Numbers and Social Justice (CMMU 30) ~ Summer Session 2, 2017

Professor: Andrea Steiner, PhD (policy analysis), MSG (G for gerontology)
Department: Community Studies
Class offered: Tu/Th 1-4:30 pm
Room: Physical Sciences Building, room 114

Sections: Wednesdays, either 5-6 or 6-7
Room: Soc. Sci. 2, room 159

My office: Oakes 207
My contact info: steiner@ucsc.edu
Office hours: Tuesdays after class (by appointment) & Wednesdays 1-4 pm (my office at Oakes)

TA: Julianne Foxworthy
Contact info: jfoxwort@ucsc.edu
Office hours: To be announced

Syllabus
Welcome to Numbers & Social Justice, a lower-division elective offered by Community Studies. The following syllabus will guide our work during the quarter and give you a clear picture of my expectations.

Aims:
• To support social science and humanities students in developing a firm foundation in basic statistical reasoning -- i.e., the logics of numeracy -- and a clear appreciation of the power of sensible thinking about probability and uncertainty, as well as its limitations.
• To relate simple lessons of quantitative analysis to topical materials immediately relevant to social justice, social change, civic engagement, and social action.
• To encourage willingness to sort fact from fiction in a quantitatively informed manner.

Objectives:
By the end of this course, you will know how to:
• Do “rough (back of the envelope) math” – quick calculations that give you a clear sense of the realities you’re confronting in the world, whether examining income inequality, voters’ polls and survey results, the rate at which a virus is spreading (and where), or potential discrimination whether in employment, criminal justice, or access to health care;
• Roughly calculate (orders of magnitude [powers of 10], rounded estimates) quantities such as proportions, rates of change, means, standard deviations, and standard errors, and understand when and why these calculations will serve you;
• Accurately extract useful information from graphs and tables; and
• Pose appropriate questions in response to quantitatively framed claims, whether to debunk naïve assumptions or expose the flaws behind impressive-looking but bogus arguments.
You will also be able to:
• Relate theory to practice, and personal experience to both;
• Develop your listening and participation skills; and
• Think critically and creatively about how quantitative information is deployed in relation to social justice debates.

Expectations (including assignments and due dates):

For all assignments, I’ll provide a more detailed prompt on Canvas. Use it!

More generally, in order to get the most out of this course, I ask you to:

1. **Attend classes regularly, and arrive on time.** If this is a problem for you, come see me right away. Your attendance is crucial because (1) we meet only 10 times, (2) my teaching method is often interactive, so you can’t do the learning without the dialogue, (3) there’s a test (assignment, quiz, call it what you want but there’s a grade) every Thursday. **Attendance is required.** We’re handling section attendance a little differently; see Grading & Evaluation (below) for an explanation.

2. **Ask questions whenever you are unclear.** For all of us, the beginning of learning is to acknowledge ignorance. It can be an uncomfortable feeling but it’s crucial to become good at embracing the steeper parts of life’s learning curves. I encourage you to frame your uncertainties or anxiety as “excitement,” because it is also that. In this class, we’re aiming for an atmosphere where learning can happen, and that means all questions are welcome. I promise, if you have a question then somebody else in the class is wondering the same thing. And, if you prefer one-on-one tutorial-style learning, you can also talk with me during office hours or with our TA Julianne.

3. **Keep up with the reading and come to class prepared.** That’s important. Come with your questions and I’ll make sure that everyone understands the material. Anyway, I will do my very best.
   • **As part of this, Numbers in the News.** In week 2, you’ll be responsible for bringing a justice-relevant, chart-using or stats-quoting or study-describing article from a reputable news source to class. [Because the class is large-ish, we’ll probably divide presentations between section and lecture.] **Part 1:** You’ll have THREE MINUTES – that’s all – to summarize the article and identify what additional contextual information would help a reader understand the article more completely. You should pose 2-5 answerable, i.e. researchable, questions. Then, Julianne and I will focus on an example or two to help you see the kinds of questions or simple research that would provide appropriate context or help us value the research as presented. **Part 2:** Find the answers to the questions you posed or that you think of afterward, and write 1-2 paragraphs re-summarizing the article, with context and/or critical analysis. Cite your sources. **DUE:** Elevator speech due in week 2 (August 8-10) according to sign-up sheet. Write-up due the following Tuesday (August 15). (10% of your total grade)

4. **In weeks 2-4, complete a weekly (Thursday) assignment in class – basically a quiz with debriefing afterward.** The quizzes will be based on material presented right up to the moment of the exam. Each week will emphasize that specific week’s work, but some
questions will reflect previous lessons, so your demonstrated knowledge will be cumulative. At times, I may ask you to bring something in that you’ll work with as part of the quiz. (Each worth 20% of your grade, for a total of 60%)

5. In place of a final exam, complete a group project, to be presented in week 5. Working in small groups—or if you strongly prefer, solo or in a pair—you will take a social justice issue and collectively present the following (pretty structured) analysis to the rest of the class:
   • What is the issue, and what makes it a “social justice” issue?  To cover this, you’ll have to present certain numbers in a contextualized, meaningful way.
   • Where does the quantitative information we need to understand this issue come from, and what does it say?  This will involve identifying key sources, considering their credibility and biases, explaining the type of research that produced the information, and summarizing the key findings.
   • What is your assessment of the way/s that government agencies, popular media, alternative (critical) media, and/or scholars have framed the issue  Show graphics, headlines, media clips, direct quotes.
   • How would you frame the issue, using quantitative methods?  You may also use qualitative methods as a complement, but not as a substitute.
   • In sum, use your numeracy skills to confront a social justice issue from both hegemonic and counter-hegemonic perspectives, the better to understand what most consumers are getting—for better or for worse—and how best to interpret it.

Throughout summer session you’ll have some time to meet during class, but you’ll also have to connect outside of class to get it done. Each group will have about 30 minutes (this number may change depending on how many people are in the class and how many groups we form); presentations will take place on Tuesday and Thursday of week 5.

In addition to presenting, each unit will turn in a compiled document that specifies:
   • Who did what
   • Three take-home messages for each student’s contribution
   • Source list in APA format  You will lose points for incorrect citation format
   • Supplemental materials as desired  Links, tables or figures, etc.

This final assignment is worth 25% of your grade: 20% for the class presentation, 5% for the written materials.

6. Conduct yourself with academic integrity and honesty. The university has strong policies about academic misconduct, and so do I. Much of our work is collaborative; some is not. If I catch you cheating, you will fail the relevant assignment, very possibly fail the course, and equally possibly I will start the formal procedures that the university stipulates. If you have any questions at all about what constitutes cheating or plagiarism, there is no shame in that; for clarification, see http://www.ucsc.edu/academics/academic_integrity/index.html, where the 18th century thinker Samuel Johnson is quoted as saying: “Knowledge without integrity is dangerous and dreadful.” The UC statement goes on to read, “Academic misconduct includes but is not limited to cheating, fabrication, plagiarism, or facilitating academic dishonesty or as further specified in campus regulations.” You can also come and check with me.
Bottom line: it is your responsibility—and, I hope, your joy—to learn for yourself by doing your own work. If you’re concerned about your performance, come see me and we’ll make a plan to help you earn your best possible grade. Don’t get yourself into a desperate situation; communicate, please!

7. Please let me know right away if you are registered with the Disability Resource Center, so we can ensure that your need for accommodations will be satisfied. Thanks.

Grading and evaluation
Please, don’t get hung up on them. Steady A’s don’t mean you couldn’t improve, and an early C or D doesn’t mean you won’t end up doing fine. I look at progress and growth as well as basic performance. I’ll give you a lot of feedback along the way, because I want you to take that feedback into account and use it to improve your critical thinking and writing. I’m happy to work closely with you, so please don’t be shy about asking for support. Here is the breakdown of how I’ll grade your work:

- **Numbers in the News – 10%**. You’ll be graded for your choice of article (Is it social justice? Does it draw on or call for statistical reasoning?); quality of elevator speech (accurate summary, appropriate questions, effective time management); and quality of follow-up essay (transforming a news article into something you’ve positioned within its wider world, demonstrating accurate spelling, grammar, punctuation, and phrasing, and citing your sources in accurate APA format).

- **Quizzes – 20% x 3 = 60%**. I’ll grade these according to the accuracy of responses, clarity of expression, and understanding of key concepts and why they matter.

- **Final project – 25% (20% presentation, 5% companion materials)**. I’ll evaluate your presentations for their clarity, even-handedness, perceptiveness, accuracy, and—as appropriate—creativity. I’ll also look at your team-working skills, i.e. the quality of the collaboration as demonstrated by the overall functioning of the group as a group. I’ll assess the written report/companion packets for its grammatical accuracy and style as well as the intellectual taste you show in selecting appropriate materials for inclusion and in the way that you point out the relevance of each included item.

- **Attendance and participation – 5% and risk of failing the course**. **Lecture:** Anyone who misses more than one class may not pass. “I’m busy with other courses” is not a legitimate excuse. I’ll consider (1) evidence that you’re coming to class prepared, (2) how perceptive your questions and comments are, and (3) how respectfully you listen to and engage with your classmates. **Section:** Section attendance is required during the Numbers in the News exercise in weeks 1 and 2. After that, we’ll continue to take attendance and the final number of absences will be one factor. Julianne will arrive at a section grade based in part on how much you need to be there! Students earning A’s on all the assignments may miss a section or two without penalty; students who need additional support are expected to show up and take advantage of the help that’s here for you. We’ll work hard to support your learning and expect you to work hard for it too.
Required Reading

Both sources are on sale downtown at The Literary Guillotine, 204 Locust Street, 457-1195.


Course Outline, by week

(How to read this: The reading is listed under the week that it’s due. If for a specific day of the week, that’s noted; otherwise please be ready for Tuesday.)

Here’s how most of the weeks will be structured:

Tuesdays: Lecture/lessons associated with (but not exclusively about) assigned reading. Some exceptions, so read the course outline below with care.

Wednesdays: Discussion section. The focus will be on preparing for the Thursday quizzes. Think of sections in this course as labs, and take advantage of the great resource that Julianne is. Remember, if you’re not following the material or not doing well on your quizzes, any absences will affect your participation grade, because you’re neglecting a key resource (Julianne) in learning the material.

Thursdays: Sometimes some lecture first. Then quiz, then debriefing the quiz, then groups work on project development.

Week One (August 1, 3)
Introductions / Numeracy as a social justice issue, statistics as a social justice tool / Reading and translating math / Rough math / The questions to ask

Reading for Thursday:
- Woloshin et al., Know Your Chances, Parts 1 & 2.

DUE NEXT WEEK:
- Numbers in the News, date as assigned.
- Quiz Thursday (August 10th).
Week Two (August 8, 10)
ALL the basics of interpreting statistics about risk & change

DUE THIS WEEK:
• On Tuesday/Wednesday/Thursday, give your Numbers in the News elevator speech
• On Thursday, take Quiz #1
• Also on Thursday, you’ll form project groups. Please review the list, think about it, and come with your top 3 choices. Groups will meet and each person will leave with a ‘next step.’

Reading for this week:
• Woloshin et al., Know Your Chances, Parts 3 & 4 (i.e., finish the book).

DUE NEXT WEEK:
• On Tuesday, Numbers in the News write-up
• On Thursday, Quiz #2
• Also on Thursday, based on your initial discussion, bring relevant materials for small group discussion.

Week Three (August 15, 17)
Measuring: Validity, Reliability, Operationalization // Counting: Surveys, censuses, polls, surveys // Samples and populations

DUE THIS WEEK:
• On Tuesday, hand in your Numbers in the News write-up
• On Thursday, Quiz #2
• Also on Thursday, come prepared to work on your project.

Guest speaker on Tuesday: Jamie Epstein, queer and sexual health activist.

Reading for Tuesday on measures, plus an intro to Jamie Epstein:
• Moore & Notz, Chapter 8 (Measuring). R-8-23

Reading for Thursday on surveys:
• Moore & Notz, Chapters 1 (Where do data come from?), 2 (excerpt from Samples, good and bad), 3 (What do samples tell us?) and 4 (Sample surveys in the real world). R-37-83

DUE NEXT WEEK:
• On Thursday, Quiz #3
Week Four (August 22, 24)
Tables & Figures: The good, the bad, and the flat-out misleading

DUE THIS WEEK:
• On Thursday, Quiz #3
• Also on Thursday, Project groups

Reading for this week:
• Moore & Notz. Chapter 10: Graphs, good and bad. R-84-98

DUE NEXT WEEK:
• Presentations and supplemental materials.

Week Five (August 29, 31)
Reading, Translating, Measuring, Showing, and Interpreting:
It’s Your Turn!
// And, Wrapping Up

STUDENT PRESENTATIONS (Remember to hand in your supplemental materials)

No new reading

That’s the course!
~ THANKS ~