

Autumn 2008
Monday and Wednesday 1:30-3:18
UH 0038 (University Hall)
Call # 05668-8

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COURSE DESCRIPTION

Journalists and other communication professionals increasingly need to analyze and use quantitative data, including data gathered using social science research methods and information in the public domain. This course offers students an overview of the use, manipulation, and interpretation of quantitative information as well an introduction to the scientific method, useful in a wide range of communication careers, especially journalism. We also examine the kinds of biases and errors in human reasoning that perpetuate false beliefs and claims and investigate the research that explains how those biases come to be.

GOALS

- Learn to think critically about statistical claims that are made regularly in the media and other forms of social discourse. Students will be provided with tools for understanding and evaluating numbers and evidence. This will make you not only better, more marketable journalism and communication professionals, but more savvy citizens as well.
- Be able to understand and write about quantitative information, both in the empirical research literature and the media.
- Learn skills to ask and answer research questions, both by using publicly available sources of data and collecting your own data.
- Understand how our own cognitive limitations and mental shortcuts we use often lead us to believe things that aren't true or aren't based on sufficient evidence, and how we can overcome such fallacies and shortcomings of human reasoning.

REQUIRED MATERIALS

- Meyer, P. (2002). *Precision Journalism: A Reporter's Introduction to Social Science Methods* (4th ed). Rowman & Littlefield
- Gilovich, T. D. (1991). *How We Know What Isn't So: The Fallibility of Human Reason in Everyday Life*. Free Press.
- A daily newspaper, either print or online editions. Look for articles that raise statistical, scientific, or quantitative issues or debates. When you find a particularly appropriate and interesting article, download or print it. You may find it useful for the class in terms of completing assignments.
- Other information sources of interest to you where course-related content could be found, such as local or national television news broadcasts, magazines or blogs.

An order for both books has been placed with Barnes and Noble in the South Campus Gateway.

OPTIONAL MATERIALS

- A computer with SPSS installed.

SPSS can be obtained on your personal machine as a free software download via the Office of Information Technology (OIT) downloads web page (<http://osusls.osu.edu/>). You will need to sign a license agreement to get the code necessary to activate the software once it is downloaded. See the IT Service desk at 025 Central Classroom Building to get this code.

ASSESSMENT

Your grade will be based on the number of points earned on various exams and assignments. The scale for deriving your grade is as follows:

275+ points:	A
250-274 points:	A-
225-249 points:	B+
200-224 points:	B
185-199 points:	B-
170-184 points:	C+
150-169 points:	C
130-149 points:	C-
110-129 points:	D+
90-109 points:	D
<90 points:	E

There will be two multiple choice exams that you must attempt. I define “attempt” as taking the exam and achieving a score of at least 10% more than what would be expected if you were just guessing. If you don’t achieve at least at this level, you will be required to take a comparable exam again during final exam period. Each exam will be worth 100 points each. The rest of your points will be earned “a la carte,” meaning you can select one or more assignments to complete in order to earn additional points. You can complete as many or as few assignments as you like. With the exception of those assignments that require weekly contributions throughout the quarter, you can turn the assignments in whenever you are ready, but in no circumstances any later than December 9th at 1:30PM. These assignments and their point values are as follows (details about each assignment will be distributed on separate handouts):

<u>Assignment</u>	<u>Value</u>
Personal journal:	up to 40 points
Empirical article review:	up to 5 points, can be done 5× for a max. of 25 pts.
Interview a scientist:	up to 20 points, can be done 2× for a max. of 40 pts.
Book review:	up to 10 points, can be done 3× for a max. of 30 pts.
Quantitative research project:	up to 50 points

You will also earn 1 point for simply attending class and arriving before I start class. Attendance will be taken at the very beginning of class. If you arrive after attendance is taken, no points will be earned. Although I am happy to hear from you when you can’t

make it to class, if you aren't in class, you won't get the point, regardless of your explanation for your absence.

COURSE POLICIES

Late assignments and missed exams

Assignments turned in late lose 1 point for every hour turned in past the due date and time, and assignments will not be accepted more than 48 hours after the due date. Such assignments are given a zero. Assignments should not be submitted electronically unless you have made an arrangement with me to do so. If you receive permission to submit an assignment electronically, it is your responsibility to make sure that the assignment was received. If it is not received, regardless of the reason, it will be treated as late or absent.

Exams are given only once. In only rare circumstances will a make-up exam be scheduled, and it will occur on the day and time the final examination for the course is scheduled by the registrar.

The only acceptable basis for turning in an assignment late or requesting a make-up exam is a totally unforeseen personal circumstance that is convincing documented no later than 24 hours after the date the assignment is due or the exam is scheduled. Computer failures, printing problems, all but the most extreme illnesses that can be documented, buses not running on time, car problems, misbehaved pets, missed or cancelled airline flights, job interviews, attendance at family social functions, sporting events, and previously scheduled vacations are not valid excuses for turning in an assignment late or missing an exam. Make backup copies of your work, drive carefully, feed your dog regularly, and have a plan for last minute emergencies. ***Do not approach me at the end of the quarter with a medical excuse for poor performance or missing exams or assignments earlier in the quarter. The time to me is when the problem first arises. I follow this policy strictly, and documentation produced more than 24 hours after the exam or due date simply will not be accepted, regardless of how valid or compelling it seems to you.***

Once an examination is underway, you may not leave the room until you are finished. If you leave the room, you must turn in your exam, and all unanswered questions will be graded as incorrect. If you talk during the exam with another student, I will assume that your discussion is about the exam itself, and this will be treated as a violation of the Code of Student Conduct. Other forms of academic misconduct will be prosecuted according to accepted University procedures (see below).

Academic Misconduct

All students at the Ohio State University are bound by the Code of Student Conduct (see http://studentaffairs.osu.edu/resource_csc.asp). Violations of this code in this class, especially pertaining to 3335-23-04 on Academic Misconduct will be aggressively prosecuted through the procedures the university has set up to deal with violations of the Code. You are responsible for being familiar with the Student Code, and ignorance of the Code is not an excuse for violating it. Examples of violation of the Code of Student Conduct include

- Giving or receiving unauthorized assistance to or from other students in the class on recitation assignments.
- Working together on recitation assignments unless permission to do so is granted by your teaching assistant.

- Collaborating with other students on any assignment (e.g., writing sections of an assignment together, modifying electronic copies of another student's assignments or providing an electronic file of your assignment to another student, letting a student see a printed version of an assignment either whole in or part prior to the date and time the paper is due.)
- Submitting another student's work as if it were your own work
- Copying information from a web page, book, or other reference and submitting it as your own words. Quote only sparingly to avoid the possibility of unintentional plagiarism. Provide references and page numbers when you do quote. For advice on what plagiarism is and how to avoid it, see <http://science.widener.edu/svb/essay/plagiar.html> or <http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml>
- Cheating on exams (e.g., such as using cheat sheets, providing answers to or receiving answers from another student, sending or receiving electronic communications pertaining to examinable material during the exam period).

If I believe you have violated the Code of Student Conduct, your case will be referred to the Committee on Academic Misconduct (see <http://oaa.osu.edu/coam/home.html>). Possible penalties for violating the Code of Student Conduct include failure in the course (the standard penalty) and even dismissal from the University (for especially egregious violations or repeat offenders). Make sure that you are familiar with the Code of Student Conduct, and familiarize yourself with "Ten Suggestions for Preserving Academic Integrity" available online at <http://oaa.osu.edu/coam/ten-suggestions.html> and on CARMEN. I am a member of the Committee on Academic Misconduct and have also sent many students to this committee, so I am well familiar with the procedures for investigating students suspected to be in violation of the Code of Student Conduct or the rules of the course described above.

Cell Phones and General Politeness

A ringing cell phone is annoying to the instructor and others in the room. Please be respectful of those around you by turning off your cell phone prior to the start of class. If you anticipate that you will need to leave the room before the end of class, please select a seat near the door to avoid disrupting others when you leave. To maintain an atmosphere conducive to learning, please be courteous to other members of the class and treat them with the dignity and respect that you expect from others. Students who do not abide by standards of basic human decency can expect to be escorted out of the room or, in extreme circumstances, the University Police.

Professor's Use of Electronic Mail and Messaging

There may be occasions where I will need to get in touch with you outside of regular class hours. Email will usually be the first means by which contact will be initiated. It is important that you check your OSU email account regularly, and make sure you purge your account of unneeded email so that new email can get through. If you do not use your OSU email address as your primary email account, please arrange through OIT to have your OSU email forwarded to your preferred account. For instructions on how to have your email forwarded, see http://8help.osu.edu/forms/mail_forwarding.html. I have a Google Chat account (afhayes@gmail.com) that I am logged into whenever I am on campus, and frequently when I am at home. However, I am not always sitting at my computer, so your message may not be received and replied to immediately.

Emergencies

In the event of an emergency, please carefully follow the directions of the teaching staff or, if deemed prudent by your own judgment, contact 911 or the University Police at 292-2121.

Inclement Weather or “Absent Professor”

Unless the university is closed, you should always assume class will be held. But there may be times when I am not able to make it to a lecture as a result of some unforeseen circumstance. If I do not show up within **30** minutes after the scheduled start of class, then consider the lecture cancelled, and expect material scheduled for that day to be rescheduled for the next class meeting.

Tentative Nature of this Syllabus

This syllabus represents a contract in the works. Events that transpire over the quarter may require me to modify the administration of the course and therefore the syllabus. In the event I need to modify the syllabus, I will announce the modification in class and CARMEN. Ultimately it is your responsibility to keep up with any such modifications and be aware of current policies, deadlines, etc.

Students with Special Needs

If you need an accommodation based on the impact of a disability, you should contact me to arrange an appointment as soon as possible. At the appointment we can discuss the course format, anticipate your needs, and explore potential accommodations. I rely on the Office of Disability Services for assistance in verifying the need for accommodation and developing accommodation strategies. If you have not previously contacted the Office for Disability Services, I encourage you to do so. The office can be contacted at 614-292-3307. The office is located in room 150 Pomerene Hall.

SCHEDULE OF TOPICS AND READINGS

Below is a tentative schedule of lectures, with corresponding readings from the book and/or links and PDFs available on CARMEN. Information from CARMEN may not always be available prior to 24 hours before the day of class. If there is no reading posted by 1:30PM the day prior to class, assume there is no additional reading on CARMEN for that day. Please try to complete readings prior to class. Readings in **bold** are available on CARMEN. Reading not in bold are from one of the two texts for the class. "TBA" this means that readings, if any, have not yet been determined. If any are required, they will be posted on CARMEN as the date approaches.

- 9/24 Lecture: Course Introduction
Reading: None
- 9/29 Lecture: Operationalization, Measurement, and the Role of Numbers
Reading: Meyer, Chapter 1; **Murray, Schwartz, and Lichter (1999)**
- 10/1 Lecture: Descriptive Statistics Refresher
Reading: Meyer, Chapter 5 (pp. 51-68); **Hayes (2005, Ch. 3)**
- 10/6 Lecture: Numerical Indicators and Numbers in Context
Reading: Meyer, Chapter 3; **Best (2001)**
- 10/8 Lecture: Visual Communication Through Graphs and Tables
Reading:
- 10/13 Lecture: Quantitative Information in the Public Domain.
Reading: Meyer, Chapter 10 (skip the section on Scott's pi)
- 10/15 Lecture: Using SPSS for Quantitative and Visual Description
Reading: TBA
- 10/20 Lecture: Basics of Polling
Reading: Meyer, Chapter 6
- 10/22 Lecture: Question Wording, Formatting, and Context
Reading: **Schwartz (1999)**
- 10/27 Lecture: Inference and the Description of Poll Results
Reading: Meyer, Chapter 12; **Gawiser and Witt**
- 10/29 Exam I**
- 11/3 Lecture: Correlational Research I
Reading: Meyer, Chapters 7 and 8;
- 11/5 Lecture: Correlational Research II
Reading: TBA
- 11/10 Lecture: Experimentation I
Reading: Meyer, Chapter 9

- 11/12 Lecture: Experimentation II
Reading: TBA
- 11/17 Lecture: Science Communication
Reading: TBA
- 11/19 Lecture: Errors and Biases in Human Reasoning I
Reading: Gilovich, Chapters 1 through 4;
- 11/24 Lecture: Errors and Biases in Human Reasoning II
Reading: Gilovich; Chapters 5 through 7
- 11/26 Thanksgiving break. No class.
- 12/1 Lecture: Errors and Biases in Human Reasoning III
Reading: Gilovich; Chapters 8 through 11
- 12/3 **Exam II**
- 12/9 at 1:30 All course assignments due by this date, in box outside of DB3068 or hand delivered to me. Any exam make ups that have been approved will also take place at this time at a location to be announced.