

**PSC/SOC 401 SEC 01**  
**Research Methods**  
**MSSU, Fall 2018**  
**Tuesday and Thursday 1:00 - 2:15 PM**

## 1 Class Information

- ⇒ **Professor:** Nicholas P. Nicoletti, Ph.D.
- ⇒ **Office:** Webster Hall 226-B and Taylor 210
- ⇒ **Phone:** (417) 625-9572<sup>1</sup>
- ⇒ **Email:** nicoletti-n@mssu.edu
- ⇒ **Class Time:** Tuesday and Thursday 1:00 - 2:15 PM
- ⇒ **Room:** Webster Hall 208
- ⇒ **Office Hours:** Mondays from 11:00 AM 2:00 PM (3 hours) will be in my Webster Hall 226-B Office. Wednesdays from 11:00 AM 2:00 PM (3 hours) will be in the Taylor 210 Honors Office. (Office Door is Always Open, Please Stop By)

## 2 Course Description

**Credit Hours:** 3 CR

**Prerequisites: Political Science Majors:** 9 Hours of Political Science Credits. **Sociology Majors:** 9 Hours of Sociology Credits.

**Course Type:** Face-to-Face

This course is an introduction to the ways in which political scientists and sociologists conduct research. An emphasis will be placed on quantitative analysis and the decisions faced by social scientists when designing and applying social research. The course will be an exploration of the skills employed in conducting research as utilized in various designs, including interviewing, observation, survey design, and content analysis. We will cover methods of problem and hypothesis formulation, data collection and instrumentation. There will also be an emphasis placed on ethical issues in research.

In the course of your college education research methods is one of the most important elements. Understanding research methods is vital for two reasons. First, you will need a basic understanding of research methods to understand the works in your field. Most scholarly articles from peer-reviewed journals follow a pattern of analysis we call the *scientific method*. Generally, you will find that the authors have identified a puzzle or problem that they believe is important to explain or solve. This question is usually narrow in nature and guided by the extant research. Next, the author will develop an explanation

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<sup>1</sup>If you leave a voicemail, please leave your name, what class you are in, a description of the problem/question, and slowly leave a number where I may reach you. The best way to reach me is by email.

which sheds light on the puzzle or attempts to solve the problem. These explanations can take the form of a framework, theory, or model. Frameworks are fairly abstract and general, while theories and models are more specific, often identifying *causal mechanisms*. Theories are literally stories about how the world works that usually take a causal form: X has a direct affect on Y. Or X directly affects Z, and Z directly affects Y, therefore X indirectly affects Y. Once an explanation has been established the author will then derive testable *hypotheses* or *observable implications* which would follow if the theory were to be correct. Finally, the author will choose an appropriate research tool (e.g. statistical model, experiment, quasi-experiment, qualitative case study, etc.) to test the hypotheses. This process is generally known as the *hypothetico-deductive model* or *scientific method*. While this is just one version of the scientific process, it is the one you will most commonly encounter in social science literature.<sup>2</sup> The second reason research methods is vital to your education is because in order to conduct your own original research you need to understand the structure and tools necessary to produce valid and reliable conclusions.

### 3 Objectives

1. Demonstrate the ability to analyze and evaluate scholarly research in the social sciences.
2. Demonstrate the ability to develop and defend conclusions using relevant research techniques, evidence, and reasoned argument.
3. Compare and contrast research designs with the ability to choose the proper design for a chosen research question/problem.
4. Demonstrate the ability to construct a literature review, develop a novel framework/theory/model to answer a research question, derive observable implications from the theoretical framework, and choose the proper research design and instrumentation to test the hypotheses appropriately.
5. Demonstrate the ability to collect data relevant to the research design.
6. Understand the ethical concerns with conducting research on human subjects and research methods in general.
7. Demonstrate the ability to write an original research design in the social sciences.

### 4 Course Expectations

I expect that *ALL* students will come to class each week having read the material assigned for that day. **Readings are due on the day they are listed in the syllabus AND you are required to bring the readings with you to class that day.** Some of the readings are theoretically and analytically rigorous. Simply put, many of them are difficult and will require students to do more than skim through the pages. Students are expected to go beyond the memorization of core concepts and vocabulary words; you will be expected to apply

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<sup>2</sup>Other models of the scientific method include *model based inquiry*.

these concepts throughout the class and especially on examinations.

Taking attendance is required by university policy and by U.S. federal government regulations. Attendance will be taken regularly at the start of class. However attendance is not enough to earn participation credit. I expect that students participate in class. Participation is worth 10% of your final grade and *simple attendance is not good enough*. You are required to *answer* and/or *ask* questions during this class. If you are someone that does not like to talk during class, you may want to reconsider your enrollment. **If you do not participate you will not be able to earn a major portion of your grade.** Part of your participation grade will be calculated using the *Top Hat Monocle* online software. See the section on *Top Hat* for more information on this class tool.

Late arrivals are annoying and disturb the class. However, **I would rather a student arrive late than not come to class at all.** Late students will be taking a chance. This class will include pop quizzes that I call *D.I.R.T.* quizzes, which stands for “Did I Read Today”. *D.I.R.T.* quizzes are given at the very beginning of class via the *Top Hat* system. If you are too late to take the quiz you automatically lose the quiz points for that day, no exceptions. I never allow makeup quizzes for any reason. Thus, there are consequences for being late. Moreover, quizzes are not always comprised of the same number of points. Sometimes they are worth 1 point and other times they can be worth up to 3 points (see the Grading section for point worth). The number of points the quizzes are worth is not predestined - thus it is important to be on time and limit class absences. Please give the class and I the courtesy of refraining from perpetual late arrivals.

All exams are online via Blackboard and must be completed by the due date on the syllabus. There are no makeups for exams. Since these exams are taken online, students can complete them at their leisure anytime up to the due date. All examinations are timed and must be completed in a single sitting; in other words, you cannot save your examination and come back to it another time. Given that these exams are online, they are open book and open notes. However, since the exams are timed it will be difficult to search through study materials and complete the exam before the time expires. Students are forbidden from using the Internet to conduct online searches during the Exams. You will still need to study prior to taking the exam. **There are absolutely no makeups for examinations or pop quizzes; if you miss class on a day that I give a quiz, you will lose the quiz points for that day — NO EXCEPTIONS.**

I expect that the following classroom norms will be followed in my class. Please refrain from listening to mp3 players/all music devices, texting, instant messaging, Facebooking, Tweeting, Snapchatting, Yik Yaking, Whispering, using any other computer application (mobile or otherwise), or typing assignments for other courses during this class. **Take the earphones out of your ears please.** Cell Phones should only be used for the *Top Hat* software. Laptop computers are a privilege and may be used for note taking or reading digital copies of the textbook; this privilege may be revoked at my discretion at any time. Disruptive behavior will not be tolerated. Students are expected to be respectful of their peers and various points of view. Discussion is encouraged but rude responses will not

be tolerated. Finally, please refrain from holding private conversations with your peers during class; this behavior is distracting to other students and the overall classroom environment. If I become aware that you are violating any of these norms, you will be asked to leave the classroom.

Multiple students often have the same question regarding course material or administrative issues. All relevant information about the course should be contained in this syllabus. Thus, students should always consult the syllabus first when they have a general / administrative question. In the event that the answer to your question is not in the syllabus, I have setup a Discussion Forum, under the "Discussion Board" tab in Blackboard, where students can anonymously post a question about administrative issues or course material. Utilizing this mechanism allows all students to gain access to the answers to frequently asked questions. Hence, always check the discussion forum for the answer to your question (after you have consulted the syllabus). If the answer to your question is not in the discussion forum, create a new post and I will answer your question. Of course, students are free to email me or stop by my office hours with any questions; I understand that some questions / issues must be resolved outside of the discussion forum.

All students in my classes are expected to check their school email regularly (I suggest once per day). I communicate solely via email sent to your **school email address**. Students are expected to use their school email address when sending messages to the professor. I will NOT make special accommodations for students that want to use personal email addresses. All email communications will be sent and received via your school email address.

No form of video/audio recording or photography will be permitted in my class without permission. I reserve the right to request copies of any recordings in any form taken in my class.

I expect a lot from students in my class, so you ought to expect something from me. You can expect me to come to class prepared, enthusiastic, and open to questions at any time. You can expect me to always be available during my office hours and to answer emails within a 24 hour window (outside of holidays and weekends). *If you are struggling with the material do not hesitate to see me!* I take my teaching responsibility seriously and I strive to be the best possible educator I can be. I will often ask for your feedback during the course and I take your input seriously.

## 5 Time on Task Statement

For every one credit hour in which you are enrolled, you will spend approximately two to three hours outside of class studying. Therefore, to help determine the course load most appropriate for you, use the formula: 3 credit hours (1 course) = 3 hours in class per week = 6-9 hours study time per week.

## 6 Required Texts

- ◇ Babbie, Earl R. (2013). *The Practice of Social Research, 13<sup>th</sup> Edition*. Belmont, CA: Thomson/ Wadsworth. ISBN: 9781133049791.
- ◇ TopHat Monacle Subscription - About \$26 for the semester (depending on where you buy the code, as the bookstore marks up the subscription). To use this software you will need a mobile device such as, a laptop, tablet, smart-phone, or a cell phone with texting capabilities (Subscription card purchased at Bookstore or online).
- ◇ The remaining readings are a mixture of scholarly articles and book chapters which will be posted on Blackboard. A “†” indicates that the reading is posted on Blackboard. A “∇” indicates that the reading is in the physical Course Reserve in the MSSU libraries.
- ◇ The References section of this syllabus provides a list of readings for this class in the American Political Science Association (APSA) citation style, which is a variant of APA.

### 6.0.1 Proper Email Etiquette

**This is the format I expect all emails to be sent in:**

To: nicoletti-n@mssu.edu  
From: Your Email Address Here  
Subject: Always Include a Subject Line

Dear Professor Nicoletti,

Your message should be written here using complete sentences.

Thank you (Or Other Valediction),  
Jane/John Doe Student

## 7 Grading

Students can earn a total of 100 (non-extra credit) points per semester. Up to 15 points can be earned from successfully answering weekly D.I.R.T. quizzes correctly. Up to 30 points can be earned from the three course Examinations. Up to 10 points can be earned from participating in class throughout the semester and participating in *Top Hat* participation questions. Up to 40 points can be earned by completing the Final Research Paper and the 5 Research Paper assignments. Finally, up to 5 points can be earned by completing the Final Presentation. This means that each point in the class is literally worth one percent of your final grade. In other words, the denominator for your grade will change throughout the semester as points are accumulated. For example, by mid-semester students will have the

possibility to earn approximately 50 points in the class. Let's say that you earned 41 total points by mid-semester. To figure out your grade simply divide 41 by 50 and multiply by 100:  $(\frac{41}{50}) * 100 = 82$ . This would mean that you earned a B halfway through the semester. By the end of the semester - when all assignments are turned in - there will be 100 total points that could have possibly earned in the course. Thus, if you earned 75 points out 100 possible points, your grade would be a 75 which is a C. Extra credit points also count directly toward your final grade just like regular points do. However, these points are not included in the final grade denominator. For example, let's say that by the end of the semester a possible 5 extra credit points could have been earned. Technically, this means that there was a possible 105 points that students could have earned. However, no matter how many of those extra credit points you earned, the grade is still out of 100, not 105.

- \* D.I.R.T. Quizzes on the Readings Due that Day worth 15% of the Final Grade.
- \* Literature Review Assignment worth 5 points, or 5% of your Final Grade.
- \* Theoretical Framework Assignment worth 5 points, or 5% of your Final Grade.
- \* Hypotheses Assignment worth 5 points, or 5% of your Final Grade.
- \* Research Design/Methodology Assignment worth 5 points, or 5% of your Final Grade.
- \* Data Collection Assignment worth 5 points, or 5% of your Final Grade.
- \* Final Research Design Assignment (the above assignments edited, revised, and formatted) worth 15 points, or 15% of your Final Grade.
- \* Final Presentation worth 5 points, or 5% of your Final Grade.
- \* Three Exams, worth 10 points each, for a total of 30 points, worth 30% of the Final Grade.
- \* Participation (TopHat): 10%.

## 8 Grading Distribution

- ✓ A = 90-100
- ✓ B = 80-89
- ✓ C = 70-79
- ✓ D = 60-69
- ✓ F = 0-59

## 9 Academic Integrity Statement

Cheating and plagiarism (using someone else's work or ideas without proper citation) will not be tolerated. Cheating and/or plagiarism is a serious offense and can have severe consequences. Cell phones, PDAs, tablets, laptops, digital cameras or electronic devices of any kind (calculators can be utilized if necessary) are banned from all quizzes, except for the use of the Tot Hat software. Students using electronic devices during quizzes for anything other than Top Hat will fail the assignment. If you are taking a quiz and are found using an electronic device inappropriately, I will be forced to fail your assignment

and you will receive a zero. Of course there are other ways to cheat and all of them will result in the same consequence, complete failure of the assignment. The MSSU's policy on Academic Integrity and the plagiarism judicial process is as follows:

Missouri Southern State University is committed to academic integrity and expects all members of the university community to accept shared responsibility for maintaining academic integrity. Academic work is evaluated on the assumption that the work presented is the student's own, unless designated otherwise. Submitting work that is not one's own is unacceptable and is considered a serious violation of University policy. Cheating is a serious offense that invalidates the purpose of a university education. Any student who takes credit for the work of another person, offers or accepts assistance beyond that allowed by an instructor, or uses unauthorized sources for a test or assignment is cheating. Students must be conscious of their responsibilities as scholars, to learn to discern what is included in plagiarism as well as in other breaches of the Student Handbook, and must know and practice the specifications for citations in scholarly work. When dealing with cases of academic dishonesty, the course instructor may choose to use the campus judicial system; this includes filing an incident report with the Dean of Students, who may act on the report by issuing a written warning or by recommending disciplinary probation, suspension or expulsion. Penalties for academic dishonesty may include a failing grade on the assignment, a failing grade in the course, or any other course-related sanction the instructor determines to be appropriate.

## **10 Similarity Detection Software**

To prevent and detect plagiarism, I may require students to use similarity detection software (e.g. SafeAssign) in this course. Textual similarity software compares submitted student text to a database of millions of previously published documents, including those on the public Internet, a proprietary collection of published articles, as well as every student paper previously submitted to the detection software (including my class assignments from previous semesters). When similarities between student text and an existing document are found, the software identifies those similarities for the instructor and/or student to review. Similarity alone is not evidence of academic misconduct, as such material may be correctly cited. This software may be used as an educational tool to assist students in learning how to properly cite resources, to decrease instances of academic misconduct, and/or to assist in the identification of acts of academic misconduct.

## **11 Disability Accommodation Statement (ADA)**

If you are an individual with a disability and require an accommodation for this class, please notify the instructor or the Coordinator of Student Disability Services, at the Student Success Center (417) 659-3725. I will make every effort to assist students with special

needs. Students dealing with stress-related or other medical issues should visit the Willcoxon Health Center, Billingsly Room 242.

## **12 Non-Discrimination Statement**

Missouri Southern State University emphasizes the dignity and equality common to all persons and adheres to a strict non-discrimination policy regarding the treatment of individual faculty, staff, students, third parties on campus, and applicants for employment and admissions. In accord with federal law and applicable Missouri statutes, the University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, pregnancy, ancestry, age, disability, genetic information, veteran status, or any other legally protected class, in employment or in any program or activity offered or sponsored by the University, including, but not limited to, athletics, instruction, grading, the awarding of student financial aid, recruitment, admissions, and housing. Questions, concerns, and reports about Title IX, including sexual misconduct or pregnancy educational planning, should be directed to the Title IX Coordinator in the Student Affairs Office at (417) 625-9532.

I will seek to keep information private to the greatest extent possible. However, as an instructor, I have a mandatory reporting responsibility. I am required to share information regarding sexual misconduct or information about a crime that may have occurred related to Title IX. Students may speak to someone confidentially by contacting a counselor in the Advising, Counseling, and Testing Services Office (ACTS) at (417) 625-9324. Crime reports to law enforcement can be made at (417) 623-3131.

## **13 Copyright Statement**

You are encouraged to use the materials from these courses to learn. You can listen, read, view and interact with the pages. You can print them out for your own use. You may not, however, let others not registered in the courses hear audio, view or read pages, either on the screen or printed out. You may not make copies of these copyrighted and all rights reserved materials electronically or optically without express permission from the copyright holder. You may not incorporate these copyrighted materials or derivatives into other works. The copyright includes the course artwork. Some portions of the courses use material from other copyrighted material. These materials are noted and are used with permission of the author, or under compliance with federal guidelines. You are encouraged to use materials you create as part of the course, however, you may not use materials created by others taking the course without their written permission. This includes but is not limited to written assignments submitted to the instructor, postings to discussion groups or any online comments or other collaborative events. MSSU will not use any of your work for purposes other than your learning without getting your written permission. If we use your materials with your permission, we will credit your work if you so desire.



## 14 Participation

Attendance is an important part of the college learning experience. I expect students to come to class prepared (having done the readings and assignments) and ready to participate in the form of answering and asking questions. Participation is worth approximately 10% of your grade. This will be a combination of your personal in-class participation and your participation in *Top Hat Monocle* exercises given during class.

### 14.1 TopHat Monocle Subscription

TopHat Monocle Software is a digital subscription for students that cost approximately \$20 for the semester. The software allows your professor to: (1) Take attendance each class, (2) Give pop quizzes, and (3) intermittently ask questions throughout lecture. These questions will count toward your participation grade which is worth 10% of your final grade. Each class you will need to have your mobile device ready so that you can answer the questions pertinent to the lecture. I expect that students will not abuse the privilege of using their mobile device during class. The software is intended to make lecture more interactive and fun, not to give students an excuse to text.

The first week of classes I will send each person an email inviting them to access the TopHat Software. When you receive the email please use the subscription code purchased in the bookstore to access and enroll in the course.

### 14.2 Inclement Weather and Course Cancellation Policy

If inclement weather occurs during Finals Week resulting in a closing, the printed and online versions of the Schedule of Classes contain information about a contingency plan for finals.

If the professor cancels class for any reason during the semester, an alternative online assignment (Top Hat or Blackboard) will be posted.

## 15 Course Schedule

### 15.1 Week 1: August 20 — 26, 2018

#### 15.1.1 ⇒ Tuesday, August 21: Course Introduction

- ★ Course Introduction and Administrative Review.
- ★ Acquire Textbook.
- ★ Acquire Access to Top Hat Monocle Online Participation Account.

#### 15.1.2 ⇒ Thursday, August 23: What is Science? What is the Process?

- ★ Lecture on the Scientific Method.

- ★ Go to <http://guides.library.vcu.edu/lit-review> and review this short guide for writing a Literature Review. You will have to click on the different PDF documents to view and read them.

## **16 Part One: Introduction to Social Science and the Nature of Ontology**

### **16.1 Week 2: August 27 — September 2, 2018**

#### **16.1.1 ⇒ Tuesday, August 28: What is Social Science?**

- ★ Babbie, Chapter 1: Human Inquiry and Science, pp. 1-16.
- α August 27 - Drop/Add Fees & Late Registration Fees Begin.

#### **16.1.2 ⇒ Thursday, August 30: What is Social Science?**

- ★ Babbie, Chapter 1: Human Inquiry and Science, pp. 17-29.
- α August 31 - Last Day for a Full Refund of Fees

### **16.2 Week 3: September 3 — 9, 2018**

#### **16.2.1 ⇒ Tuesday, September 4: Theory Construction**

- ★ Babbie, Chapter 2: Paradigms, Theory, and Social Research, pp. 31-43.

#### **16.2.2 ⇒ Thursday, September 6: Theory Construction**

- ★ Babbie, Chapter 2: Paradigms, Theory, and Social Research, pp. 43-59.

### **16.3 Week 4: September 10 — 16, 2018**

#### **⇒ Tuesday, September 11: Ethics and the Human Subject Institutional Review Board**

- ★ Babbie, Chapter 3: The Ethics and Politics of Social Research, pp. 61-69.
- ★ Register and Begin the Humans Subjects Research Participants Training Through the *Collaborative Institutional Training Initiative* (CITI) Website (<https://www.citiprogram.org/>). This course will take approximately 3 hours to complete.

#### **⇒ Thursday, September 13: Ethics and the Human Subject Institutional Review Board**

- ★ Babbie, Chapter 3: The Ethics and Politics of Social Research, pp. 69-85.
- ✓ **Literature Review and Research Question Assignment is Due at Start of Class.** Upload your assignment to the Blackboard Drop-Box with Safe Assign.
- α September 12 - Withdrawal after this Date-No Refund of Fees.

## **17 Part Two: Research Design, Data Collection, and the Structure of Inquiry**

### **17.1 Week 5: September 17 — 23, 2018**

#### **17.1.1 ⇒ Tuesday, September 18: Research Design and Hypotheses**

- \* Babbie, Chapter 4: Research Design, pp 87-103.

#### **17.1.2 ⇒ Thursday, September 20: Research Design and Hypotheses**

- \* Babbie, Chapter 4: Research Design, pp. 103-122.
- ✓ **Exam 1 is due on September 30 by 11:59 PM.** Exam 1 will cover Chapters 1, 2, 3, and 4.

### **17.2 Week 6: September 24 — September 30, 2018**

#### **17.2.1 ⇒ Tuesday, September 25: Operationalizing the Abstract and Measuring Variables**

- \* Babbie, Chapter 5: Conceptualization, Operationalization, and Measurement, pp. 124-140.
- \* Introduction to potential data sources and social science databases.

#### **17.2.2 ⇒ Thursday, September 27: Operationalizing the Abstract and Measuring Variables**

- \* Babbie, Chapter 5: Conceptualization, Operationalization, and Measurement, pp. 140-156.
- \* Introduction to potential data sources and social science databases.
- ✓ **Human Subjects Training Assignment is Due at Start of Class. A copy of the certificate must be handed in. You can print a certificate from the CITI website.**

### **17.3 Week 7: October 1 — 7, 2018**

#### **17.3.1 ⇒ Tuesday, October 2: The Scientific Method of Sampling**

- \* Babbie, Chapter 7: The Logic of Sampling, pp. 186-205.

#### **17.3.2 ⇒ Thursday, October 4: The Scientific Method of Sampling**

- \* Babbie, Chapter 7: The Logic of Sampling, pp. 205-224.
- ✓ **Theory Assignment is Due at Start of Class** Upload your assignment to the Blackboard Drop-Box.

## **18 Part Three: Testing Our Hypotheses, Modes of Observation and Research Design**

### **18.1 Week 8: October 8 — 14, 2018**

#### **18.1.1 ⇒ Tuesday, October 9: Experiments - The Gold Standard of Causal Analysis**

★ Babbie, Chapter 8: Experiments, pp. 227-236.

#### **18.1.2 ⇒ Thursday, October 11: Experiments - The Gold Standard of Causal Analysis**

★ Babbie, Chapter 8: Experiments, pp. 236-251.

### **18.2 Week 9: October 15 — 21, 2018**

#### **18.2.1 ⇒ Tuesday, October 16: NO CLASS, FALL BREAK**

★ FALL BREAK, NO CLASS

#### **18.2.2 ⇒ Thursday, October 18: Survey Research and Observational Design**

★ Smith, Tom W. and Jaesok Son. (2015). "General Social Survey Final Report: Trends in Gun Ownership in the United States, 1972-2014." *Presented at NORC, University of Chicago*. pp. 1-11.†

### **18.3 Week 10: October 22 — 28, 2018**

#### **18.3.1 ⇒ Tuesday, October 23: Survey Research and Observational Design**

★ Babbie, Chapter 9: Survey Research, pp. 253-273.

#### **18.3.2 ⇒ Thursday, October 25: Survey Research and Observational Design**

★ Babbie, Chapter 9: Survey Research, pp. 273-293.

✓ **Hypothesis Assignment is Due at Start of Class** Upload your assignment to the Blackboard Drop-Box.

✓ **Exam 2 is due on November 4 by 11:59 PM.** Exam 2 will cover Chapters 5, 7, 8, and 9.

### **18.4 Week 11: October 29 — November 4, 2018**

#### **18.4.1 ⇒ Tuesday, October 30: Field Research and Ethnography**

★ Babbie, Chapter 10: Qualitative Field Research, 295-309.

**18.4.2 ⇒ Thursday, November 1: Field Research and Ethnography**

★ Babbie, Chapter 10: Qualitative Field Research, pp. 309-328.

α November 3 - Last Day to Withdraw from a Class with a "W."

## **19 Part Four: Introduction to Statistics - Univariate and Multivariate Analysis**

### **19.1 Week 12: November 5 — 11, 2018**

#### **19.1.1 ⇒ Tuesday, November 6: Quantitative Analysis**

★ Babbie, Chapter 14: Quantitative Data Analysis, pp. 414-426.

#### **19.1.2 ⇒ Thursday, November 8: Quantitative Analysis**

★ Babbie, Chapter 14: Quantitative Data Analysis, pp. 426-440.

### **19.2 Week 13 November 12 — 18, 2018**

#### **19.2.1 ⇒ Tuesday, November 13: The Logic of Multivariate Analysis**

★ Babbie, Chapter 15: The Logic of Multivariate Analysis, pp. 442-458.

#### **19.2.2 ⇒ Thursday, November 15: The Logic of Multivariate Analysis**

★ Contingency Table Activity in Webster Hall Computer Lab.

★ **Research Design Assignment is Due at Start of Class.**

### **19.3 Week 14: November 19 — 25, 2018**

#### **19.3.1 ⇒ Tuesday, November 20: Introduction to Quantitative Methods**

★ Babbie, Chapter 16: Statistical Analysis, pp. 460-475.

#### **19.3.2 ⇒ Thursday, November 22: No Class, Thanksgiving Break**

★ NO CLASS, THANKSGIVING BREAK.

### **19.4 Week 15: November 26 — December 2, 2018**

#### **19.4.1 ⇒ Tuesday, November 27: Statistics as a Tool For Research**

★ Babbie, Chapter 16: Statistical Analysis, pp. 475-496.

★ Continue our discussion of statistical analysis and catchup.

### **19.4.2 ⇒ Thursday, November 29: Statistics as a Tool For Research**

- ★ Continue our discussion of statistical analysis and catch up or time to work on Final Paper edits with Professor present to ask questions.
- ★ **Data Collection/Survey Design/Experimental Design Assignment is Due at Start of Class.** Upload the assignment to the Blackboard Drop-Box.

## **19.5 Week 16: December 3 — 9, 2018**

### **19.5.1 ⇒ Tuesday, December 4: Student Presentations**

- ★ Student Presentations.
- ★ **Completed Final Research Paper is Due at Start of Class.** Upload the assignment to the Blackboard Drop-Box.
- α December 4 - Last Day for Complete Withdrawal with all "W's."

### **19.5.2 ⇒ Thursday, December 6: Student Presentations**

- ★ Student Presentations.

## **19.6 Week 17: December 10 — 16, 2016**

### **19.6.1 ⇒ Final Exam Week**

- ✓ **Exam 3 (The Final Exam) must be completed by 5:30 PM on Tuesday, December 11, 2018.** The official Final Exam Time is from 3:30 - 5:30 PM. Exam 3 will cover Chapters 10, 14, 15, and 16.

## **20 Final Paper: Research Design (50% of the Final Grade)**

### **20.1 Research Question Assignment and Literature Review - Worth 5 Points**

For this assignment students must choose a topic of interest. Topics can be broad to narrow study areas that interest researchers. For example: Why do wars begin? What drives individuals toward deviant behavior? How does legislative bargaining work? Do legislative term limits alter the way politicians behave? How do groups overcome collective action problems? Does decision-making differ from individual decision making? What role do increased casualties have on the public's support for war? Why are some nations more wealthy than others? How does the mass media impact public opinion? The sociology of gender roles. Youth Culture. Class conflict and inequality. The formation of social movements. Cults, clans, and communities.

All of the above are topics where researchers have produced a substantive body of literature. There are very few topics that researchers have not already analyzed. However,

as research progresses new puzzles and questions are revealed. For this assignment your job is to start researching a topic that interests you. This is not an annotated bibliography where you produce a list of articles and summarize each one. You must target your research and narrow it down as your research continues. A deep understanding of the literature is what will help you develop a theory which will become your story for how the world works for a subsection of your given research topic.

Your initial literature review must cite at least 10 scholarly (peer-reviewed) articles and be approximately 5-6 pages in length. The assignment should demonstrate that you have rigorously begun to study your topic and have a strong understanding of what previous researchers have already accomplished. The assignment must have a references/works cited page using a proper and complete professional citation style of your choice (I recommend the American Psychological Association (APA) style). While you are doing your literature review begin to think about what puzzles have not been solved, what alternative explanations you may have for certain phenomenon, and what questions still remain to be answered. You will eventually develop your own theory after thoroughly researching your topic. At the end of the literature review assignment you are required to write a paragraph outlining your specific research question, puzzle, or problem that you will be using a research design to answer.

## **20.2 Theory Assignment - Worth 5 Points**

Theories are a logically consistent set of statements that explain some phenomenon of interest. In other words, theories are stories for how the world works. Theories are used to describe why some relationships are causal. Social science is about explaining why something of interest happens the way it does. We can think about this in terms of the relationships between variables. For example,  $X$  (independent variable) causes  $Y$  (the dependent variable) to occur because  $X$  affects  $Y$  in some predictable way that the research outlines. For this assignment, your job is to develop an original theoretical explanation for the phenomenon you have been researching. Your theory should be guided by the literature review you conducted earlier. You will need to reference the existing literature to discover where it can be improved upon and develop your own explanation to a puzzle of problem.

This assignment should be approximately 1-2 pages in length and cite the relevant literature which helped you come to your theoretical framework. Are you building on another researcher's idea? Are you solving a puzzle that you found in the existing literature? Are you developing a theory which you believe explains some phenomenon better than an existing set of authors? This process will also help you to narrow down your literature review to make it more targeted toward what you are trying to explain.

### 20.3 Hypothesis Assignment - Worth 5 Points

While theories can be abstract, hypotheses are real world propositions that can be tested using a research design (experimental, observational data, survey research, case study, etc.). Hypotheses are usually expressed as relationships between variables. For example, let's say that a researcher develops a theory that argues that weather is causally related to criminal activity. The researcher believes that pleasant weather gives people an incentive to leave their homes and plan more activities outside. This means that there are more people walking the streets, going to beaches, driving to the movies and shopping centers, and generally being away from their homes. When the weather is less pleasant there are fewer people leaving their home. Moreover, during unpleasant weather conditions those planning criminal activity may find it harder to do so. How can the researcher test their theory empirically? The first step is to hypothesize real world relationships that we would observe if the researcher was correct. Hypothesis testing begins with the alternative hypothesis ( $H_a$ ), which is the researcher's proposed proposition. The alternative hypothesis is always accompanied by the null hypothesis ( $H_0$ ), which states that there is no relationship between the variables of interest. When using statistical analysis, it is the null hypothesis that we are testing.

Below are a series of hypotheses (relationships) that we should observe if the researcher is correct.

- $H_{a1}$  When the temperature increases, crime rates increase.
- $H_{10}$  There is no relationship between temperature and crime rates.
- $H_{a2}$  When there is a moderate to severe storm (blizzard, hurricane, tornado, rain-storm), crime rates decrease .
- $H_{20}$  There is no relationship between storms and crime rates.
- $H_{a3}$  Crime rates are higher in the winter than they are in the summer.
- $H_{30}$  There is no relationship between seasons and crime rates.

The above hypotheses are all examples of relationships that a researcher can use to test their theory. Temperature is a real world variable that we can collect and measure. Crime statistics are available from the FBI's Uniform Crime Reports and also from all 50 state governments. In fact, we can even separate crime rates into different categories and develop hypotheses for each. For example, petty crime, burglary, violent crime, etc. We can also measure when certain storms occur at different points in time. We can also measure time in terms of seasons.

For this assignment, your job is to develop a series of hypotheses which you can use to test your theory. If your theory was correct, what would we observe empirically? What real world relationships would be needed to corroborate your theoretical explanation? This assignment should be about a single page, outlining as many relationships as possible. You should also write a brief paragraph explaining what variables you would



need to test your hypotheses. Please state your hypotheses as they are above, denoting both the alternative and null hypotheses.

## **20.4 Research Design Assignment - Worth 5 Points**

The research design is an important part of the final research paper. For this assignment your job is to choose the appropriate mode of observation to test your hypotheses. For this section you will explain how you would go about conducting the research. Will you develop an experiment? Will you use a survey instrument? Will you collect data to be used in a statistical analysis? Will you conduct an ethnographic study? Will you conduct a case study? In general, what will be the structure of your research design?

This section should be approximately 3-4 pages and thoroughly discuss how you will test your hypotheses. By this point in the class we will have covered various research designs that you can apply to your research question. You must explain: (1) An outline of the potential research design. (2) Why this is the best method to test your hypotheses? (3) What are the pros and cons to using this design? (4) What resources would you need to conduct this study (what type of data? which subjects? what is your population? what might be your sample? etc.)?

## **20.5 Data Collection/Survey Design/Experimental Design Assignment - Worth 5 Points**

For this assignment students will develop the potential instrument needed to conduct their research design. If you decided to use a survey analysis, then you will develop a survey. If you decided to use a design that requires real world data, they you will need to find potential data sources and specific variables. If you decided to conduct a case study, you need to research and find suitable cases required to conduct your research project. If you chose an experimental analysis, then you need to design a plausible experiment that you can use to test your hypotheses.

This assignment should be approximately 3-5 pages depending on what instrument you have chosen. If you are collecting existing data, you should cite the database and also provide me with an email showing that you downloaded the dataset and an explanation of the variables you chose and how they can be used to test your hypotheses. If you chose a survey, then you should submit your survey questions with a brief explanation for why you wrote the questions you did and how they relate to operationalizing your variables. If you chose an experimental design, they you need to write a detailed explanation of exactly how you would conduct the study. If you chose a case study, then you should actually begin to analyze your case and discuss why this is the best case to corroborate your argument.

## 21 The Final Paper with All Sections Combined - Worth 15 Points

The final product will combine all sections of the paper along with an abstract, introduction, and a conclusion. The conclusion should discuss what you hope to find if you actually conducted the study and how it would add to the body of extant literature. What would the implications be? How would this help our understanding of your chosen phenomenon? The abstract should appear on the first page after the title page be no more than 250 words. A good abstract should concisely explain your research project, focusing on your theoretical explanation and research design. The key to a good final product is taking professor feedback from the series of assignments and using it to make the total project better.

The Final Paper should be between 15 and 20 pages following the guidelines below precisely:

- ✓ Times New Roman, 12 Point Font.
- ✓ 1 inch margins top and bottom.
- ✓ 1 inch margins left and right.
- ✓ Minimal grammatical and spelling errors (no internet/texting slang please).
- ✓ The paper is segmented into the appropriate sections: (1) Introduction, (2) Literature Review, (3) Theory, (4) Hypotheses, (5) Research Design, (6) Data/Survey/Experiment Instrument, and (7) Conclusion.
- ✓ The inclusion of a proper works cited page in a complete professional citation style.

## 22 Project Presentation - Worth 5 Points

Each student will be required to make a 5 minute class presentation on the final day of classes. The presentation should NOT focus on the literature review! The presentation SHOULD focus on your theory and research design. It should briefly discuss: (1) Your research question, (2) Theory, and (3) Research Design. All presentations will require a visual aid (handout or digital presentation). Good presentations will include some type of visual aid, such as a PowerPoint presentation or class handout.<sup>3</sup> Sticking with a short 5 minute presentation will allow for questions from the audience for each student. Time limits for the presentation will be strictly enforced and students going over time limit will have to stop where they are in their presentation, regardless of whether or not they finished.

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<sup>3</sup>**Note:** Visual aids should not be large blocks of text on a slide or page. Visual aids should enhance the presentation in ways that will help the audience understand your points, not overwhelm them with too much information. Stick to about 2 or three short sentences to each slide.

## References

- Babbie, Earl. 2013. *The Practice of Social Research 13<sup>th</sup> Edition*. Belmont, CA: Thomson/Wadsworth.
- Smith, Tom W. and Jaesok Son. 2015. "General Social Survey Final Report: Trends in Gun Ownership in the United States, 1972-2014." *Presented at the National Opinion Research Center (NORC), University of Chicago* pp. pp. 1-11.