PSC 621

Quantitative Methods in Political Science II

Spring 2015

Instructor: Dr. Mark Nieman

Time and Location: TR 12:30-1:45pm, ten Hoor Hall 23

Contact: mdnieman@ua.edu

Office Hours: T 2:00-4:00pm and by appointment, ten Hoor Hall 312

Overview and Objectives

This class introduces a variety of statistical techniques for limited and categorical dependent variables relevant to political science research. The objective is for you to become familiar with these techniques to understand how, when, and why to use them. I therefore emphasize empirical applications, and a large portion of class time (approximately 40% of classes) is devoted to hands-on use and interpretation of these methods on computers. I recommend using the statistical program Stata, since all sample code for assignments are written in this programming language, though you are welcome to turn in assignments and replication materials in R. I assume some familiarity with the concepts of maximum likelihood, linear algerbra, calculus, and probability theory, but we may review these topics as necessary.

The course covers a wide variety of estimators, including those for binary, ordered, polychotomous, and multivariate outcome variables. We also discuss issues relating to truncation, censoring, and non-random sample selection. Additional and related topics will be covered as necessary. The main tools through which you will familiarize yourself with these methods are Maximum Likelihood Estimation and Monte Carlo analysis, which will be presented in the first and second weeks. Many of your homework assignments and in-class work will involve these two techniques.

Learning Outcomes

- Students will apply statistical estimators with limited dependent variables;
- Students will explain when to use specific estimators given specific research questions and datasets;
- Students will interpret statistical output in substantive terms;
- Students will apply appropriate estimators to their own research;
- Students will adhere to scientific standards of data replication.

Requirements

Grades are based on five parts: homework assignments (40%), a midterm exam (20%), a final exam (20%), and a final project involving an in-class presentation (15%) and the circulation of replication materials (5%) at the end of the semester.

Homework

The best way to learn the material is to use the estimators. I will assign homework on a weekly to bi-weekly basis. Many assignments will specify a model and ask you to run a Monte Carlo analysis that involves generating data and then estimating parameters using a few different assumptions (both correct and incorrect). When you turn in the homework, I want you to upload an electronic copy of your Stata (or R) program file, appropriate graphical or tabular representation of the results, and a document summarizing your results in words, to Blackboard. The file should be written such that I am able to run it and replicate your results without modification. Late homework will lose ten percent of the total value per week unless prior arrangements are made.

• Exams

There is a midterm and a final examination. These are timed take home exams. I expect you to understand the basic mathematical logic as to acquire a less technical understanding of how the estimators work and when each is suitable.

• Final Project

- Final Presentation

During our scheduled exam week time slot, class members will present the results of their research project to the class in a conference format (12-15 minute presentations). The focus of the presentation should involve either 1) the application of a suitable, advanced method to a substantive research question; 2) the theoretical development of a new method; or 3) a detailed investigation of existing methods using Monte Carlo analysis, with a critique of current studies (i.e. replications of published work). You are free to use a substantive topic that you have worked on in the past, but with a focus on improving the quality and the interpretation of the estimation technique.

Presentations must meet the following criteria:

- · Between 5-15 slides;
- · One slide must indicate the primary hypothesis being tested;
- · One slide must clearly indicate the data and/or methods employed;
- One slide must explain why the primary method is an improvement over previous studies or how the method permits appropriate testing of a novel hypothesis;

· One slide must present a graphical interpretation of the main result (or tabular, if graphical is inappropriate).

You must upload a copy of your presentation to Blackboard before your scheduled presentation day for grading purposes.

- Replication Materials

You must submit a complete set of replication materials for the analysis in your presentation through Blackboard along with your slides. These files must allow anyone to replicate your results without consulting you and should run on any computer with Stata or R installed. Your should use comments liberally to help users follow your code. At a minimum, your replication materials should include:

- The do.file or r.script used to construct and compile your data set so that others can see your coding decisions;
- · Your final data set (you do not need to supply the original, raw data set(s);
- · The do.file or r.script that runs all the analyses in your presentation, including the creation of the quantities of interest in the interpretation slide;
- · Your lab book that you prepare over the course of the semester documenting important data, coding, and statistical decisions that you make.

General Topics to be Covered

I will pick out a few papers from the current topic each week and expect you to read them, but the ones I do not assign will also be useful if you are interested in that area or want to see some empirical applications:

- Maximum Likelihood Estimation;
- Monte Carlo Analysis;
- Discrete Choice Analysis;
- Interaction Effects;
- Multi-level Data Structures.

Required Texts

Long, J. Scott. 1997. Regression Models for Categorical and Limited Dependent Variables. USA: Sage Publications.

Recommended:

King, Gary. 1989. Unifying Political Methodology: The Likelihood Theory of Statistical Inference. Ann Arbor, MI: University of Michigan Press.

Course Outline

Week 1: Intro and Maximum Likelihood Estimation

Long, Chapter 1.

Beck, Nathaniel. 1999. Political Methodology: A Welcoming Discipline. *Journal of the American Statistical Association* 95(450): 651-654.

King, Gary. 1986. How Not to Lie With Statistics: Avoiding Common Mistakes in Quantitative Political Science. American Journal of Political Science 30: 666-687.

FiveThirtyEight. Mohawks, Faux-hawks And Macklemores: The Top-Heavy Hairdos of the World Cup. Available on Blackboard.

Nagler, Jonathan. 1995. Coding Style and Good Computing Practices (in Verification/Replication). PS: Political Science and Politics 28(3): 488-492.

King, Chapter 2-4.

Week 2: Logistic and Probit Regression

Long, Chapter 3-4

Week 3: Monte Carlo

Mooney, Christopher Z. and George A. Krause. 1997. Of Silicon and Political Science: Computationally Intensive Techniques of Statistical Estimation and Inference. *British Journal of Political Science* 27(1): 83-110.

Mooney, Christopher. 1997. Monte Carlo Simulation. Thousand Oaks, CA: Sage Publications.

Week 4: Estimating Quantities of Interest

King, Gary, Michael Tomz, and Jason Wittenberg. 2000. Making the Most of Statistical Analyses: Improving Interpretation and Presentation. *American Journal of Political Science* 44(2): 347-361.

Williams, Laron K. and Guy D. Whitten. 2012. But Wait, There's More! Maximizing Substantive Inferences from TSCS Models. *Journal of Politics* 74(3): 685-693.

CLARIFY documentation: http://gking.harvard.edu/clarify/clarify.pdf.

Chyzh, Olga. 2014. Can You Trust a Dictator: An Endogenous Model of Authoritarian Regimes' Signing and Compliance with International Treaties. *Conflict Management and Peace Science* 31(1): 3-27.

Week 5: Ordered Logit and Probit

Long, Chapter 5

Best, Samuel J. and Brian S. Krueger. 2005. Analyzing the Representativeness of Internet Political Participation. *Political Behavior* 27(2): 183-216.

Wright, Thorin M. 2014. Territorial Revision and State Repression. *Journal of Peace Research* 51(3): 375-387.

Week 6: Multinomial and Conditional Logit

Long, Chapter 6

Dow, Jay K. and James W. Endersby. 2004. Multinomial Probit and Multinomial Logit: A Comparison of Choice Models for Voting Research. *Electoral Studies* 23: 107-122.

Clarke, Harold D., Allan Kornberg, Chris McIntyre, Petra Bauer-Kaase, and Max Kaase. 1999. The Effect of Economic Priorities on the Measurement of Value Change: New Experimental Evidence. *American Political Science Review* 93(3): 637-647.

Alvarez, R. Michael and Lisa García Bedolla. 2003. The Foundations of Latino Voter Partisanship: Evidence from the 2000 Election. *Journal of Politics* 65(1): 31-49.

Week 7: Heteroskedastic Probit

Arena, Philip and Glenn Palmer. 2009. Politics or the Economy? Domestic Correlates of Dispute Involvement in Developed Democracies. *International Studies Quarterly* 53(4): 955-975.

Clark, David H. and Timothy Nordstrom. 2005. Democratic Variants and Democratic Variance: How Domestic Constraints Shape Interstate Conflict. *Journal of Politics* 67(1): 250-270.

Krutz, Glen S. 2005. Issues and Institutions: "Winnowing" in the U.S. Congress. *American Journal of Political Science* 49(2): 313-326.

Week 8: Multivariate Probit

Greene, William. 1993. Bivariate and Multivariate Probit. *Econometric Analysis*. Upper Saddle River, NJ: Prentice-Hall, 2nd Ed. Chapter 21, Section 6. Available on Blackboard.

Carrubba, Cliff and Richard J. Timpone. 2005 Explaining Vote Switching Across First-and Second-Order Elections: Evidence from Europe. *Comparative Political Studies* 38(3): 260-281.

Week 9: Censoring and Truncation

Long, Chapter 7, Sections 1-3

Sigelman, Lee, and Langche Zeng. 1999. Analyzing Censored and Sample-selected Data with Tobit and Heckit Models. *Political Analysis* 8(2): 167-182.

Freeman, David A. and Jasjeet S. Sekhorn. 2010. Endogeneity in Probit Response Models. *Political Analysis* 18(2): 138-150.

Reed, William. 2000. A Unified Statistical Model of Conflict Onset and Escalation. American Journal of Political Science 44(1): 84-93.

Week 10: Sample Selection

Long, Chapter 7, Section 4

Heckman, James J. 1979. Sample Selection Bias as a Specification Error. *Econometrica* 47(1): 153-161.

Sartori, Anne E. 2003. An Estimator for Some Binary-Outcome Selection Models Without Exclusive Restrictions. *Political Analysis* 11: 111-138.

Henesz, Witold J. 2000. The Institutional Environment for Multinational Investment. *Journal of Law, Economics, and Organization* 16(2): 334-364.

Week 11: Split-Sample and Strategic Models

Signorino, Curtis S. and Ahmer Tarar. 2006. A Unified Theory and Test of Extended Immediate Deterrence. American Journal of Political Science 50(3): 585-605.

Xiang, Jun. 2010. Relevance as a Latent Variable in Dyadic Analysis of Conflict. *Journal of Politics* 72(2): 484-498.

Bas, Muhammet Ali, Curtis S. Signorino, and Robert W. Walker. 2008. Statistical Backwards Induction: A Simple Method for Estimating Recursive Strategic Models. *Political Analysis* 16(1): 21-40.

Signorino, Curtis S. 2002. Strategy and Selection in International Relations. *International Internations* 28(1): 93-115.

Nieman, Mark David. 2015. Statistical Analysis of Strategic Interaction with Unobserved Player Actions: Introducing a Strategic Probit with Partial Observability. *Political Analysis*. Forthcoming.

Week 12: Interpreting Interaction Effects

Brambor, Thomas, William Clark, and Matt Golder. 2006. Understanding Interaction Models: Improving Empirical Analyses. *Political Analysis* 14: 63-82.

Franzese, Robert J. and Cindy Kam. 2007. Modeling and Interpreting Interactive Hypotheses in Regression Analysis. Ann Arbor: University of Michigan Press.

Barry, William D., Jacqueline H. R. DeMerritt, and Justin Esarey. 2010. Testing for Interaction in Binary Logit and Probit Models: Is a Product Term Essential? *American Journal of Political Science* 54(1): 248-266.

Thyne, Clayton L. 2010. Supporter of Stability or Agent of Agitation? The Effect of US Foreign Policy on Coups in Latin America, 1960-99. *Journal of Peace Research* 47(4): 449-461.

Week 13: Issues with Cross-Sectional Time-Series and Panel Data

Beck, Nathaniel, Jonathan N. Katz, and Richard Tucker. 1998. Taking Time Seriously: Time-Series-Cross-Section Analysis With a Binary Dependent Variable. *American Journal of Political Science* 42: 1260-1288.

Carter, David B. and Curtis S. Signorino. 2010. Back to the Future: Modeling Time Dependence in Binary Data. *Political Analysis* 18(3): 271-292.

Beck, Nathaniel and Jonathan N. Katz. 1995. What to do (and not to do) with Time-Series Cross-Section Data. *American Political Science Review* 89(3): 634-647.

Green, Donald P., Soo Yeon Kim, and David H. Yoon. 2001. Dirty Pool. *International Organization* 55(2): 441-468.

Tomz, Michael, Judith L. Goldstein, and Douglas Rivers. 2007. Do We Really Know That the WTO Increases Trade? Comment. American Economic Review 97(5): 2005-2018.

Week 14: Multi-level Modeling

Steenbergen, Marco R. and Bradford S. Jones. 2002. Modeling Multilevel Data Structures. *American Journal of Political Science* 46 (1): 218-237.

Shor, Boris, Joseph Bafumi, Luke Keele, and David Park. 2007. A Bayesian Multilevel Modeling Approach to Time-Series Cross-Sectional Data. *Political Analysis* 15(2): 165-181.

Snijeders, Tom and Roel Bosker. Multilevel Analysis: An Introduction to Basic and Advanced Multilevel Modeling. Thousand Oaks, CA: Sage Publications.

Gelman, Andrew and Jennifer Hill. 2007. Data Analysis Using Regression and Multi-level/Hierarchical Models. New York: Cambridge University Press., Ch 11-19

Week 15: Count Models

Long, Chapter 8, Section 1-3

King, Gary, 1988. Statistical Models for Political Science Event Counts: Bias in Conventional Procedures and Evidence for the Exponential Poisson Regression Model. *American Journal of Political Science* 32: 838-863.

Alt, James E., Gary King, and Curtis S. Signorino. 2001. Aggregation among binary, count, and duration models: Estimating the same quantities from different levels of data. *Political Analysis* 9(1): 21-44.

Murdie, Amanda and Johannes Urpelainen. 2015. Why Pick on Us? Environmental INGOs and State Shaming as a Strategic Substitute. *Political Studies*. Forthcoming.

Week 16: Finals Week

Class Presentations

Other Topics

Spatial Econometrics

Beck, Nathaniel, Kristian Skrede Gleditsch, and Kyle Beardsley. 2006. Space Is More than Geography: Using Spatial Econometrics in the Study of Political Economy. *International Studies Quarterly* 50: 27-44.

Franzese, Robert J., Jr., and Jude C. Hays. 2008. Interdependence in Comparative Politics: Substance, Theory, Empirics, Substance. *Comparative Political Studies* 41: 742-780.

Hays, Jude C., Aya Kachi, and Robert J. Franzese Jr. 2010. A Spatial Model Incorporating Dynamic, Endogenous Network Interdependence: A Political Science Application. *Statistical Methodology* 7(3): 406-428.

Thies, Cameron G., Olga Chyzh, and Mark David Nieman. 2015. The Spatial Dimensions of State Fiscal Capacity: The Mechanisms of International Influence on Domestic Extractive Efforts. *Political Science Research and Methods*. Forthcoming.

Network Analysis

Cranmer, Skyler J. and Bruce A. Desmarais. 2011. Inferential Network Analysis with Exponential Random Graph Models. *Political Analysis* 19(1): 66-86.

Rogowski, Jon C and Betsy Sinclair. 2012. Estimating the Causal Effects of Social Interaction with Endogenous Networks. *Political Analysis* 20(3): 316-328.

Franzese, Robert J., Jude C. Hays and Aya Kachi. 2012. Modeling History Dependence in Network-Behavior Coevolution. *Political Analysis* 20(2): 175-190.

Murdie, Amanda. 2014. The Ties that Bind: A Network Analysis of Human Rights International Nongovernmental Organizations. *British Journal of Political Science* 44(1): 1-27.

Event History Modeling

Box-Steffensmeier, Janet M. and Bradford D. Jones. 2004. Event History Modeling: A Guide for Social Scientists. Cambridge University Press.

Boehmke, Frederick J., Daniel Morey and Megan Shannon. 2006. Selection Bias and Continuous-Time Duration Models: Consequences and a Proposed Solution. *American Journal of Political Science* 50(1): 192-207.

Licht, Amanda A. 2011. Change Comes with Time: Substantive Interpretation of Nonproportional Hazards in Event History Analysis. *Political Analysis* 19(2): 227-243.

Semi- and Non-parametric Regression

Keele, Luke. 2008. Semiparametric Regression for the Social Science. Wiley.

Kenkel, Brenton and Curtis S. Signorino. 2011. Data Mining for Theorists. Working Paper.

Mooney, Christopher Z. and Robert Duval. 1993. Bootstrapping: A Nonparametric Approach to Statistical Inference. Thousand Oaks, CA: Sage Publications.

Time-varying Parameters

Park, Jong Hee. 2010. Structural Change in U.S. Presidents' Use of Force. American Journal of Political Science 54(3): 766-782.

Beck, Nathaniel and Jonathan N. Katz. 2006. Random Coefficient Models for Time-Series-Cross-Section Data: Monte Carlo Experiments. *Political Analysis* 15(2): 182-195.

Williams, Laron K. 2014. Long-term Effects in Models with Temporal Dependence. Working Paper.

Brandt, Patrick T. and Todd Sandler. 2010. What Do Transnational Terrorists Target? Has It Changed? Are We Safer. *Journal of Conflict Resolution* 54(2): 214-236.

Nieman, Mark David. 2015. Moments in Time: Temporal Patterns in the Effect of Democracy and Trade on Conflict. Conflict Management and Peace Science. Forthcoming.

Endogeneity

Engle, Robert F., David F. Hendry, and Jean-Francois Richard. 1983. Exogeneity. *Econometrica* 51(2): 277-304.

Kelejian, Harry H. 1971. Two-stage Least Squares and Econometric Systems Linear in Parameters but Nonlinear in the Endogenous Variables. *Journal of the American Statistical Association* 66(334): 373-374.

Boehmke, Frederick J., Olga Chyzh, and Cameron G. Thies. 2014. Addressing Endogeneity in Actor-Specific Network Measures. Working paper.

Keshk, Omar M. G., Brian M. Pollins, and Rafael Reuveny. 2004. Trade Still Follows the Flag: The Primacy of Politics in a Simultaneous Model of Interdependence and Armed Conflict. *Journal of Politics* 66(4): 1155-1179.

Ideal Point Estimation and Latent Variables

Poole, Keith T. and Howard Rosenthal. 2007. *Ideology and Congress*. 2nd Ed. New Brunswick, NJ: Transaction Publishers.

Martin, Andrew D. and Kevin M. Quinn. 2002. Dynamic ideal point estimation via Markov chain Monte Carlo for the US Supreme Court, 1953-1999. *Political Analysis* 10(2): 134-153.

Treier, Shawn and Simon Jackman. 2008. Democracy as a Latent Variable. *American Journal of Political Science* 52(1): 201-217.

Signorino, Curtis S. and Jeffrey M. Ritter. 2002. Tau-b or Not Tau-b: Measuring the Similarity of Foreign Policy Positions. *International Studies Quarterly* 43(1): 115-144.

Schnakenberg, Keith E. and Christopher J. Fariss. Dynamic Patterns of Human Rights Practices. *Political Science Research and Methods* 2(1): 1-31.

Bafumi, Joseph, Andrew Gelman, David K. Park, and Noah Kaplan. 2005. Practical issues in implementing and understanding Bayesian ideal point estimation. *Political Analysis* 13(2): 171-187.

Survey Experiments

Gaines, Brian J., James H. Kuklinski, and Paul J. Quirk. 2007. The Logic of the Survey Experiment Reexamined. *Political Analysis* 15(1): 1-20.

Barabas, Jason and Jennifer Jerit. 2010. Are survey experiments externally valid? *American Political Science Review* 104(2): 226-242.

Brader, Ted A., and Joshua A. Tucker. 2009. What's Left Behind When the Party's Over: Survey Experiments on the Effects of Partisan Cues in Putin's Russia. *Politics and Policy* 37(4): 843-868.

Matching and Regression Discontinuity

Ho, Daniel E., Kosuke Imai, Gary King, and Elizabeth A. Stuart. 2007. Matching as Non-parametric Preprocessing for Reducing Model Dependence in Parametric Causal Inference. *Political Analysis* 15(3): 199-236.

Imai, Kosuke and In Song Kim. 2012. On the Linear Fixed Effects Regression Models for Causal Inference. Working Paper.

Bowers, Jake, Mark M. Fredrickson, and Costas Panagopoulos. 2013. Reasoning about interference between units: a general framework. *Political Analysis* 21(1): 97-124.

Keele, Luke J. and Rocio Titiunik. 2015. Geographic Boundaries as Regression Discountiuities. *Political Analysis*. Forthcoming.

Keele, Luke J., Rocio Titiunik, and Jose Zubizarreta. 2015. Enhancing a Geographic Regression Discontinuity Design Through Matching to Estimate the Effect of Ballot Initiatives on Voter Turnout. *Journal of the Royal Statistical Society, Series A.* Forthcoming.

Model Discrimination

Clarke, Kevin A. 2003. Nonparametric Model Discrimination in International Relations. Journal of Conflict Resolution 47(1): 72-93.

Clarke, Kevin A. 2007. A Simple Distribution-Free Test for Nonnested Model Selection. *Political Analysis* 15(3): 347-363.

Clarke, Kevin A. and Curtis S. Signorino. 2010. Discrimination Methods: Tests for Nonnested Discrete Choice Models. *Political Studies* 58: 368-388.

Vuong, Quang H. 1989. Likelihood Ratio Tests for Model Selection and Non-nested Hypotheses. *Econometrica* 57(2): 307-333.

Multiple Imputation of Missing Data

King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation. *American Political Science Association* 95(1): 49-69.

Honaker, James, and Gary King. 2010. What to Do about Missing Values in Time-Series Cross-Section Data. American Journal of Political Science 54(2): 561-581.

Honaker, James, Gary King, and Matthew Blackwell. 2011. Amelia II: A program for missing data. *Journal of Statistical Software* 45(7): 1-47.

Selection for Case Studies

King, Gary, Robert Keohane and Sidney Verba. 1994. Designing Social Inquiry. Princeton, NJ: Princeton University Press.

Dion, Douglas. 1998. Evidence and Inference in the Comparative Case Study. *Comparative Politics* 30(2): 127-145.

Administrative Issues

Missing an Exam: I expect at least two weeks advance notification that you will miss an exam (i.e. participating in university sponsored activity). You must arrange with me to make up the work in a timely manner. If you are physically unable to contact me in advance (e.g., if you wake up extremely ill), you must contact me (via email or phone) as soon as possible and then bring some form of verification from a physician. Failure to complete an exam without appropriately notifying me results in zero credit for that exam.

Grade Complaints: If for some reason a student is unhappy with their grade on an exam, they may submit their complaint in writing, explain the particular discrepancy, and recommend an appropriate recourse. The instructor will read the memo, re-read the disputed answer, and then assign a new grade. The instructor reserves the right to assign a lower grade after re-reading the answer a second time.

Academic Integrity: All students in attendance at the University of Alabama are expected to be honorable and to observe standards of conduct appropriate to a community of scholars. The University expects from its students a higher standard of conduct than the minimum required to avoid discipline. Academic misconduct includes all acts of dishonesty in any academically related matter and any knowing or intentional help or attempt to help, or conspiracy to help, another student. The Academic Misconduct Disciplinary Policy will be followed in the event of academic misconduct. Examples of academic dishonesty include-but are not limited to-the following:

- Plagiarism—that is, using another's ideas or writings without proper attribution, including sources from the internet;
- copying from another person during an examination;
- assisting another person to cheat by providing information.

Disability Statement: If you are registered with the Office of Disability Services, please make an appointment with me as soon as possible to discuss any course accommodations that may be necessary. If you have a disability, but have not contacted the Office of Disability Services, please call 348-4285 or visit 133-B Martha Parham Hall East to register for services. It is your responsibility to do this in a timely manner.

Severe Weather Protocol: In the case of a tornado warning (tornado has been sighted or detected by radar, sirens activated), all university activities are automatically suspended, including all classes and laboratories. If you are in a building, please move immediately to the lowest level and toward the center of the building away from windows (interior classrooms, offices, or corridors) and remain there until the tornado warning has expired. Classes in session when the tornado warning is issued can resume immediately after the warning has expired at the discretion of the instructor. Classes that have not yet begun will resume 30 minutes after the tornado warning has expired provided at least half of the class period

remains.

UA is a residential campus with many students living on or near campus. In general classes will remain in session until the National Weather Service issues safety warnings for the city of Tuscaloosa. Clearly, some students and faculty commute from adjacent counties. These counties may experience weather related problems not encountered in Tuscaloosa. Individuals should follow the advice of the National Weather Service for that area taking the necessary precautions to ensure personal safety. Whenever the National Weather Service and the Emergency Management Agency issue a warning, people in the path of the storm (tornado or severe thunderstorm) should take immediate life saving actions.

When West Alabama is under a severe weather advisory, conditions can change rapidly. It is imperative to get to where you can receive information from the National Weather Service and to follow the instructions provided. Personal safety should dictate the actions that faculty, staff and students take. The Office of Public Relations will disseminate the latest information regarding conditions on campus in the following ways:

- Weather advisory posted on the UA homepage;
- Weather advisory sent out through Connect-ED-faculty, staff and students (sign up at myBama);
- Weather advisory broadcast over WVUA at 90.7 FM;
- Weather advisory broadcast over Alabama Public Radio (WUAL) at 91.5 FM;
- Weather advisories are broadcast via WUOA/WVUA-TV, which can be viewed across Central Alabama. Also, visit wvuatv.com for up-to-the-minute weather information. A mobile Web site is also available for your convenience.

I reserve the right to modify the syllabus to reflect the pace of the course.