Proposed Change in the
Mathematics Requirement for Undergraduate Majors
In Communications and Journalism at UNM

DEPARTMENTAL GRADUATION PLANS:
　　See https://cjdept.unm.edu/advisement/undergraduate-planning.html
The current graduation planning documents require Stat145 for the journalism concentrations
Math1350 is the new name for Stat 145. They have the same title: "Introduction to Statistics"
This proposed change involves a new course: Statistical Literacy (Math 1300).

STATISTICAL LITERACY: MATH1300
The Mathematics department at UNM began offering Statistical Literacy (Math1300) as a catalog course in fall 2021.

Math 1350, traditional statistics, is intended for *producers* of statistics: students in STEM majors, psychology and some of the social sciences. Math 1300, statistical literacy, is intended for the *consumers* of statistics: students in majors such as journalism, political science, history, etc. Both courses satisfy a mathematics requirement in the General Education curriculum.

Here is the UNM catalog description for **Math1300: Statistical Literacy.**

Participants will study the social statistics encountered by consumers. Investigate the story behind the statistics. Study the influences on social statistics. Study the techniques used to control these influences. Strong focus on confounding.

This course is different: less than a 30% overlap with a traditional introductory statistics course. This course focuses on how statistics are constructed, influenced and manipulated. It features hypothetical thinking: how statistics could have been defined, counted, measured, combined and presented, and about what was -- and was not -- taken into account.

This course has no algebra and doesn't use computer software. It has a heavy emphasis on the use of ordinary English. This is important for ESL students -- and for some native speakers.

This course was designed for journalists. I invited Victor Cohn (Author of *News and Numbers*) and Stephen Doig (Arizona State) to give talks in my sessions at the annual meetings of the American statistical associations on the statistics needed by journalists. My colleagues and I analyzed the content of over 2,000 news stories to see what statistics and statistical ideas were most common. We analyzed over 200 graphs in USA Today. This course focuses on statistics in the everyday media. Each semester students analyze 10 to 20 news stories.

Students like this course. Here are anonymous student comments from fall 2021:
http://www.statlit.org/pdf/2021-Fall-UNM-Math1300-S1.pdf
For more on Math1300, see this video: *Statistical Literacy: Critical Thinking about Confounding*.
https://drive.google.com/file/d/1RCu7ZC81IWdQGR4RpU0LIhWbuFN0ggx4/view?usp=sharing

Proposal:
Proposal to change the mathematics requirement for Communication-Journalism undergraduates:

For communication students, require "Math1300" since it satisfies a mathematics Gen Ed requirement.
For journalism students, change the requirement from "Math1350" to "Math 1300"
　　OR change the requirement from "Math1350" to "Math1300 *or* Math1350".
　　　　Those that plan to go on for an advanced degree could be advised to take Math1350.
　　　　Those that do not could be advised to take Math1300.