**Experimental Design (MEJO 862) Fall 2021**

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| **Meeting time & location** | Tuesdays, 12:30 – 3:15 PM  Carroll Hall, Rm 338 |
| **Instructor & contact info** | Dr. Maria Leonora (Nori) Comello (she/her/hers)  comello@email.unc.edu (Best way to reach me)  (919) 928-2440 cell |
| **Office hours & location** | Tuesdays, 10 – 11 AM, and at other times by arrangement  Carroll 359, or online via Zoom |

**Course Overview**

This course will focus on the methodological and design issues to enable you to fully design and conduct an experiment. Rather than just reading about controlled experiments and field experiments, single factor experiments and factorial designs, manipulation checks, etc., we will walk through the steps in deciding which of these elements is best used in the creation of your own experiment, including making the stimuli and questionnaire, submitting an IRB application, etc. By the end of the semester you will run your own experiment. It is important to note that this class differs from experimental design courses offered from other departments, such as psychology, which deal primarily with analyzing data with various statistics. While we will cover this aspect briefly, the inner workings of the statistics and formulas will not be part of this class; you should take a traditional experimental design class to complement the conceptual knowledge gained in this course if desired.

**Readings**

Required

* Coleman, R. (2019). Designing Experiments for the Social Sciences: How to Plan, Create, and Execute Research Using Experiments. Los Angeles: Sage.
* Readings posted on the course schedule. Go to Sakai/Resources/Articles for links to full text through our library system. For the Scharrer & Ramasubramanian chapters, go to Sakai/Course Reserves.

Optional (highly recommended for those planning a career with experiments)

* Shadish, W.R., Cook, T. D., & Campbell, D.T. (2002). Experimental and Quasi-Experimental Designs for Generalized Causal Inference. Belmont, CA: Wadsworth.

**ACEJMC competencies**

The Accrediting Council on Education in Journalism and Mass Communications (ACEJMC) requires that, irrespective of their particular specialization, all graduates should be aware of certain core values and competencies. This course is particularly relevant to the following competencies:

* Demonstrate an understanding of the history and role of professionals and institutions in shaping communications;
* Understand concepts and apply theories in the use and presentation of images and information;
* Think critically, creatively and independently;
* Conduct research and evaluate information by methods appropriate to the communications professions in which they work;
* Write correctly and clearly in forms and styles appropriate for the communications professions, audiences and purposes they serve;
* Apply tools and technologies appropriate for the communications professions in which they work.

The full list of competencies is available here: <http://www2.ku.edu/~acejmc/PROGRAM/PRINCIPLES.SHTML#vals&comps>

**Honor code**

I expect that all students will conduct themselves within the guidelines of the University honor system (<http://honor.unc.edu>). All academic work should be done with the high levels of honesty and integrity that this University demands. You are expected to produce your own work in this class. If you have any questions about your responsibility or your instructor’s responsibility as a faculty member under the Honor Code, please see the course instructor or Senior Associate Dean for Graduate Studies Heidi Hennink-Kaminski, or you may speak with a representative of the Student Attorney Office or the Office of the Dean of Students.

**Accessibility resources and services**

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in barriers to fully accessing University courses, programs and activities. Accommodations are determined through the Office of Accessibility Resources and Service (ARS) for individuals with documented qualifying disabilities in accordance with applicable state and federal laws. See the ARS Website for contact information: <https://ars.unc.edu> or email [ars@unc.edu](mailto:ars@unc.edu).

**Counseling and Psychological Services (CAPS)**

CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: <https://caps.unc.edu/> or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

**Title IX**

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Reports can be made online to the EOC at <https://eoc.unc.edu/report-an-incident/> . Please contact the University’s Title IX Coordinator (Elizabeth Hall, interim – titleixcoordinator@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs. Additional resources are available at safe.unc.edu.

**Non-discrimination**

The University is committed to providing an inclusive and welcoming environment for all members of our community and to ensuring that educational and employment decisions are based on individuals’ abilities and qualifications. Consistent with this principle and applicable laws, the University’s Policy Statement on Non-Discrimination offers access to its educational programs and activities as well as employment terms and conditions without respect to race, color, gender, national origin, age, religion, creed, genetic information, disability, veteran’s status, sexual orientation, gender identity or gender expression. Such a policy ensures that only relevant factors are considered and that equitable and consistent standards of conduct and performance are applied. If you are experiencing harassment or discrimination, you can seek assistance and file a report through the Report and Response Coordinators (see contact info at safe.unc.edu) or the Equal Opportunity and Compliance Office, or online to the EOC at <https://eoc.unc.edu/report-an-incident/> .

**Diversity statement**

I strive to make this classroom an inclusive space for all students. Please let me know if there is anything I can do to improve; I appreciate any suggestions. More broadly, our school has adopted diversity and inclusion [mission and vision statements](http://hussman.unc.edu/diversity-and-inclusion) with accompanying goals. These complement the university non-discrimination policy described above, as well as [broader university goals](https://diversity.unc.edu/) for diversity. In summary, UNC is committed to providing an inclusive and welcoming environment for all members of our community and does not discriminate in offering access to its educational programs and activities on the basis of age, gender, race, color, national origin, religion, creed, disability, veteran’s status, sexual orientation, gender identity, or gender expression. The Dean of Students (Suite 1106, Student Academic Services Building, CB# 5100, 450 Ridge Road, Chapel Hill, NC 27599-5100 or [919] 966-4042) has been designated to handle inquiries regarding the University’s nondiscrimination policies.

**Masks**

All enrolled students are required to wear a mask covering your mouth and nose at all times in our classroom. This requirement is to protect our educational community -- your classmates and me – as we learn together. If you choose not to wear a mask, or wear it improperly, I will ask you to leave immediately, and I will submit a report to the Office of Student Conduct. At that point you will be disenrolled from this course for the protection of our educational community. Students who have an authorized accommodation from Accessibility Resources and Service have an exception. For additional information, see <https://carolinatogether.unc.edu/university-guidelines-for-facemasks/>

**Absences**

If you need to be absent, please let me know if advance, and be sure to send your reflections by start of class so we can include your thoughts in class discussion.

**Course requirements**

* Reflection and participation: Be prepared to discuss readings at the start of class. Reflect on 1) something of value you took from the readings, 2) a question or point of confusion about any of the readings, and 3) how any of the readings relate to your life, your topic, or past readings. We will begin each class by having each person talk about these points briefly (1-2 minutes per person) OR discussing them within a small group. I will sometimes provide additional prompts at the start of class. If you need to be absent for professional or other reasons, please submit these in advance (see section on absences). Beyond these reflections, I expect everyone to engage in lively and respectful class discussion. Regular and on-time attendance is important as well.
* Experiment-building assignments: There are 7 assignments that correspond to the steps required in developing an experiment: idea-generation, literature review, hypotheses, sampling strategy, stimuli and manipulation check, questionnaire, and IRB application. These are opportunities to build and get feedback on your design prior to conducting the experiment and submitting the final paper. Lengths will vary as appropriate to the topic. Instructions on each will be posted on Sakai under Assignments before the due date. The assignments will be due on Sakai. I will build in workshop time during class to allow you to receive feedback from me and peers to help guide your work.
* Final paper and presentation: The final paper and presentation should demonstrate the culmination of the entire semester’s work. This is a standard research paper suitable for a conference submission. The paper should be 8-10 pages **single-spaced** (or less if norm in your subfield) and include: introduction, theory-based literature review, hypotheses, a complete methods section, results, and a discussion. This paper is expected to be of much higher quality than the experiment-building assignments and needs to address feedback from those earlier pieces. It needs to be clearly and concisely written and suitable to a peer-review submission process. With permission and sufficient rationale, proposals written up to the results section may be accepted. You will also present your work in class in a style similar to (but more engaging than 😊) a typical academic conference presentation. Instructions for both the paper and presentation will be provided on Sakai.

**Grading**

Grades for overall course performance and most individual assignments will be based on the graduate scale (H, P, L, F). *As applied to final course grades*, interpretations are as follows:

* H = Your very best work. These students read and critically engage with all materials. They are able to apply concepts to practical and/or research-based contexts, suggest new directions, and significantly contribute to the body of scholarship in the area. Assignments are submitted on time and are well written and engaging. *Reserved for truly extraordinary work – I will actually say “wow!”*
* P = Your very best work. These students read and critically engage with all materials. They are able to apply concepts and suggest new directions in many instances. Assignments are submitted on time and are well written and engaging.
* L = Students read most of the material but do not often critically engage with it. They are able to apply concepts and suggest new directions in some instances.
* F = Students miss one or more classes without prior arrangement. They do not always read the material, and they fail to critically engage it.

Most individual assignments are also evaluated according to the H/P/L/F scale. *As applied to individual assignments:*

* H signifies work that is exceptional in terms of rigor, depth of analysis, or significance of contribution – again, a “wow!” assessment. Needless to say, work earning an H must also meet content and formatting requirements as explained in instructions, have few errors, and be submitted on time. (For the final paper, an H would be comparable to an editorial decision of “accept with minor revisions.”)
* P signifies work that meets content and formatting requirements, is well written, has few errors, and is submitted on time. (For the final paper, a P would be comparable to a “revise and resubmit” decision.)
* L indicates work that shows little understanding of the material and has substantial errors. (For the final paper: “Reject.”)

Although no formal points corresponding to the grades are issued, the WEIGHTS of each assignment in determining the final course grade are as follows:

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| Experiment-building assignments (7) | 35 |
| Final paper | 40 |
| Presentation | 10 |
| Reflection and participation | 15 |
| TOTAL | 100 |

For individual assignments, I will also provide written feedback, typically in the form of comments (sometimes extensive) added directly to your paper using the comment feature in Word.

**Fall 2021 Experimental Design Course Schedule – tentative schedule – subject to change**

**This schedule represents a good faith effort to outline our work over the course of the semester. However, because of unpredictable factors, I reserve the right to make changes to any aspect of this syllabus, including the timeline and assignments. I will alert you of any changes in readings, assignments, due dates, etc., over the course of the semester. Thank you for your flexibility!**

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|  | **Topic** |
| Aug. 24 | Day one. Meet and greet, discuss course goals, go over syllabus, discuss research interests. |
| Aug. 31 | INTRODUCTION, HISTORY OF EXPERIMENTS, & ETHICS   * Read:   + Coleman Ch. 1-2   + Scharrer & Ramasubramanian Ch. 2 (Sakai under Course Reserves) * Assignment due next week: Propose 3 ideas for an experiment. |
| Sep. 7 | OVERVIEW OF EXPERIMENTS, THEORY, & LITERATURE   * Assignment due: 3 ideas * Read:   + Coleman Ch. 3   + Potter, 2018; Thorson, Wicks, & Leshner, 2012 (Sakai under Resources/Articles) * Prep for assignment due in two weeks: Revise 1 approved idea, and add theory and literature review. |
| Sep. 14 | EXPERIMENTAL DESIGNS & VARIALBES   * Read:   + Coleman Ch. 4 & 6   + Baron & Kenny, 1986; Hayes, 2009; Spencer, Zanna, & Fong, 2005 * Assignment due next week: Revised idea with lit review. |
| Sep. 21 | VALIDITY, RANDOMIZATION, & HYPOTHESES   * Assignment due: Revised idea with lit review * Read:   + Coleman Ch. 5 & 7   + Mook, 1983; Smith, Levine, Lachlan, & Fediuk, 2002 * Prep for assignment due next week: Develop Hs and any RQs. |
| Sep. 28 | EFFECT SIZES & SAMPLING   * Assignment due: Hs and any RQs * Read:   + Coleman Ch. 8   + Basil, Brown, & Bocarnea, 2002; Crump et al., 2013; O’Keefe, 2017; VanVoorhis & Morgan, 2007 * Prep for assignment due next week: Write up sampling strategy for your study including a power analysis. |
| Oct. 5 | MEASUREMENT & STIMULI DESIGN   * Assignment due: Sampling strategy * Read:   + Coleman Ch. 9 to pg. 264   + Jackson & Jacobs, 1983; Tao & Bucy, 2007 * Prep for assignment due in two weeks: Design your stimuli and write description of stimuli development. |
| Oct. 12 | MANIPULATION CHECKS, PRETESTS, & PILOT STUDIES   * Read:   + Coleman Ch. 9 (pgs. 264-284)   + Arpan et al., 2006; O’Keefe, 2003; Hauser et al., 2018 * Prep for assignment due next week: Design your stimuli and write description of stimuli development. Make sure to include your manipulation check for your study (& pretest if applicable). |
| Oct. 19 | QUESTIONNAIRES & PROCEDURES   * Assignment due: Stimuli and manipulation check * Read:   + Coleman Ch. 10   + Coleman, Thorson, & Wilkins, 2011; Vannette, 2017; Olson & Raz, 2021 * Prep for assignment due next week: Design your questionnaire. |
| Oct. 26 | METHODS WRITE-UP & (REVISITING) ETHICS   * Assignment due: Questionnaire * Read:   + Coleman Ch. 11   + Simmons et al., 2011; Brannigan, 2021 * Prep for assignment due next week: Complete an IRB application. |
| Nov. 2 | DATA INTERPRETATION AND PAPER WRITE UP   * Assignment due: IRB application * Read:   + Levine, 2013; O’Keefe, 2007; Bem, 2003   + Scharrer & Ramasubramanian Ch. 12 (Sakai under Course Reserves) * Select any two experimental design studies, analyze and critique the way the results are written. |
| Nov. 9 | APPLICATIONS AND VARIATIONS ON EXPERIMENTAL DESIGNS   * Read: Robinson & Mendelson (2012), Mutz Ch. 1, other readings TBA * Guest speaker TBA |
| Nov. 16 | Consultations/Conduct your experiment |
| Nov. 23 | Consultations/Conduct your experiment |
| Nov. 30 | Present your final project and submit slides.  FINAL PAPERS DUE DEC 7 BY NOON on Sakai. |