# UNIVERSITY OF OREGON SCHOOL OF LAW CONFLICT AND DISPUTE RESOLUTION MASTER'S PROGRAM

# CRES 632: EMPIRICAL RESEARCH METHODS

(SPRING 2019)

Class Meets: Tuesdays/Thursdays, 2:00-3:20 pm

Location: 282 Knight Law Center

Instructor: Robert Rocklin

Office Hours: Monday 2-3 pm or (especially) by appointment

Office: 341 Knight Law Center Email: rrocklin@uoregon.edu

**Note**: This syllabus is subject to change, as the needs of the course dictate. I will provide notice if it

does.

#### **COURSE DESCRIPTION**

The course is intended to help students become critical, sophisticated consumers and—to a lesser extent—producers of empirical research. The course covers different approaches to performing empirical research, that is, different research methods. The course will provide you with the tools to determine whether the research approach reported in a journal article or book is the appropriate approach in light of the researchers' research goal. It will allow you to assess the weaknesses and strengths of different empirical research methods. The course will provide you with the knowledge to evaluate whether research was properly designed and carried out in a manner to support the researchers' conclusions.

The course also addresses data analysis and interpretation of the results of that analysis. The course will not teach you to perform statistics. Rather, it will give you the knowledge to interpret empirical results and their accompanying statistics and to critically evaluate whether the researchers have used the appropriate analysis in interpreting their data. It will introduce you to the assumptions underlying different statistical analyses and the strengths and weaknesses of the most common statistical tests.

At bottom, the course will prepare you to read, critically evaluate, and discuss empirical research in the area in which you will be working.

The course will be conducted as a seminar, meaning that a significant amount of class time will be devoted to discussion of the readings and other students' work. We will also have several guest speakers.

#### **LEARNING OBJECTIVES**

After successfully completing this course, students will:

- Be able to describe the scientific method and how it is applied to studies in the social sciences.
- Be able to explain the research design process, including problem formulation, hypothesis testing, appropriate data analyses, and conclusions.
- Have a general understanding of empirical research design and methods that will contribute to their ability to understand, interpret, and explain the major theories in their own profession or field of research.
- Be able to perform literature reviews using online databases.
- Be able to describe, compare, and contrast descriptive and inferential statistics.
- Have a general sense of what type of statistical analysis is appropriate for what kind of research question and type of data.
- Be able to explain the rationale for research ethics, and the importance of, and local processes for, Institutional Review Board (IRB) review.
- Be able to act as an educated, critical consumer of empirical research.
- Have acquired the knowledge to formulate appropriate methodologies if they are called upon to perform empirical research.
- Understand research terminology.
- Describe quantitative, qualitative and mixed methods approaches to research.
- Critically analyze published research.

#### **COURSE MATERIALS**

- Francis C. Dane, *Evaluating Research: Methodology for People Who Need to Read Research* (2<sup>nd</sup> ed 2018)
- Additional readings and other resources on Canvas

The required text is available for purchase or rental at the Duck Store, as well as at the other usual purveyors of textbooks. I will also place a copy on reserve at the John E. Jaqua Law Library.

#### **COURSE POLICIES**

Accessible Education for All Students: The University of Oregon works to ensure inclusive learning environments for all students. We recognize that students bring a variety of learning styles to the course, and that some learning styles may require adjustment to course structure. We are happy to talk with you about such adjustments. Please be in touch with the professor if there are aspects of the instruction or design of this course that result in barriers to your participation as a result of learning style or diagnosed disability. For more information, you are also encouraged to contact the Accessible Education Center (formerly Disability Services) in 164 Oregon Hall at 346-1155 or uoaec@uoregon.edu.

**Inclusion and Collegiality:** Our community values inclusion. We are committed to equal opportunities for all faculty, staff, and students to develop individually, professionally, and academically regardless of ethnicity, heritage, gender, sexual orientation, ability, socioeconomic standing, cultural beliefs and traditions. We are dedicated to an environment that is inclusive and fosters awareness, understanding, and respect for diversity. If you feel excluded or threatened, please contact Dean of Students Jennifer Espinola at <a href="mailto:espinola@uoregon.edu">espinola@uoregon.edu</a> or 541-346-1557.

### **Prohibited Discrimination and Harassment Reporting**

Any student who has experienced sexual assault, relationship violence, sex or gender-based bullying, stalking, and/or sexual harassment may seek resources and help at <a href="mailto:safe.uoregon.edu">safe.uoregon.edu</a>. To get help by phone, a student can also call either the UO's 24-hour hotline at 541-346-7244 [SAFE], or the non-confidential Title IX Coordinator at 541-346-8136. From the SAFE website, students may also connect to Callisto, a confidential, third-party reporting site that is not a part of the university.

Students experiencing any other form of prohibited discrimination or harassment can find information at <a href="investigations.uoregon.edu">investigations.uoregon.edu</a> or contact the non-confidential Office of Investigations and Civil Rights Compliance at 541-346-3123 or the Dean of Students Office at 541-346-3216 for help. As UO policy has different reporting requirements based on the nature of the reported harassment or discrimination, additional information about reporting requirements for discrimination or harassment unrelated to sexual assault, relationship violence, sex or gender based bullying, stalking, and/or sexual harassment is available in the <a href="Employee Responsibilities section">Employee Responsibilities section</a> of the Office of Investigations and Civil Rights Compliance website.

Specific details about confidentiality of information and reporting obligations of employees can be found at <u>investigations.uoregon.edu/employee-responsibilities</u>.

#### **Mandatory Reporting of Child Abuse**

UO employees, including faculty, staff, and GEs, are mandatory reporters of child abuse. This statement is to advise you that your disclosure of information about child abuse to a UO employee may trigger the UO employee's duty to report that information to the designated authorities. Please refer to the following link for detailed information about mandatory reporting: Mandatory Reporting of Child Abuse and Neglect.

The instructor of this class, as a Designated Reporter, will direct students who disclose sexual harassment or sexual violence to resources that can help and has the responsibility to report the information shared with them to the university administration. The instructor of this class is required to report all other forms of prohibited discrimination or harassment to the university administration.

# Statement Regarding Sexual Violence (from Senate Task Force to Address Sexual Violence and Survivor Support)

The UO is committed to providing an environment **free** of all forms of discrimination and sexual harassment, including sexual assault, domestic and dating violence and gender-based stalking. If you (or someone you know) has experienced or experiences gender-based violence (intimate partner violence, attempted or completed sexual assault, harassment, coercion, stalking, etc.), know that you are **not alone**. UO has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more.

Please be aware that all UO employees, other than designated confidential resources (see <a href="https://safe.uoregon.edu/services">https://safe.uoregon.edu/services</a>) are required to report credible evidence of prohibited discrimination, including sexual harassment and sexual violence. This means that if you tell me about a situation, I may have to report the information to my supervisor or the Office of Affirmative Action and Equal Opportunity. Although I have to report the situation, you will still have options about how your case will be handled, including whether or not you wish to pursue a formal complaint. Our goal is to make sure you are aware of the range of options available to you and have access to the resources you need.

If you wish to speak to someone confidentially, you can call 541-346-SAFE, UO's 24- hour hotline, to be connected to a confidential counselor to discuss your options. You can also visit the SAFE website at <a href="mailto:safe.uoregon.edu">safe.uoregon.edu</a>.

**Academic Integrity**: Students are expected to demonstrate high levels of academic integrity and are prohibited from committing or attempting to commit any act that constitutes academic misconduct. Plagiarism and other forms of academic dishonesty will be grounds for automatic failure in the course. If you have questions about conduct, please ask your instructor or review the University Student Conduct Code (available at <a href="http://dos.uoregon.edu/conduct">http://dos.uoregon.edu/conduct</a>).

**Attendance:** Attendance promotes class discussion on the assigned material. In addition, material may be presented in class that is not in the reading. You are expected to come to class on time (meaning arriving before the class is scheduled to begin) and to stay until the end. Failure to attend class may result in a grade reduction. Please let me know before class if you will be absent or if you must leave early (for a legitimate reason), in which case please sit near the door in order to leave unobtrusively.

**Preparation and participation:** You are responsible for reading the assigned materials prior to class so that you can participate effectively. Class will be interactive as we build answers to questions we ask together. I expect you to engage actively in these opportunities for joint inquiry and exploration. Your participation will contribute both to your learning and to that of your classmates.

**Late assignments:** Assignments must be submitted on time. Failure to do so may result in a reduction in grade.

**Electronic devices:** Electronic devices are permitted in class only for note taking or other activities approved by the instructor. Use of these devices for other purposes detracts from everyone's learning experience.

**Pronouns**: Note that most of the materials we will read, as well as much of our discussion in class, will use the pronouns "he/him/his" or "she/her/hers." Gender is not binary, and some people prefer to use "they/them/their" or "ze/hir" for individuals. I try to limit the use of pronouns, but when pronouns are necessary, having a singular pronoun match a singular noun can be important for clarity. For more information on gender identity, please visit the LGBTQA3 office, <a href="http://dos.uoregon.edu/lgbt">http://dos.uoregon.edu/lgbt</a>.

**Building Safety**: Emergencies are rare, but if they happen, we must know how to respond effectively and efficiently. The University's Emergency Management and Continuity group provides extensive resources for emergencies (see <a href="http://emc.uoregon.edu/">http://emc.uoregon.edu/</a>). Please review these materials when you can, with special emphasis on the following:

- Identify all the exits in each of your classrooms;
- Practice being aware of your surroundings at all times; and
- Familiarize yourself with the basic procedures around **earthquakes** ("duck, cover, hold" at <a href="https://www.youtube.com/watch?v=0-MycATjypg">https://www.youtube.com/watch?v=0-MycATjypg</a>) and **active shooter situations** ("run, hide, fight" at <a href="http://emc.uoregon.edu/content/active-shooter-situations">http://emc.uoregon.edu/content/active-shooter-situations</a>).

We are all responsible for the safety and well-being of our community. For more on emergency procedures and building safety, please talk with me about the situation in our classroom, with Dean of Students Jennifer Espinola or with Erica Daley, Associate Dean for Finance and Operations.

#### WHAT YOU CAN EXPECT FROM YOUR INSTRUCTOR

You can expect me to:

- treat you with respect
- plan and facilitate learning opportunities that will help you meet the course goals and objectives
- provide constructive feedback on your performance
- be open to constructive feedback on my performance
- bring my teaching and professional expertise and experience into the classroom

- be open-minded in responding to your ideas and suggestions
- allow you to wrestle with ideas to shape your own conclusions

#### **COURSE ASSIGNMENTS AND GRADING**

#### **Assignments:**

- 1. <u>Textbook</u>: Most weeks, there will be one to two chapters of reading in the Dane textbook.
- 2. <u>Additional reading</u>: Generally, there will also be journal articles that you will read. Some of them discuss issues related to research methods, but most of them are simply examples of the issues we are talking about in class. It is important to get used to reading empirical journal articles. *Note*: For the "Critical Thinking" articles that are assigned, you should be ready to discuss any flaws in the study reported in the article.
- 3. <u>Quizzes</u>: Each **Thursday**, I will post a quiz on Canvas. You will take the quiz by the following **Monday** night. The quiz will include questions from the material that we have addressed in class and in the week's reading.
- 4. <u>Oral presentation</u>: During the last week or two of class, you will present to the class an overview of empirical research in an area of interest. Essentially, the presentation will be what you would do if a supervisor in an employment setting asked you to give an overview of the empirical research in a given area. More details to come.
- 5. <u>Class project</u>: As a class, we are going to address the following question as an empirical matter: *What is the best conflict resolution master's program?* We'll work on answering this question together over the course of the term. Answering the question will require additional work outside of class.

**Note:** I may use students' work in class to illustrate the topic we're discussing. I will not identify the author of the work when discussing it. If you object to the use of your work to help others learn, please email me and I will not use it.

# **Grading:**

Most educators will tell you that grading is the least enjoyable part of their job; I fall into that category. Nonetheless, assign grades I must. So, this is how it will work:

- 20% of your grade will be based on your oral presentation toward the end of the term
- 65% of your grade will be based on your performance on the weekly quizzes
- 15% of your grade will be based on your attendance and class participation, including your work on the class project.

#### **STATISTICS**

Over the course of the class, we will be learning about the rationale behind statistical analysis and learning about a number of statistical tests. If you can add 2 + 2 (and get 4), you have the math skills necessary. The goal is to introduce you to statistical concepts and to give you the knowledge you need to interpret statistical statements in empirical journal articles and books. Although we may go through some calculations in class, you will not need to perform any statistics in this class.

#### **COURSE SCHEDULE**

#### Week 1:

Introduction: empirical research and the scientific approach; the IRB Process

# Tuesday, April 2

#### Read:

- Dane, chapter 1 (Introduction)
- Cuddy, et al., Power Posing: Brief Nonverbal Displays Affect Neuroendocrine Levels and Risk Tolerance (2010)

# Thursday, April 4

Guest speaker: Caitlin Alcorn, Research Compliance Administrator: What You Need to

**Know about Human Subjects** 

#### Read:

- Dane, chapter 2 (The Scientific Approach)
- Pyrczak & Tcherni-Buzzeo, Quantitative, Qualitative, and Mixed Methods Research
- Chronicle, *Does This Have to Go Through the IRB*?

#### Week 2:

Intro to stats; reading research reports; choosing judges; discovering the best conflict resolution program

# Tuesday, April 9

Guest speaker: Robert Mauro, Associate Professor (Psychology) and Senior Research

Scientist, Decision Research: Overview of methodology

#### Read (and watch):

- Dane, chapter 9 (Overview of Statistical Analyses)
- Considerations in Critically Reading Research
- Kahn Academy, Displaying and Comparing Quantitative Data (videos) (watch as much as you think will be helpful; you can speed them up if you want to)

# Thursday, April 11

# Read:

• Dane, chapter 3 (Reading a Research Report)

- Brookshire, Psychology Is WEIRD (from Slate)
- Choosing State Court Judges (Background)
- Critical Thinking Article 1

#### Week 3:

Stats overview; sampling; finding articles; choosing judges as an example

# Tuesday, April 16

Guest speaker: Robert Mauro, Associate Professor (Psychology) and Senior Research

Scientist, Decision Research: Statistics should make sense!

#### Read:

- Dane, chapter 4 (Sampling)
- The Deadly Truth About a World Built for Men (The Guardian)
- Why the Polls Were Wrong in the 2016 Presidential Election

## Thursday, April 18

#### Read:

- Jung, et al., Female hurricanes are deadlier than male hurricanes (2014)
- Critical Thinking Article 2

#### Do:

• Take the online study linked to under this date in Canvas (less than 20 minutes). Keep notes of any questions or comments you have.

#### Take a look at:

- How to Choose a Reference Management Tool
- UO Library, Citation Management Tools

### Week 4

Measurement; reliability and validity; experimental designs

### Tuesday, April 23

#### Read:

- Dane, chapter 5 (Measurement)
- Measuring Happiness
- *Either* Tomiyama, et al., Misclassification of cardiometabolic health when using body mass index categories in NHANES 2005–2012 (2016)

or

BMI is a Terrible Measure of Health

# Thursday, April 25

#### Read:

- Dane, chapter 6 (Experimental Research)
- Renita Coleman, The Hawthorne Effect
- Criteria for evaluating a quantitative study

#### Week 5

Quasi-experimental research; qualitative research; other topics TBA

# Tuesday, April 30

#### Read:

- Dane, chapter 7 (Quasi-Experimental Research)
- Critical Thinking Article 15
- *Either* Mendes, The study that helped spur the U.S. stop-smoking movement (2014)

or

 Proctor, The history of the discovery of the cigarette-lung cancer link evidentiary traditions, corporate denial, global toll (2012)

### Thursday, May 2

### Read:

- Dane, chapter 8 (Qualitative Research)
- Criteria for Evaluating a Qualitative Study (in general folder)
- Critical Thinking Article 9
- Either Robinson-Wood, et al., Robinson-Wood, et al., "What Is It Going to Be Like?" - A Phenomenological Investigation of Racial, Gendered, and Sexual Microaggressions Among Highly Educated Individuals (2018)

or

 Pallin, et al., "Hey, let me hold your guns for a while" - A qualitative study of messaging for firearm suicide prevention (2019)

# Week 6 Archival research; survey Research

# Tuesday, May 7

#### Read:

- Dane, chapter 10 (Archival Research)
- Critical Thinking Article 11

#### Do:

• Dig into an interesting database and be prepared to tell the class about it. Look at the "Links to Public Sources of Data" module on Canvas and find a database that interests you. If you prefer, you can find a database any other way.

# Thursday, May 9

#### Read:

- Dane, chapter 11 (Survey Research), Epilogue
- Morin & Mercer, Police officers who have fired a gun on duty A closer look (2017)
- Qualtrics, 7 Tips for Writing Surveys
- ICPSR, Voting Behavior in the 2016 Election Survey Research Methods

#### Week 7

Critical reading: Power posing revisited; panel on projects, theses, and concentrations

#### Tuesday, May 14

# Skim (from Week 1):

• Cuddy, et al., Power Posing: Brief Nonverbal Displays Affect Neuroendocrine Levels and Risk Tolerance (2010)

#### Read:

- Ranehill, et al., Assessing the Robustness of Power Posing- No Effect on Hormones and Risk Tolerance in a Large Sample of Men and Women (2015)
- *Another failed replication of power pose* (Gelman Blog Post 10-2016)
- Carney, et al., Review and Summary of Research on the Embodied Effects of Expansive (vs. Contractive) Nonverbal Displays (2015)

- Garrison, et al., Embodying Power- A Preregistered Replication and Extension of the Power Pose Effect (2016)
- Elsesser, Power Posing Is Back—Amy Cuddy Successfully Refutes Criticism (Forbes 4-2018)

# Thursday, May 16

*Guest speakers*: Panel on final projects, theses, and course concentrations

#### Bring:

Questions for panel members

#### Skim:

• Conflict and Dispute Resolution Master's Program Standard & Concurrent Degree Requirements

# Week 8 Statistics; critical thinking articles

# Tuesday, May 21

#### Read:

- Critical Thinking Article 5
- Some Problems with NHST (from Fields (2017))
- 800 Scientists Say It's Time to Abandon "Statistical Significance"
- *Optional*: American Statistical Assn', The ASA's Statement on p-Values Context, Process, and Purpose (2016)

#### Do:

For each of the following two scenarios, use one of the online "which test to use" tools set out in the Week 8 module to determine the proper statistical test for the results. (I might prefer the one from Sage.) Be ready to discuss what you think the appropriate test is.

(1) You are reading the following journal article: Gregory & Holliday, *Boy or Girl: Empirical Aspects of Predicting the Sex of Harry and Meghan's Baby* (2019). In it, they describe an experiment in which one independent variable ("factor") is manipulated: Type of Story. There are three conditions ("levels") for Type of Story: Sad Story, Neutral Story, and Happy Story.

After reading one of the stories, the participant answers the following question: "What is the likelihood (from 1 = Very Unlikely to 10 = Very Likely) that

Harry and Meghan's baby has already been born, but the birth has been kept a secret?" Each participant is presented with only one condition. That is, each participant reads only one story. That is, it is a between-subjects design.

(2) Belen and Emily are interested in the relationship between chocolate consumption and happiness. They recruit 150 UO undergraduates and have them fill out a questionnaire. The first part of the questionnaire asks how many ounces of chocolate they consume per week. The second part is the (previously validated) Subjective Happiness Scale (SHS). The scale produces a number between zero and 25, with higher numbers indicating greater happiness.

# Thursday, May 23

#### Read:

- Critical Thinking Article 6
- Review Dane, chapter 9

# Week 9 Student Presentations

Tuesday, May 28

Student presentations

Thursday, May 30

Student presentations

# Week 10 Student Presentations/Course Wrap-Up

Tuesday, June 4

**Student Presentations** 

Thursday, June 6

Student Presentations/Course Wrap-Up