contact the instructor as soon as possible and document your excuse.

If you feel that an assignment was graded incorrectly, e-mail the instructor within a week of the assignment. Students should keep graded assignments until they receive their final course grade.

Students with disabilities who require individualized testing or other accommodations should discuss this with the instructor in the first week of the semester.

Students who will need to miss a class meeting to observe a religious holiday should make arrangements with the instructor in the first week of the semester.

All coursework must meet the Georgia Tech standards of academic honesty. Each student is responsible for informing themselves about those standards before performing any academic work. See: <u>http://www.osi.gatech.edu/plugins/content/index.php?id=46</u>

The use of cell phones is not permitted during class meetings.

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

#### **Class Schedule**

- August 20 Introduction
- August 22 Topic Selection and Question Development

Roselle & Spray chp. 1

August 24 – Scholarly Literature and the Literature Review

Roselle & Spray chp. 2

August 27 – Project Definition and Analysis

Roselle & Spray chp. 3, 4

August 29 – Writing Resources

Roselle & Spray chp. 10, 11, 12

August 31 – The Definition and Measurement of Concepts

Pollock Essentials, chp. 1

September 3 – No class (Labor Day)

- September 5 The Definition and Measurement of Concepts Pollock Essentials, chp. 1
- September 7 Measuring and Describing Variables Pollock Essentials, chp. 2
- September 10 Measuring and Describing Variables Pollock Essentials, chp. 2
- September 12 Hypotheses and Comparisons Pollock Essentials, chp. 3
- September 14 Hypotheses and Comparisons Pollock Essentials, chp. 3
- September 17 Research Design and the Logic of Control Pollock Essentials, chp. 4
- September 19 Research Design and the Logic of Control Pollock Essentials, chp. 4
- September 21 Making Controlled Comparisons Pollock Essentials, chp. 5
- September 24 Making Controlled Comparisons Pollock Essentials, chp. 5
- September 26 Introduction to STATA Pollock STATA, chp. 1
- September 28 Descriptive Statistics Pollock STATA, chp. 2
- October 1 Transforming Variables Pollock STATA, chp. 3
- October 3 Transforming Variables Pollock STATA, chp. 3
- October 5 Making Comparisons Pollock STATA, chp. 4
- October 8 Making Comparisons Pollock STATA, chp. 4
- October 10 Making Controlled Comparisons Pollock STATA, chp. 5
- October 12 Making Controlled Comparisons Pollock STATA, chp. 5

October 15 - Fall 2012 Student Recess

- October 17 Foundations of Statistical Inference Pollock Essentials, chp. 6
- October 19 Foundations of Statistical Inference Pollock Essentials, chp. 6
- October 22 Making Inferences about Sample Means Pollock STATA, chp. 6
- October 24 Making Inferences about Sample Means Pollock STATA, chp. 6
- October 26 Test of Significance and Measures of Association Pollock Essentials, chp. 7
- October 29 Test of Significance and Measures of Association Pollock Essentials, chp. 7
- October 31 Chi-Square and Measures of Association Pollock STATA, chp. 7
- November 2 Midterm exam
- November 5 Chi-Square and Measures of Association Pollock STATA, chp. 7
- November 7 Correlation and Linear Regression Pollock Essentials, chp. 8
- November 9 Correlation and Linear Regression Pollock Essentials, chp. 8
- November 12 Correlation and Linear Regression Pollock STATA, chp. 8
- November 14 Correlation and Linear Regression Pollock STATA, chp. 8
- November 16 Logistic Regression Pollock Essentials, chp. 9
- November 19 Logistic Regression Pollock Essentials, chp. 9
- November 21 Dummy Variables and Interaction Effects Pollock STATA, chp. 9
- November 23 No class (Thanksgiving Break)

- November 26 Dummy Variables and Interaction Effects Pollock STATA, chp. 9
- November 28 Logistic Regression Pollock STATA, chp. 10
- November 30 Logistic Regression Pollock STATA, chp. 10
- December 3 Group Presentations
- December 5 Group Presentations
- December 7 Group Presentations
- December 10 Final exam 2:50-5:40 p.m.