

# CEHC 310: Research Seminar in Emergency Preparedness, Homeland Security & Cybersecurity

Keith A. Preble

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E-mail: [kpreble@albany.edu](mailto:kpreble@albany.edu)

Office Hours: 5:00 PM - 7:00 PM

Office: Downtown

Web: [albany.edu](http://albany.edu)

Class Hours: W 7:15 PM - 10:05 PM

Class Room: HS 310

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## Course Description

Empirical social science research uses observations about the world to learn about social phenomena. Researchers analyze data (like surveys, experimental observations, and documents) to draw conclusions about actors, organizations, behavior, and beliefs. In the course of writing about their findings, researchers often provide indirect answers to the question "how do you know?"

In many undergraduate classes, students are consumers of research created by others; students read historical case studies of disasters, examine regression results probing the relationship between democracy and terrorism, peruse interviews with government officials from homeland security agencies, and scrutinize surveys of public opinion of privacy and security. What is often unclear is the research process lurking behind the final results - the answer to "but how do you know?" The mission of this course is to shed light on the research process in the areas of emergency preparedness, homeland security, and cybersecurity.

This course introduces the basic logic of empirical research and ethical consideration for such research. Over the semester, students will conduct literature reviews, develop hypotheses, construct research designs, and communicate ideas about research. Students will start by creating a literature review on a topic of interest; identifying a research question of interest (and related falsifiable hypotheses) in the areas of emergency preparedness, homeland security, and cybersecurity; and subsequently designing an investigation of the question using the procedures and methods of social science.

## Course Objectives

At the completion of this course, students should:

1. be able to use library and other tools to search for existing research relevant to their topic.
2. be able to articulate a clear research question or problem and formulate a hypothesis or claim.
3. be able to create a research plan to evaluate the hypothesis or claim.
4. be able to identify and understand appropriate research methods and know the strengths and weaknesses of different methods.
5. know how to collect data and information to test a hypothesis or claim.
6. be able to identify and carefully reflect on research ethics and responsible conduct in research.

## Note from the Instructor

Research designs are not research papers. They are *maps* or *guidelines* on how you will carry out a particular study. Much of what you put together is full of unknowns, but you need to justify why your particular course of action is the best way to answer the research question you identify.

This course is meant to be collaborative. Much research in the social sciences is coauthored. It is not uncommon for two, three, four or more authors working together on a project. Think of this course as a collaborative effort in which we help each other improve and perfect our research designs.

Doing *good* research is difficult and involves a lot of trial and error. Doing research also involves a great deal of criticism of one's work, but it is important to remember that no research design is **ever perfect**. Taking criticism and building off of those insights is key to be a successful researcher in academic and policy settings.

Perfect research designs do not exist; we simply strive to put together designs that are **good enough**, knowing that the research design we create may change as we learn more about our topic and collect additional data. *Do not get discouraged as we proceed through the course*. Much of what we learn may be new to a lot of you, so be patient with yourself and each other over the next several weeks.

## Required Textbooks

We will be using a **free book** that is available from the library electronically and published by CQ Press: Leanne Powner's *Empirical Research and Writing*. While this guide was written for political scientists, most of the principles and practices of doing research in the social sciences follows most of the guidelines Dr. Powner outlines in her book. *Students who wish to purchase a*

*hard copy of the book may do so from the University Bookstore, but you can download the book for free through Dropbox or the Library's web site (and then print it out on your own if you so choose).*

I have placed copies of the chapters in Dropbox. If you prefer, you can order a physical copy from the university bookstore.

Also, we will also read Christopher S. Horne's (2018) *A quick, free, somewhat easy-to-read introduction to empirical social science research methods*, a free open-source ebook on empirical social science. Please download your free copy here: <https://scholar.utc.edu/oer/1/>.

## Course Assessment

The following activities will be used to evaluate you and determine your final grade in the course:

1. **Class Participation and Final Presentation (10%):** Students will be required to make a 5 minutes presentation on their research proposal to the class on April 29. Students may use the white board or make a PowerPoint presentation. Being able to talk about and explain your research is great practice for future graduate studies or future professional endeavors. **Also, most classes will be workshops where I will combine lecture and hands-on practice. It is imperative that students come prepared to engage, ask questions, and support each other through the research design process.** Excessive absences will result in a failing participation grade and a lower final grade at the end of the semester. **See Attendance Policy below.**
2. **Topic, Research Question, and Theory (due February 16) (10%):** A great deal of social science research tests or generates theory (I value descriptive work, but for the purposes of this class, your research proposal should be empirical in nature). For this assignment, describe and discuss a topic that interests you that you wish to explore. After discussing your topic, develop a research question and then develop an answer to that research question based on what you know thus far about your topic. **2-page minimum.** *Your question doesn't have to be perfect; we can help narrow it down or broaden it. Students will be asked to share their research question.*
3. **Literature List (due February 23) (5%):** Construct a brief **annotated bibliography** of **5 initial sources** for your research proposal. 3 of the 5 sources should be peer-reviewed, such as books published by academic presses or journal articles (we'll go over what a peer-reviewed source is). Given the nature of many of your topics, newspaper articles, think-tank studies, magazine articles, and blog posts. **1-2 pages.** *Use this opportunity to help me to learn more about your topic.*
4. **Project Background (due March 8) (5%):** This section should be a justification of your research and why this research is worth undertaking. While your research question explains the problem that led you to develop the research question, this portion of your research proposal attempts to provide answers to the question. **2-3 pages.** *You can justify your research in a number of ways. Perhaps it is a question not yet explored in the literature? Perhaps it has policy relevance? There's no "right" or "wrong" answer, but your justification should be compelling. It should be of interest not just to you but to others, as well.*

5. **Literature Review (due March 22) (10%)**: Literature reviews outline the landscape of the extant literature on your topic and helps your reader understand where your project lies within this landscape. *We will do exercises in class to help learn about how to do literature reviews.* **4-5 pages.**
6. **Hypotheses (due April 5) (5%)**: For this assignment, you will derive at least 1 testable hypothesis as well as the rationale for testing this hypothesis. **1-2 pages (longer if you have more than 1 hypothesis).**
7. **Data description (due April 12) (5%)**: Data can be **quantitative** or **qualitative** and can range from published data sets, data you collect from published reports, data from interviews and focus groups, and more. The data we use is determined by the type of question we are asking. **2 pages.** *Not all data may be available for your project, so your research design may necessitate creating it from scratch. We will cover these issues in class.*
8. **Research Proposal - First Draft (due April 22) (10%)**: 8-page minimum (double-spaced, 12-pt font), with subject headings.
9. **Peer Review (due April 29) (10%)**: Each student will conduct peer reviews on two of their colleagues research proposal drafts.
10. **Final Research Proposal (due May 13) (25%)**: Students will incorporate feedback receive from their peers and the instructor to produce a final draft of the research proposal. **Minimum length: 8 pages; Maximum length: 12 pages.**

Total: 100%

*Students may revise and resubmit ONE assignment (except the first draft, peer review, and final research proposal).*

## Course Policies

### Academic Accommodation

Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning, and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please go here:

<http://www.albany.edu/disability/current.shtml>

You can arrange for an academic accommodation letter to be sent to me. If you wish to discuss academic accommodations for this course, please also inform me as soon as possible.

### Academic Integrity and Honesty

No cheating or plagiarism will be tolerated in this course. Cheating and plagiarism can take a variety of forms so please be sure you familiarize yourself with the potential dangers. In the past, students have relied on Google and Wikipedia to complete assignments. The use of either of these sources is considered cheating; you should be using the resources on the syllabus to answer questions. If in doubt, ask the instructor!

If you are struggling with the course, please email me or come see me so I can help you. Please note that all assignments submitted through Blackboard (take-home quizzes, final paper, and take-home midterm) will go through the SafeAssign Plagiarism check.

For a good survey of potential dangers, see [http://www.albany.edu/el1/academic\\_integrity.php](http://www.albany.edu/el1/academic_integrity.php). All violations are reported to the Office of Community Standards regardless of the penalty imposed.

Students caught engaging in cheating or plagiarism may have to redo an assignment, fail the assignment, or fail the course, depending on the egregiousness of the infraction. Students will also be reported to the Office of Community Standards for possible disciplinary action.

### **Attendance Policy**

If you never come to class, you will have a lot of difficulty passing this course. It does not matter if you get an *A* on every assignment. Attendance matters for this class since the collaborative nature is key not only for your success but for your peers, as well. **All students receive one unexcused absence.** *Please note that unexcused absences are not permitted on our last classing meeting on April 29; students who miss this class will receive a double-penalty.* Students lose 3% off for each unexcused absence beyond the first (if you miss six sessions beyond the first, you lose 18 points off your final grade).

If you have a medical issue, death in the family, or some other extenuating circumstance, please contact me right away. Absences will only be excused with proper documentation and/or discussion with the instructor. Excused absences *never* impact a student's grade.

### **Blackboard**

All assessment should be submitted on Blackboard, no exceptions. If you can't access Blackboard, contact ITS right away. Assignments should never be emailed unless you receive prior permission from me. Emailed assignments will not be graded.

### **Cell Phones/Tablets/Computers**

Please stay off your phones. We only have 55 minutes per class, and there will always be a lot to cover. Stay focused; this class should not be difficult but if you get behind, you'll have trouble catching up.

### **Email Etiquette**

Email is a formal means of communication. Use proper grammar, salutations, and closings. Do not type your email/message in the subject line. My email address is <mailto:kpreble@albany.edu>. I usually respond within a day; do not expect responses after midnight (although if I am up late working and see your message, I *may* respond).

## Extensions

If you need more time, please contact me. I cannot promise I can grant an extension in each and every case, but it is important to ask, especially if the reason for your extension is that you are lost or stuck.

## Font "Games" and Spacing "Games"

Do not under any circumstances submit a paper or assignment **with super huge font or triple or quadruple spacing**.

**You will be asked to fix the formatting and receive a late penalty.** If you can't meet the page requirements for an assignment, you are either stuck (because you are confused on how to do something) or you waited until the last minute and ran out of time. Just submit what you have rather than toy with the font and margins. If you are stuck, come talk to me or email me so I can help. **All assignments should use 12-point Times New Roman font and should be double-spaced with 1-inch margins unless otherwise indicated in the assignment.**

## Grade Appeals

Grade appeals are permitted within 1 week of receipt of the grade and must be in writing over email that explains your reasoning. "Effort" is not a reason for a grade change. *Please note that if I reevaluate your work for a grade change, your grade may go up or down.*

## Late Penalties

**7-points** are deducted for each day an assignment is late. Late penalties begin 15 minutes after the due date and time. After the end of the third day, you will receive a zero and the assignment will no longer be accepted.

## Office Hours

Please reach out if you need help or are struggling. Doing research can be challenging. If you are stuck, ask questions. Office hours are Wednesdays two hours before class; I can also meet after class, too.

## Religious Holidays

As you know, UAlbany changed the way it puts together its academic calendar, and UAlbany no longer closes for religious holidays as it did in previous academic years. New York State Education Law (Section 224-a) states that all campuses are required to excuse, without penalty, individual students absent because of religious beliefs, and to provide equivalent opportunities for make-up examinations, study, or work requirements missed because of such absences.

According to UAlbany, "It shall be the student's responsibility to provide sufficient documentation to support any request (In this context, it should be noted that fraudulent excuses are considered violations of academic integrity and are grounds for academic or disciplinary penalties)."

Please note that students are still required to complete all readings and assignments in the syllabus. If a quiz or exam takes place during a religious holiday to which you have an exemption, please let me know in advance so we can work out alternative arrangements to make-up the missed assessment. No student will be penalized for absences due to religious holidays.

## Syllabus Changes

Changes.

### Title IX

Title IX of the Education Amendments of 1972 is a federal civil rights law that prohibits discrimination on the basis of sex in federally funded education programs and activities.

The SUNY-wide Sexual Violence Prevention and Response Policies prohibit offenses defined as sexual harassment, sexual assault, intimate partner violence (dating or domestic violence), sexual exploitation, and stalking. The SUNY-wide Sexual Violence Prevention and Response Policies apply to the entire University at Albany community, including students, faculty, and staff of all gender identities. The University at Albany provides a variety of resources for support and advocacy to assist individuals who have experienced sexual offenses.

Confidential support and guidance can be found through the following:

Counseling Center (518-442-5800, [https://www.albany.edu/counseling\\_center/](https://www.albany.edu/counseling_center/))  
University Health Center (518-442-5454, [https://www.albany.edu/health\\_center/](https://www.albany.edu/health_center/))  
Interfaith Center (518-489-8573, <https://www.albany.edu/spirituality/onCampus.shtml>)

Individuals at these locations will not report crimes to law enforcement or university officials without permission, except for in extreme circumstances, such as a health and/or safety emergency. Additionally, the Advocates at the University at Albany's Advocacy Center for Sexual Violence are available to assist students without sharing information that could identify them (518-442-CARE, <https://www.albany.edu/advocacycenter/>).

Sexual offenses can be reported non-confidentially to:

Title IX Coordinator within The Office for Equity and Compliance  
(518-442-3800, <https://www.albany.edu/equity-compliance/>, Building 25, Room 117)

and/or

University Police Department  
(518-442-3131, <http://police.albany.edu/>).

**Please note that faculty members are considered "responsible employees" at the University at Albany, meaning that they are required to report all known relevant details about a complaint**

of sexual violence to the University's Title IX Coordinator, including names of anyone involved or present, date, time, and location.

In case of an emergency, please call 911.

## Grading Policy

The course will be assessed on the University's A-E scale: A (93-100), A- (92-90), B+ (89-87), B (86-83), B- (82-80), C+ (79-77), C (76-73), C- (72-70), D+ (69-67), D (66-63), D- (62-60), E (less than 60).

## Readings for the Course

This is more of a "doing" course than a "reading" course, but there are assigned readings that should be done by all, especially if you are new to empirical research. We will discuss the readings in class, so please come prepared to talk about what you have read. I will also assign readings by faculty members in CEHC and other department at UAlbany, since the best way to do research is to see how it is done by experts. You can access most readings for the course in our course's Dropbox folder:

<https://www.dropbox.com/sh/gl918iok6dcwa7z/AAD7TtvPgTFcRJOHD1n7LfGga?dl=0>

## Schedule of Lectures and Readings

Readings for the course are meant to provide students with background on particular topics related to doing research. The best way to learn how to do *good research* is to practice. It is important to note that the books and techniques we learn here are not *recipes* for doing research. Every research question is unique, will have different answers, and require the testing of different hypotheses.

	Day	Activity	Reading
W	Jan 22	First day of class: Review syllabus, introductions	White, Chapter 1 (Dropbox)
W	Feb 5	Research questions and puzzles	Powner, Ch. 1-2 (Dropbox)
W	Feb 12	Inductive, deductive, and other matters	Powner, Ch. 3-4 (Dropbox)
W	Feb 19	Peer-Reviewed Sources, Project Relevance, and Citation Management	Steeleworthy and Dewan 2013 (on Dropbox)
W	Feb 26	Concepts and Operationalization	Goertz, Ch. 2 (Dropbox); Horne 2018, pp. 11-14.
W	Mar 4	Doing Literature Reviews	Walliman 2011 (Dropbox)
W	Mar 11	Theories, Hypotheses, and Methods	Review Powner, Ch. 2
W	Mar 18	<b>SPRING BREAK – NO CLASS</b>	No Reading
W	Mar 25	Data and Data Collection (I): Quantitative Methods	Powner, Ch. 7-8
W	Apr 1	Data and Data Collection (II): Qualitative Methods	Powner, Ch. 5-6



W	Apr	8	What Method(s) Should <i>You</i> Use	
W	Apr	15	Research Ethics	Horne 2018, p. 34
W	Apr	22	Research Consultations <sup>1</sup>	No Reading
W	Apr	29	Presentations (Mandatory Attendance) <sup>2</sup>	No Reading
W	May	13	Final Draft Due via Blackboard by 11:59 PM.	

## Assignment Calendar

All assignments are due on Sundays by 11:59 PM.

- January 22: *No Assignments Due*<sup>3</sup>
- February 5: *No Assignments Due*
- Sunday, February 9: *No Assignments Due*
- Sunday, February 16: **Topic, Research Question, and Theory Due**
- Sunday, February 23: **Literature List Due**
- Sunday, March 1: *No Assignments Due*
- Sunday, March 8: **Project Background Due**
- Sunday, March 15: *No Assignment Due – Spring Break*
- Sunday, March 22: **Literature Review Due**
- Sunday, March 29: *No Assignments Due*
- Sunday, April 5: **Hypotheses Due**
- Sunday, April 12: **Data Description Due**
- Wednesday, April 22: **First Draft Research Proposal Due**
- Wednesday April 29: **Peer Review Due**
- Wednesday, May 13, 2020: **Final Research Proposal Due**

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<sup>1</sup>I'll be in Husted most of the day. We will not have class, but I expect students to a) make an appointment with me during the week for a one-on-one about your research proposal b) come during the day on April 22 to meet with me.

<sup>2</sup>All students are required to attend this session; students fail to attend the last day of class will receive a double-penalty for their absence.

<sup>3</sup>While there is no *graded assignment* due, students may be asked to email rough drafts to the instructor for review before class meetings.