UNIVERSITY OF NORTH TEXAS

DEPARTMENT OF PUBLIC ADMINISTRATION
CHILTON HALL, DENTON

[UNT Internet Course via ZOOM on CANVAS]

PADM 5510 / 6710
Administrative Research Methods II

Course Outline
Fall 2020

Class Meeting: Monday 6.00 – 8.50PM @ Remote

Instructor: Simon A. Andrew, Ph.D.
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Telephone: 940-565-4982
Fax: 940-565-4466
Office: Chilton Hall 204A
Office Hours: Monday 3.00 – 5.30 PM
Or by appointment

Teaching Assistant: Valencia Prentice
Email: ValenciaPrentice@my.unt.edu
Introduction
This course covers quantitative approaches to the study of management and program evaluation. These approaches are important tools used by researchers to inform practitioners (and vice versa) about the field of public administration. The first part of this course builds on what was covered in the first research methods sequence, which stresses data analysis, statistical techniques, and computer applications in the field of public administration. It extends the sequence by examining the basic assumptions of bivariate and multivariate analyses and introduces other quantitative techniques such as dummy and nominal independent variables. We also cover methods for the study of limited dependent variables.

Course Objectives
1. To give students the tools to be an intelligent consumer of statistical analysis results and processes.
2. To develop and learn how to implement public administration and non-profit research strategies.
3. To provide students the basic skill to write program evaluation proposal and apply quantitative methods.

Required Text**

**Note that a student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Recommended Readings
J.S. Long (1997) *Regression Models for Categorical and Limited Dependent Variables,* Advanced Quantitative Techniques in the Social Science Series 7, Sage Publications; Chapters 1, 2, and 3


Materials
Electronic Calculator is handy for doing simple calculations.

Software
**SPSS / IBM:** The UNT released [UIT Virtual Statistics Lab](https://it.unt.edu/virtual-lab/) (Links to an external site). The lab provides access to all the statistics software for which UNT maintains licenses without the need to install those applications on their local computer. Install the SPSS software so that we can go through the examples and exercises.
Dataset
Course Grading (PhD Students)
Homework 50 %
(2 sets of homework, 25% each)
Exam 30 %
Research Proposal 20 %
1st Draft (5%)
Final Proposal (15%)

Course Grading (MPA Students)
Homework 50 %
(2 sets of homework, 25% each)
Exam 30 %
Program Evaluation Proposal 20 %
Project summary (5 %)
Final Project (15%)

Grades Breakdown
A = 100–90%  B = 89–80%  C = 79–70%  D = 69–60%  F = 59% below

Course Policies
1. All assignments must be turned in on time.
2. No work will be accepted after 5 pm on Monday, 7 December 2020.
3. If you are using a computer or other technology to take notes, this is fine. It is not ok, however, to surf the web, text others, or read or send emails during class time. If you choose to ignore this, plan to retake the class at a later date as it will result in one-full level grade point deduction from your final course grade (i.e., your overall grade in the course will move from an A to a B, a B to a C, etc.).

A Few Final Comments
1. A sure-cut way to make life miserable for you and me is to delay attempting to master the course material until the end of the semester. Unlike many “substantive” courses, you cannot delay your work until the last few weeks before the final exam and expect the course to “come together.” The material for the course is (to use an overused--but very accurate--expression) accumulative; if you do not master the material on a week by week basis; it will not come together at the end. I know you have heard this before, but for this course it’s true.
2. For the quantitative portion of this course, you need to be very attentive throughout the course to the proper language for describing quantitative research findings. It is not enough to read the material, say to yourself “this makes sense,” and turn your attention to something else. You need to know the material well enough to be able to discuss it and write about it using the standard language for communication. So, when reading, be very careful to note the precise phrasing and sentence structure used by the authors.
Student Perception of Teaching (SPOT)
Students are strongly encouraged to complete the Student Perception of Teaching (SPOT) survey. This short survey will be made available on-line at the end of the semester.

Policy on Disability Accommodation
Students with disabilities needing academic accommodation should (1) register with and provide documentation to the Office of Disability Accommodation (ODA); and (2) bring a letter to the instructor indicating the need for accommodation and what type. This should be done during office hours before the 12th class day of regular semesters.

Acceptable Student Behavior
Student behavior that interferes with an instructor’s ability to conduct a class or other students’ opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated the Code of Student Conduct. The university’s expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at www.unt.edu/csrr
# Course Outline and Schedule

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<tr>
<th>Date/Week</th>
<th>Course Outline</th>
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<tr>
<td><strong>Week 1</strong></td>
<td><strong>Introduction and Housekeeping</strong></td>
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<tr>
<td>24 Aug</td>
<td><strong>Lecture 1: Overview:</strong> Introduction to Inferential Statistics and Confidence Interval</td>
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<td><strong>Week 2</strong></td>
<td><strong>Lecture 2: Overview:</strong> Test of Significance—Hypothesis Testing (one sample); Testing the difference between two groups (dependent and independent samples)</td>
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<td>31 Aug</td>
<td>Reading Meier et al (2009) <strong>Chapters 11, 12, 13, &amp; 14</strong></td>
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<td><strong>Week 3</strong></td>
<td>Labor Day – No Class</td>
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<td>7 Sept</td>
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| **Week 4** | **Lecture 3 1:** Bivariate Analysis and Correlation | *
| 14 Sept | Reading Meier et al (2009) **Chapter 18** | |
| **Week 5** | **Lecture 4:** Multiple Regression Analysis | ***
| 21 Sept | Reading Meier et al. (2009) **Chapters 19 & 21** | |
| **Week 6** | **Lecture 5:** Understanding Multiple Regression Assumptions | **
| 28 Sept. | Reading Meier et al. (2009) **Chapter 21** on Multicollinearity and **Chapter 19** on Heteroscedasticity | **Homework 1 due**
| **Week 7** | **Lecture 6:** Dichotomous Variables and Nominal Independent Variables | **
| 5 Oct | Reading Meier et al. (2009) **Chapter 19** and pay special attention to **Chapter 21**, page 395. | **1st Draft Research/Program Proposal due Friday**
| **Week 8** | **Lecture 7:** Introduction to Logistic Regression | **
| 12 Oct | Reading J.S. Long (1997) *Regression Models for Categorical and Limited Dependent Variables*, Advanced Quantitative Techniques in the Social Science Series 7, Sage Publication; **Chapters 1, 2, & 3** | **
| **Week 9** | **Lecture 8:** Maximum Likelihood Test | **
| 19 Oct | J.S. Long (1997) *Regression Models for Categorical and Limited Dependent Variables*, Advanced Quantitative Techniques in the Social Science Series 7, Sage Publication; **Chapters 1, 2, & 3** | **
| **Week 10** | **Lecture 9:** Models with Quadratics (Polynomial Model) and Logarithmic Functional Forms | **
| 26 Oct | Reading Meier et al. (2009) **Chapter 21** on Polynomial Model (page 405); **Chapter 20** on logarithms (page 374) | **
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<tr>
<th>Week 11</th>
<th><strong>Lecture 10</strong>: Measurements Theory: Measurements Reliability and Validity; Research Design: Quasi-Experimental Design &amp; Experimental Designs</th>
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<th>Week 12</th>
<th><strong>Lecture 11</strong>: Research Design Revisited&lt;br&gt;<strong>Survey Research</strong>&lt;br&gt;*****Review for Exam</th>
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<td>9 Nov</td>
<td><strong>Week 13</strong>&lt;br&gt;<em><strong>Examination</strong></em></td>
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<td>16 Nov</td>
<td><strong>Week 14</strong>&lt;br&gt;<strong>Doctoral Students Presentation – 15 minutes (max)</strong></td>
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<tr>
<td>23 Nov</td>
<td><strong>Week 15</strong>&lt;br&gt;<strong>MPA Student Presentations - 15 minutes (max)</strong></td>
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<td>30 Dec.</td>
<td><strong>Week 16</strong>&lt;br&gt;<strong>Final Draft of Program Evaluation Proposal Due (MPA Students)</strong>&lt;br&gt;<strong>Final Proposal (Write-up) (PhD Students)</strong></td>
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| Homework 2 due (Monday) |

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Note: The schedule and assignments may be revised as the course progresses and new material becomes available.
PROGRAM EVALUATION PROPOSAL (Only for MPA Students)

You are asked to write a program evaluation proposal. You will be responsible for the development of a proposal to design and evaluate an intervention program of your choice. You are not expected to carry out the proposed scheme, but you should, however, be realistic in its proposal. The proposed plan will be strengthened by your familiarity with “real-life” contexts. If you do not have experience with existing programs or agencies, you may want to talk with people who work in such settings.

The guideline for a program evaluation proposal is provided below.

Three stages are involved when preparing for your final submission.

**Stage 1:** Project Summary: You are expected to write a semi-formal summary of the program evaluation proposal and the chosen evaluation design. The summary should explain the specific aim of your project including background and significance (outline below).

**Stage 2:** First Draft: You provide e-copy of the first draft of your proposal. I will provide comments.

**Stage 3:** You will present your program evaluation proposal in Class. Your presentation** will take 15-20 minutes. If changes need to be made, you will be asked to make them.

**The final proposal submitted should not exceed 15 pages** (excluding tables and figures bibliography and appendices). The final draft of your proposal should be typed with 1.5 line spacing, 12-point font, and standard one inch margins.
GENERAL GUIDELINES ON HOW TO WRITE A PROGRAM EVALUATION PROPOSAL

It is expected that all program evaluation proposals will emphasize the methods you have learned in the research methods sequence. You will be required to present measures which you think could be employed in this research. Essentially, your group’s proposed plan should answer the following questions:

1. What do you intend to do? (Specific Aims)
2. Why is the work important? What has already been done? (Background and Significance)
3. How are you going to do the work? (Research Design)
4. How are you going to analyze the data? (Analysis)

**Specific Aims:** Describe the broad and/or brief objectives of the program to be evaluated, and what the specific proposed evaluation is intended to accomplish. The section typically begins with a general statement about the program to be evaluated, with a focus on a specific problem that needs to be evaluated, to be followed by the rationale or justification for the proposed evaluation. This section generally covers the following elements:

1. State the research problem, which is often referred to as the purpose of the evaluation proposal.
2. Provide the context and set the stage for your research question in such a way as to show the evaluation proposal is necessary and important.
3. Present the rationale of your proposed study and clearly indicate why it is worth doing.
4. Briefly describe the major issues to be addressed.
5. Identify the key independent and dependent variables. That is, state your hypothesis or theory, if any. (Please do not confuse the hypothesis with the statistical null hypothesis.)

**Background and Significance:** Briefly sketch the background leading to the present proposal, critically evaluate existing knowledge or literature, and specifically identify what are the main concerns according to program staff, clients, and others outside the program. State concisely the importance or relevance of the evaluation proposal by relating the specific aims of the proposal to the broad and main objective(s) of the program to be evaluated.

Note that I do not expect an extensive review of the current knowledge about the program you proposed to evaluate. However, I do expect some review of the existing literature regarding a particular program i.e., as a means to demonstrate your knowledge of the research problem, your understanding of the theoretical and research issues related to your research question, and your ability to critically evaluate relevant literature information. In short, your brief review of the current literature should convince your readers that your proposal will make a significant and substantial contribution to a particular program’s effectiveness.

It is also helpful to keep in mind that you are telling a story to an audience. Try to tell it in a stimulating and engaging manner. Do not bore them, because it may lead to rejection of your otherwise worthy proposal.

**Research Design and Methods:** The research design section is very important because it tells the audience how you plan to conduct your proposed evaluation of a program. It provides the audience with your work plan and describes the activities necessary for the completion of your project. So, in general, your group proposal should describe the evaluation design and the
procedures to be used to accomplish the specific aims of the project. Address how the data will be collected, including measurement issues.

Specifically, for quantitative methods, the research design typically consists of the following:

1. Research Design: What kind of design will you choose? For example, will a control or comparison group be used? Is there a need for benchmarking or developing a baseline of current program performance? Are periodic or follow-up measurements foreseen and if so, over what time period?
2. Subjects or participants (unit of analysis): Who will take part in your study? What kind of sampling procedure will you use?
3. Instruments: What kind of measuring instruments or questionnaires will you use? Why did you choose them? What are the procedures to ensure they are valid and reliable?
4. Procedure: How do you plan to carry out your study? What activities are involved? How long will it take? As part of this section, you may provide a tentative sequence or timetable for the main activities involved and attach that in an appendix.

The guiding principle for writing the research design section is that it should contain sufficient information for the reader to determine whether the methodology is sound. Some even argue that a good proposal should contain sufficient details for another qualified researcher to implement the study. You need to demonstrate your knowledge of research methods and make the case that your approach is the most appropriate and most valid way to address your research question.

Please note that your research question may be best answered by qualitative research. However, there are no well-established and widely accepted canons in qualitative analysis; your method section needs to be more elaborate than what is required for traditional quantitative research. More importantly, the data collection process in qualitative research has a far greater impact on the results as compared to quantitative research. That is another reason for greater care in describing how you will collect and analyze your data using qualitative methods. When appropriate, you may want to consider using both, qualitative and quantitative methods.

**Analysis:** Describe what you will do both during and after your have collected the data to increase the utilization of the results of your evaluation. In other words, how are you going to analyze and interpret your data? Do the data meet the requirements of different statistical techniques? This is when your knowledge of the different research methods covered in class becomes very important.
POLICY ON CHEATING AND PLAGIARISM
Notice of this policy shall be given in all public administration classes each semester, and written copies shall be available in the public administration departmental office.

Definitions
The UNT Code of Student Conduct and Discipline defines cheating and plagiarism "as the use of unauthorized books, notes, or otherwise securing help in a test; copying other's tests, assignments, reports, or term papers; representing the work of another as one's own; collaborating without authority with another student during an examination or in preparing academic work; or otherwise practicing scholastic dishonesty."

Penalties
Normally, the minimum penalty for cheating or plagiarism is a grade of "F" in the course. In the case of graduate departmental exams, the minimum penalty shall be failure of all fields of the exam. Determination of cheating or plagiarism shall be made by the instructor in the course, or by the departmental faculty in the case of departmental exams.

Cases of cheating or plagiarism on graduate departmental exams, papers, theses, or dissertations shall automatically be referred to the departmental Curriculum and Degree Programs Committee. Cases of cheating or plagiarism in ordinary course work may, at the discretion of the instructor, be referred to the Curriculum and Degree Program[s] Committee in the case of either graduate or undergraduate students. This committee, acting as an agent of the Department, shall impose further penalties, or recommend further penalties to the Dean of Students, if they determine that the case warrants it. In all cases, the Dean of Students shall be informed in writing of the case.

Appeals
Students may appeal any decision under this policy by following the procedures laid down in the UNT Code of Student Conduct and Discipline.

POLICY ON DISABILITY ACCOMMODATION
The Department of Public Administration, in cooperation with the Office of Disability Accommodation, complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request during regular office hours before the 12th class day of regular semesters (4th class day of summer sessions).

Adopted 1977, revised 1993