

# CCPX5533: Research Methods in Clinical Psychology

Autumn 2021

**Meeting Time:** Wednesday, 6:00-7:40pm

**Location:** Macy Hall 130

**Instructor:** Christa D. Labouliere, Ph.D.

**Email:** [Christa.Labouliere@nyspi.columbia.edu](mailto:Christa.Labouliere@nyspi.columbia.edu)

**Office Hours:** By appointment via Zoom

<https://teacherscollege.zoom.us/j/5163287654>

**Course Assistant:** Isabel Terkuhle

**Email:** [it2293@tc.columbia.edu](mailto:it2293@tc.columbia.edu)

**Office Hours:** Wednesdays from 1-2PM ET via Zoom

<https://teacherscollege.zoom.us/j/99936988484>

## Course Description

Psychology is the science of the mind and behavior, and research methods are the backbone of that science. Whether a therapist in private practice or academic faculty at a university, every psychologist needs a thorough understanding of research methods. Research is what sets science apart from superstition or anecdote.

Regardless of why you decided to pursue psychology, research will make you a better psychologist. Perhaps you wanted to help others – this course will give you the scientific grounding to understand which treatments work and why, and how treatment efficacy is best evaluated. Or maybe you want to better understand the mind and conduct research of your own – this course will introduce you to study design and empirical methodology, and provide critical understanding of their strengths and weaknesses. Whether your interest are in neurobiology, genetics, animal models, human development, assessment and treatment of psychological disorders, the influence of culture and identity, or the implementation of systems-wide public health or epidemiology programs – the same scientific principles underlie all research, so this course should help you evaluate and create good science.

The goal of this course is to provide a survey of research methods and techniques used in the field of psychology, and to have you apply those techniques and develop skills that will help you in your career as a psychologist. Given that modern research is nearly always a team endeavor, your major assignment will be group-based. Likewise, as clear communication and dissemination of research is a critical component of the scientific process, this course will require both written assignments and an oral presentation. It is my hope that these experiences will give you insight into the research process, help you develop professional skills, *and* maybe even have fun.

## Course Format

This is a 16-week course that will be *hybrid*, meaning that the majority of students will attend in-person but that there will be also options for students to join remotely. It is preferred that students attend in-person if possible, but remote access is available for students who are not returning to campus or who cannot attend in-person for personal or health reasons. I encourage students who cannot make it in-person due to geography, illness, or scheduling conflicts to either attend remotely or review the lecture recordings once posted.

Remote access is available via Zoom:

**Topic:** Research Methods in Clinical Psychology (CCPX5533)

**Time:** Every Wednesday from 6:00-7:40PM ET, Sep 8–Dec 22, 2021 (No class November 24, 2021)

**Join Zoom Meeting:** <https://teacherscollege.zoom.us/j/99989054705?pwd=dFZUOXk2MlJQYmRSREVQR2pFcjREQT09>

**Meeting ID:** 999 8905 4705

**Passcode:** CCPX5533

**One tap mobile:** +19294362866,,99989054705# US (New York)

## Learning Objectives

By the end of this course, you should:

- Be able to clearly discuss research methodologies and their strengths and weaknesses;
- Have the ability to think critically about the methods used in published research you consume;
- Acquire the knowledge and skills to apply these research methods effectively to topics of interest to you and your field of study.

## Readings

There will be no textbook for this course; a mix of primary sources and reference texts will be used. All readings are posted to Canvas. The syllabus provides a list of required readings for each week, and these readings can be downloaded either from that week's module or from the *Files* section of the Canvas course website. You are expected to have read the required readings prior to that week's class session and be prepared to discuss them in detail. The first half of the course is quite reading-intensive, but bear with me – you will need these concepts to be prepared for assignments in the latter half of the course.

It is not a requirement, but it will make your life easier if you have ready access to the APA style manual:

American Psychological Association (2019). *Publication manual of the American Psychological Association* (7th Ed.).

ALL assignments are required to be formatted in APA-style as specified in the 7<sup>th</sup> edition of the APA style manual. Please note that the 7<sup>th</sup> edition came out Fall of 2019, and that older editions are very different. This is not one of those times where the cheaper, older edition is nearly as good; the rules change a LOT from edition to edition.

If you choose not to purchase the style manual, there are several information sources available on the internet on the intricacies on APA-style:

- APA Style Guide Online: <https://apastyle.apa.org/style-grammar-guidelines>
- Purdue Online Writing Lab: [https://owl.purdue.edu/owl/research\\_and\\_citation/apa\\_style/apa\\_style\\_introduction.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html)
- Another option is the Himmelfarb Health Sciences Library at George Washington University: <https://guides.himmelfarb.gwu.edu/APA>

Please note that *not* all online resources have been updated to reflect 7<sup>th</sup> edition requirements, but this does not absolve you of adhering to APA style. You may want to utilize the manual available on reserve in the TC Library to resolve questions.

## Grading

Grades are based on the following scale:

|              |            |             |
|--------------|------------|-------------|
| 98-100% = A+ | 94-97% = A | 90-93% = A- |
| 87-89% = B+  | 84-86% = B | 80-83% = B- |
| 77-79% = C+  | 74-76% = C | 70-73% = C- |
| <70% = F     |            |             |

There are no exams in this course. There are five primary components to your grade, and each component is described in detail below:

- Class Participation: 5%
- CITI Research Ethics Course: 5%
- Discussion Leadership: 10%
- Article Review: 30%
- Major Project – Research Proposal: 50%

Class Participation (5%): Once we are out of elementary school, we rarely receive grades for “effort,” but maybe we *should*. Knowledge and talent are important, but a good deal of the research endeavor is intangible – showing up, working hard, being prepared, participating actively in discussions, and learning from your colleagues. You are expected to attend class, either in-person or via Zoom, and be prepared to discuss the readings. Just like any meeting with collaborators in the “real world,” letting me know in advance when you cannot attend is polite and expected for all but emergency circumstances.

The course is divided into two parts – the first half includes predominantly didactic lectures on important content necessary to understand the second half of the course, where you will write your own research proposals and critique primary sources (peer-reviewed journal articles). For both halves, I expect that you will:

- Complete *all* required readings prior to the week's class session
- Attend class on time, either in person or via Zoom
- Be ready to discuss the material critically, engage actively with your classmates, and ask good questions – i.e., *participate*, not just be present.
- Just like any meeting with collaborators in the “real world,” letting me know in advance when you cannot attend is polite and expected for all but emergency circumstances

- Additionally, in the *first half of the course*, if you have questions, submit them by 5PM ET on the day prior to class using that week's Q&A discussion thread. (Submitting questions to the thread is optional, but guarantees they will be covered in-class, whereas asking in class is dependent on time left over at the end of lecture.) If a classmate asks a question you feel you can answer, feel free to chime in, either on the discussion board or in class!
- In the *second half of the course*, you are expected to read the discussion questions posted by discussion leaders prior to attending class and be prepared to engage in active discussion around these points.

If you are attending *in-person*, a reminder of course etiquette:

- Please do your best to arrive to class on time. If you must be late, please be minimally disruptive with your arrival.
- All cell phones and devices that provide notifications should be silenced *prior* to the start of class.
- Laptops, tablets, and phones are critical tools of the research endeavor, and thus are welcome in class. However, I have been known to pace the room while teaching, so *please* be respectful and don't let me catch you on Instagram or TikTok. (Remember, active participation is part of your grade.)
- **Masks are required to be worn over the nose and mouth at all times.** I know we are all tired of wearing masks – they make it harder to communicate and they are uncomfortable to some. Nevertheless, out of respect to your classmates who may have high-risk health concerns you cannot see... to my elderly immunocompromised parents who rely on my caregiving and thus will could be exposed to a deadly pathogen through no fault of their own... to the medically- and psychologically-vulnerable children with whom I work who are not yet eligible to be vaccinated – *please, please, PLEASE* wear a mask. In turn, I will wear a mask too, out of my respect for you and the challenges you and your loved ones may be facing, about which I care deeply even if I do not know the details. If there is a reason that you cannot wear a mask in class, I recommend that you join remotely so you can still participate without putting your classmates at risk. If you are hearing-impaired or have audio processing difficulties where mask-wearing may interfere with your learning, I will also post pre-recorded, mask-free lectures (so you can see my lips) and record class sessions (so you can review transcripts).
- I know this class overlaps with dinner time for many people and some folks may be coming straight from other daytime obligations, so I fully intend to look the other way if you absolutely must refuel. That being said, please **be respectful** of other classmates who may have sensory issues, airborne allergies, or dietary concerns (i.e., bring the most quiet, least smelly, low allergen foods possible). Given that mask wearing is required at all times, if you intend to eat during class, please make sure you are sitting in the back and *at least* 10 feet from your classmates.

If you are attending *remotely*, a reminder of Zoom etiquette:

- Out of respect for your classmates, please mute your microphone if you're not speaking. We cannot always control whether we have background noise in our homes, but we can do our best to keep it from disrupting everyone else. Remember to unmute when you have something to say!
- *If you choose to turn your camera off:* Totally fine, but you **MUST** upload a photo or an avatar with some personality. (No one likes to present to blank black boxes.) You can change your profile picture by logging in to the Zoom app or web portal (<https://teacherscollege.zoom.us>), clicking on *Profile*, and selecting *Change*.
- *If you choose to turn your camera on:* You do not need to be “fancy” to attend class, but please wear clothes and be aware of your surroundings (**Do not** Zoom us from the toilet; I am a little horrified that I need to make this an official rule.) If possible, clear away anything you would be embarrassed to have visible in the background (or leave it – we're all adults and I don't judge). Also, try your best to keep pets and children out of the shot (or else I will absolutely want to meet them and class will go off the rails quickly).

**CITI Research Ethics Course (5%):** A pre-requisite to submitting a research project for institutional review at most universities is completion of the Collaborative Institutional Training (CITI) Program Research Ethics course. You will need to go to [citiprogram.org](http://citiprogram.org), register as an affiliate of Columbia University Teachers College by creating a username/password and providing all requested information (select “Student Researcher – Graduate Level” as your role). Once you have made and affiliated your account, complete **both** the “IRB Social and Behavioral Researchers” and “Responsible Conduct of Research” courses. Please upload PDFs of your completion certificates for both courses to Canvas prior to the deadline to receive credit for completion.

**Deadline:** Wednesday, September 29<sup>th</sup>, 2021 at 5PM ET

**Discussion Leadership (10%):** Researchers frequently need to lead research meetings and oversee research team proceedings, and this sort of management skill is rarely taught in psychology programs. To get a taste, each student will be responsible for helping lead discussion for one of the topics listed in the syllabus. Due to the size of the class, you will lead discussion with a partner. It is up to you how you want to distribute the work.

In order to secure your discussion topic, please review the syllabus to see the articles to be read in Part 2 of the course, and then send an email to me at [Christa.Labouliere@nyspi.columbia.edu](mailto:Christa.Labouliere@nyspi.columbia.edu) with your top three choices of article. Which articles are still available to present will be posted on Canvas in the Discussion Leaders thread in the Discussion section. Article choice will be determined on a "first-come, first-served" basis. If you feel very strongly about which article you want to discuss or whether you want to co-present, please make your selection sooner rather than later! All selections must be made by October 6, 2021 or an article will be assigned to you.

Each pair of discussion leaders must:

- Provide the class with a list of questions or issues that your article raised NO LATER than 5PM ET on the day *before* you will lead discussion. To do this, the discussion leader(s) should post a new thread to the discussion board section of the class Canvas site. When posting, please be sure to select the checkbox to "allow threaded replies." Your discussion points should emphasize what the authors did well and not so well in regard to their methodology, measurement, and study design. Do not generate more than 2-3 discussion points per reading.
- Start the discussion with a *very brief* overview of the article. To this end, you can prepare visuals such as a small number of PowerPoint slides if you wish, but this is not required. When I say brief, I mean NO MORE than 5 minutes; if you choose to use slides, we are talking 3-4 slides at most. Please remember that it is expected that everyone has already read the article critically, so you do not need to review the article in depth. The purpose of this assignment is to lead discussion, not do an article presentation.
- Lead a discussion of your article during class. You will be scored on both the quantity and quality of discussion you elicit. Please note that "discussion" is not reading us the materials that have already been read by everyone; discussion consists of integrating the material with what we have covered in this class or other classes, extending the information we all have in common, and pointing out flaws. Discussion leaders should be ready to moderate the discussion and keep it going by asking the class questions about the readings or commenting on the readings as necessary. You will be expected to answer both in-class questions and those submitted via chat by remote learners. The goal of the discussion leader is to provide structure and direction for fellow students during discussion (not to be the discussion). You will need to fill about 20 minutes. The majority of the time should be spent engaging the class in a discussion of the points you have generated and the strengths and weaknesses of the methodology as described in the reading.

Deadline:        Select article for discussion – By October 6, 2021 *at the latest*  
                          Article discussion lead – TBD; different for each student

Article Review (30%): To be a good scientist, you need to also be a good consumer of scientific research. Furthermore, an often-overlooked but critically important part of being a scientist is participation in peer-review of scientific manuscripts! As such, you will get some practice with this assignment. You will be responsible for reviewing an empirical article, selected by me and Isabel, and complete an open-book, open-notes quiz on the purpose and conclusions of the research and the study's design and methodology. The article review quiz is to be completed on your own, not as a group. You are expected to think critically for this assignment. To prepare, read the article and ask yourself the questions necessary to provide a high-quality review:

- What were the authors' research question(s) and hypotheses? Were the methods and statistics selected adequate to answer the question(s)? How do you know that they're adequate?
- What choices did the authors make to improve validity and reliability? What types of reliability were assessed/reported and were they adequate? How do you know? What did the authors do to improve different types of validity (i.e., divergent/convergent, structural, content, internal, external, etc.) and were these efforts adequate? What were their trade-offs between internal and external validity?
- Who was included in the sample? Was the sample adequate? What effect did sample selection have on the validity of findings?
- What study design was used? What are strengths and weaknesses of that design? Did the study design utilize "controls"? If so, what kind (randomization, matched samples, control/comparison groups, statistical controls, others) and were they adequate? If no controls were used, what are the implications of this choice?
- What did the authors measure and how? Be *specific* – describe the measures or tasks involved, including the name, number of items/trials, scale, and any relevant reliability and validity information provided. If no reliability/validity information was provided by the authors, discuss the implications of this choice.
- Do the authors' conclusions make sense, given what they were able to actually test with their methodology? Are there alternative explanations?

- What could the authors have done to improve their methodology in this study? (Hint: No research study is perfect. There is always *something* that could be improved.) What questions did the study raise that you would like to see answered by future research studies?

The article for this assignment is TBD and will be available via Canvas. Likewise, to complete the assignment, you will access the quiz via Canvas during Weeks 7-8.

Deadline: Wednesday, October 27, 2021 at 5PM ET

Major Paper – Research Proposal (60%): In small groups of 4-5 people (Not 2! Not 6!), students will submit a major paper by choosing a topic area of interest and developing a research proposal. Although students will not be required to carry out the research they propose, the opportunity to develop a well thought-out proposal should be helpful to those who wish to develop new lines of research. Some students may eventually use this material to propose an actual research project to the IRB or submit a grant for graduate student funding.

*This paper must be a research proposal* – it cannot be simply a literature review. A research proposal includes an abstract (no more than 250 words), specific aims and hypotheses to be tested (1-2 pages), relevant background information and a brief literature review to explain the research’s rationale (2-3 pages), a brief statement on the significance of the research and why it is important (0.5-1 page), a full description of the method (including measures, procedures, planned analyses, and strengths/limitations; 5-8 pages), and a human subject section (including who the sample will be, how they will be recruited, risks to participants and how they will be mitigated, direct benefits if any, and how participant rights will be protected; 2-4 pages). Please note that your final proposals should be no longer than 15 pages, so if one section approaches the higher end of the page limits, then another section will inherently need to be kept to the shorter ends of the limits.

Since some students will be taking the course remotely, it is expected that you will meet with your group members outside of class (or communicate electronically) to make progress on this project across the semester. Many students also find technology (e.g., Google Docs for sharing ideas or collaborative writing, Doodle polls for scheduling, etc.) helpful in getting organized. I will be available to help refine your ideas, and it is recommended that you meet with me and Isabel, either during class sessions or by scheduling office hours, to obtain personalized recommendations. To help you maintain progress, different components of this project will be due at different times (see deadlines below); each group will submit one version of each section via Canvas. Within two weeks of submitting each section, you will receive comments much like a “revise and resubmit” for a grant or journal. You will be asked to incorporate my feedback AND provide a “response to reviewers” for your final proposal. Your final proposals should be *no longer than 15 pages* (excluding response, title page, and references), and must be written in APA-style (i.e., double-spaced; 1” margins; 11-pt Arial, 11-pt. Calibri, or 12-pt. Times New Roman font; title page; proper heading structure; in-text citations; reference section, etc.). Your grade is determined by the scientific merit of your proposal, as well as adherence to 7<sup>th</sup> edition APA-style formatting and proper spelling and grammar (yes, this absolutely counts). This is to emphasize that following formatting and submission instructions and thoroughly proofreading are integral unless you want your grant proposals immediately rejected from funding agencies.

Each group will also present their proposal to the class. Again, although students will not carry out the research they propose, the ability to present a scientific research project is an important skill to develop. You will have 20 minutes to present your research proposal in a clear and concise manner. It is preferred if you use PowerPoint or Prezi for this presentation and consider it practice for how you would present at a professional conference.

Deadlines:

- Select group members and presentation date – By October 6, 2021 *at the latest*
- Specific aims and hypotheses section, including references (10%) – November 3, 2021
- Background/significance section, including references (10%) – November 10, 2021
- Method section, including references (10%) – November 17, 2021
- Human subjects section (5%) and abstract (5%) – TUESDAY, November 23, 2021
- Final proposal, including “response to reviewers” (40%) – December 15, 2021
- Presentation (20%) – December 15<sup>th</sup> or 22<sup>nd</sup>, 2021

All submissions are due *at 5pm* on the date listed; this means submissions at 5:01pm and later are considered late and will face a 10% deduction. All drafts of specific sections are to be submitted via Canvas in Word document format; final proposals and “response to reviewers” can be submitted via Canvas in either Word or PDF format.

## **Policies:**

Course Etiquette: If you are going to miss a class or are requesting a change to an assignment due date, please ask me in writing. The best way is to send me a brief email ([Christa.Labouliere@nyspi.columbia.edu](mailto:Christa.Labouliere@nyspi.columbia.edu)). I may request that we discuss the matter further, either before/after a class or during office hours. However, a brief chat with me during these times without a written request does not count; if it is not in my email, it did not happen. Please do not rely on my (occasionally faulty) memory for important matters!

If you send me an email, I will always respond within 24 hours Monday through Friday. If you do not receive a response within 48 hours, please follow-up with me. It is rare (but has happened) that emails or assignments have disappeared into the dark corners of the interwebs and were not received. It is better to send a follow-up than miss out on the window to submit an assignment or make a request.

Class Recording Policy: To make course content accessible to students taking the course remotely, all class sessions will be recorded. Regardless of whether you are joining remotely via Zoom or attending in-person, it is possible that your image or voice could be captured on this recording during your participation. It is TC's policy that, if a course is being recorded, students must be informed in advance; please consider this your notification. Course recordings are protected by FERPA. Recordings will only be used in the course where they were made, accessible via Canvas for only the students enrolled in the course at the time of the recording. Zoom recordings will be accessible for a few months after the semester ends, but are automatically deleted after one year.

Students have the right to control whether their image/voice can be used in a class recording. Students connecting to the course remotely can use an avatar instead of turning their camera on if they do not want their image captured, and those who do not want their voice recorded can use the chat feature, discussion boards, or email to submit comments or questions. For students attending in-person, students who do not want their image captured should sit in an area of the classroom not covered by the camera so their image is not recorded, and those who do not want their voice recorded can be encouraged to write or use the discussion boards/email to submit comments or questions. All students will have access to the recordings via Canvas; students may not download the recording to a computer or other electronic device and may not distribute the recording or any portion or transcript of it to anyone else. If a student is found to have downloaded or shared a recording in violation of this rule, the student will be subject to sanctions for academic and general misconduct, including a failing grade for this course. Any other use of class recordings beyond the class requires permission from the College and students' (and anyone else recorded) expressed written permission. Please be respectful of your classmates' privacy and intellectual contributions!

Late Assignments: Assignments are due by the date and time listed. Late assignments (without documentation of personal emergency or illness) will face a 10% grade reduction for each calendar day (including weekends and holidays) that it is overdue. If you fear you will not be able to make a deadline, please let me know as far in advance as possible. I tend to be more charitable and flexible to those who plan ahead, as opposed to those sending frantic emails the night before. Of course, emergencies sometimes happen and will be dealt with on a case-by-case basis. However, procrastination and technological failure when submitting minutes before a deadline are a risk you choose to take, not an emergency.

COVID Safety: Instructors, students, and staff are a crucial part of keeping COVID-19 numbers low, and supporting the College's commitment to providing all members of its community with a safe, healthy, and supportive environment. Therefore, masks are required to be worn, covering both the mouth and nose, in all classrooms and buildings on the Teachers College's campus. All students who fail to comply will be asked to leave the class immediately and report to the Vice Provost for Student Affairs.

Academic Integrity: Academic dishonesty is defined as cheating, fabrication, and facilitation of academic dishonesty and/or plagiarism. Students who engage in academic dishonesty in this course will be subject to Departmental and College censure and may fail the course. Please be aware that intent is not always required for a written assignment to be plagiarized. Especially when conducting a review of the extant literature, it can be easy to absorb ideas – after all, the goal is to learn and synthesize new content! That being said, a good scientist keeps detailed notes and records so they are prepared to properly cite all intellectual property that contributed to their work.

Students who intentionally submit work either not their own or without clear attribution to the original source, fabricate data or other information, engage in cheating, or misrepresentation of academic records may be subject to charges. Sanctions may include dismissal from the college for violation of the TC principles of academic and professional integrity fundamental to the purpose of the College.

Accommodations: The College will make reasonable accommodations for persons with documented disabilities. Students are encouraged to contact the Office of Access and Services for Individuals with Disabilities (OASID) for information about registration. You can reach OASID by email at [osid@tc.columbia.edu](mailto:osid@tc.columbia.edu), stop by 301 Zankel Building, or call 212-678-3689. Services are available only to students who have registered and submit appropriate documentation. As your instructor, I am happy to discuss specific needs with you as well. Please report any access related concerns about instructional material to OASID and to me as your instructor.

Incomplete Grades: For the full text of the Incomplete Grade policy please refer to <http://www.tc.columbia.edu/policylibrary/Incomplete Grades>

Student Responsibility for Monitoring TC Email Account: Students are expected to monitor their TC email accounts. For the full text of the Student Responsibility for Monitoring TC email account please refer to <http://www.tc.columbia.edu/policylibrary/Student Responsibility for Monitoring TC Email Account>

Religious Observance: For the full text of the Religious Observance policy, please refer to <http://www.tc.columbia.edu/policylibrary/provost/religious-observance>

Sexual Harassment and Violence Reporting: Teachers College is committed to maintaining a safe environment for students. Because of this commitment and because of federal and state regulations, we must advise you that if you tell any of your instructors about sexual harassment or gender-based misconduct involving a member of the campus community, your instructor is required to report this information to the Title IX Coordinator, Janice Robinson. She will treat this information as private, but will need to follow up with you and possibly look into the matter. The Ombuds Officer is a confidential resource available for students, staff and faculty, including matters concerning "Gender-based Misconduct". "Gender-based misconduct" includes sexual assault, stalking, sexual harassment, dating violence, domestic violence, sexual exploitation, and gender-based harassment. For more information, see <http://sexualrespect.columbia.edu/gender-based-misconduct-policy-students>. The TC Ombuds Officer may be reached at [ombuds@tc.columbia.edu](mailto:ombuds@tc.columbia.edu) or 212-678-4169.

Emergency Plan: TC is prepared for a wide range of emergencies. After declaring an emergency situation, the President/Provost will provide the community with critical information on procedures and available assistance. If travel to campus is not feasible, instructors will facilitate academic continuity through Canvas and other technologies, if possible.

1. It is the student's responsibility to ensure that they are set to receive email notifications from TC and communications from their instructor at their TC email address.
2. Within the first two sessions for the course, students are expected to review and be prepared to follow the instructions stated in the emergency plan.
3. The plan may consist of downloading or obtaining all available readings for the course or the instructor may provide other instructions.

## Schedule

### Part I: The Basics

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Week 1     September 8, 2021     **Introduction**

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Week 2     September 15, 2021     **Psychological Science**

**Readings:** (approx. 64 pages)

Hershey, D. A., Jacobs-Lawson, J. M., & Wilson, T. L. (2016). Chapter 1 – Research as a script. In F. T. L. Leong & J. T. Austin (Eds.), *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants* (2<sup>nd</sup> Ed.; pp. 3-22). Sage Publications.

Leong F. T. L. & Muccio, D. J. (2016). Chapter 2 – Finding a research question. In F. T. L. Leong & J. T. Austin (Eds.), *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants* (2<sup>nd</sup> Ed.; pp. 23-40). Sage Publications.

Oleson, K. C., & Arkin, R. M. (2016). Chapter 4 – Reviewing and evaluating a research article. In F. T. L. Leong & J. T. Austin (Eds.), *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants* (2<sup>nd</sup> Ed.; pp. 59-74). Sage Publications.

Gelso, C. J. (2016). Chapter 32 – Applying theories to research: The interplay of theory and research in science. In F. T. L. Leong & J. T. Austin (Eds.), *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants* (2<sup>nd</sup> Ed.; pp. 455-464). Sage Publications.

**Assignment Due:**

**Getting to Know You:** Visit the course Padlet, introduce yourself, and get to know your classmates –  
Due by Tuesday, September 21, 2021 by 5PM ET

**REMINDER: Last day to Add/Drop is Tuesday, September 21, 2021**

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Week 3     September 22, 2021     **Reliability & Validity**

**Readings:** (approx. 72 pages)

Whitley, B. E. Jr., & Kite, M. E. (2013). Chapter 6 – Developing a measurement strategy. In B. E. Whitley, Jr. & M. E. Kite (eds.), *Principles of Research in Behavioral Science* (3<sup>rd</sup> Ed.; pp. 146-184). Routledge.  
**PAGES 146-163 ONLY**

Whitley, B. E. Jr., & Kite, M. E. (2013). Chapter 7 – The internal validity of research. In B. E. Whitley, Jr. & M. E. Kite (eds.), *Principles of Research in Behavioral Science* (3<sup>rd</sup> Ed.; pp. 185-211). Routledge.

Whitley, B. E. Jr., & Kite, M. E. (2013). Chapter 8 – The external validity of research. In B. E. Whitley, Jr. & M. E. Kite (eds.), *Principles of Research in Behavioral Science* (3<sup>rd</sup> Ed.; pp. 212-238). Routledge.

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Week 4     September 29, 2021     **Applying Reliability, Validity, & Research Ethics**

**Readings:** (approx. 38 pages)

Dell, D. M., Schmidt, L. D., & Meara, N. M. (2016). Chapter 12 – Applying for approval to conduct research with human participants. In F. T. L. Leong & J. T. Austin (Eds.), *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants* (2<sup>nd</sup> Ed.; pp. 175-185). Sage Publications.

National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research*.

Fisher, C. B., Hoagwood, K., Boyce, C., Duster, T., Frank, D. A., Grisso, T., Levine, R. J., Macklin, R., Spencer, M. B., Takanishi, R., Trimble, J. E., & Zayas, L. H. (2002). Research ethics for mental health science involving ethnic minority children and youths. *American Psychologist*, 57, 1024-1040. <https://doi.org/10.1037/0003-066X.57.12.1024>

**Assignment Due:**

**CITI Research Ethics Course –**  
Due Wednesday, September 29<sup>th</sup>, 2021 at 5PM ET

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Week 5      October 6, 2021      **Study Design, Part I:** Experimental & quasi-experimental studies; Randomization; Control and comparison groups; Between-subject, within-subject, and single-subject designs

**Readings:** (approx. 121 pages)

- Wompold, B. E. (2016). Chapter 6 – Designing a research study. In F. T. L. Leong & J. T. Austin (Eds.), *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants* (2<sup>nd</sup> Ed.; pp. 93-103). Sage Publications.
- Whitley, B. E. Jr., & Kite, M. E. (2013). Chapter 9 – True experiments. In B. E. Whitley, Jr. & M. E. Kite (Eds.), *Principles of Research in Behavioral Science* (3<sup>rd</sup> Ed.; pp. 241-279). Routledge.
- Whitley, B. E. Jr., & Kite, M. E. (2013). Chapter 10 – Field research. In B. E. Whitley, Jr. & M. E. Kite (Eds.), *Principles of Research in Behavioral Science* (3<sup>rd</sup> Ed.; pp. 146-184). Routledge.
- Whitley, B. E. Jr., & Kite, M. E. (2013). Chapter 13 – The single-case research strategy. In B. E. Whitley, Jr. & M. E. Kite (Eds.), *Principles of Research in Behavioral Science* (3<sup>rd</sup> Ed.; pp. 362-393). Routledge.

**Assignment Due:**

**Select your article for discussion and group members for the research proposal**

– Due Wednesday, October 6<sup>th</sup>, 2021 at 5PM ET

- To secure your *discussion leadership topic*, review the syllabus or Canvas discussion thread to see the articles to be read in Part 2 of the course, then send an email to [Christa.Labouliere@nyspi.columbia.edu](mailto:Christa.Labouliere@nyspi.columbia.edu) with your *top three* choices of article
- When your *group membership* is finalized, have *one person* from each group send an email to [Christa.Labouliere@nyspi.columbia.edu](mailto:Christa.Labouliere@nyspi.columbia.edu) and CC all group members

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Week 6      October 13, 2021      **Study Design 2:** Descriptive & naturalistic studies; Power; Meta-analysis

**Readings:** (approx. 89 pages)

- Estes, W. K. (2000). Chapter 2 – Basic methods of psychological science. In K. Pawlik & M. R. Rosenzweig (Eds.), *International Handbook of Psychology* (pp. 20-39). Sage Publications.
- Whitley, B. E. Jr., & Kite, M. E. (2013). Chapter 11 – Correlational designs. In B. E. Whitley, Jr. & M. E. Kite (Eds.), *Principles of Research in Behavioral Science* (3<sup>rd</sup> Ed.; pp. 311-336). Routledge.
- Myors, B. (2016). Chapter 11 – Statistical power. In F. T. L. Leong & J. T. Austin (Eds.), *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants* (2<sup>nd</sup> Ed.; pp. 161-172). Sage Publications.
- Cooper, H., Robinson, J. C., & Dorr, N. (2016). Chapter 21 – Conducting a meta-analysis. In F. T. L. Leong & J. T. Austin (Eds.), *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants* (2<sup>nd</sup> Ed.; pp. 315-325). Sage Publications.

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Week 7      October 20, 2021      **Measurement**

**Readings:** (approx. 36 pages)

- Whitley, B. E. Jr., & Kite, M. E. (2013). Chapter 6 – Developing a measurement strategy. In B. E. Whitley, Jr. & M. E. Kite (Eds.), *Principles of Research in Behavioral Science* (3<sup>rd</sup> Ed.; pp. 146-184). Routledge. **PAGES 164-180 ONLY**
- Constantine, M. G., & Ponterotto, J. G. (2016). Chapter 7 – Evaluating and selecting psychological measures for research purposes. In F. T. L. Leong & J. T. Austin (Eds.), *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants* (2<sup>nd</sup> Ed.; pp. 104-113). Sage Publications.
- National Institute of Mental Health. Definitions of the RDoC domains and constructs. <https://www.nimh.nih.gov/research-priorities/rdoc/definitions-of-the-rdoc-domains-and-constructs.shtml>
- National Institute of Mental Health. RDoc Matrix. <https://www.nimh.nih.gov/research/research-funded-by-nimh/rdoc/constructs/rdoc-matrix>
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## Part 2: Units of Analysis – From Neurons to Nations

Week 8    October 27, 2021    **Micro measures – genes, molecules, and cells**

**Readings:** (approx. 53 pages)

- Alboni, S., Van Dijk, R. M., Poggini, S., Milior, G., Perrotta, M., Drenth, T., Brunello N., Wolfer, D. P., Limatola, C., Amrein, I., Cirulli, F., Maggi, L., & Branchi, I. (2017). Fluoxetine effects on molecular, cellular and behavioral endophenotypes of depression are driven by the living environment. *Molecular Psychiatry*, 22, 552-561. <https://doi.org/10.1038/mp.2015.142>
- Alexander, N., Kirschbaum, C., Wankerl, M., Stauch, B. J., Stalder, T., Steudte-Schmiedgen, S., Muehlhan, M., & Miller, R. (2018). Glucocorticoid receptor gene methylation moderates the association of childhood trauma and cortisol stress reactivity. *Psychoneuroendocrinology*, 90, 68-75. <https://doi.org/10.1016/j.psyneuen.2018.01.020>
- Pereira, G. R. C., Tavares, G. D. B., de Freitas, M. C., & De Mesquita, J. F. (2020). *In silico* analysis of the tryptophan hydroxylase 2 (TPH2) protein variants related to psychiatric disorders. *PLoS ONE*, 15, e0229730. <https://doi.org/10.1371/journal.pone.0229730>
- Wertz, J., Belsky, J., Moffitt, T. E., Belsky, D. W., Harrington, H., Avinun, R., Poulton, R., Ramrakha, S., & Caspi, A. (2019). Genetics of nurture: A test of the hypothesis that parents' genetics predict their observed offspring. *Developmental Psychology*, 55(7), 1461-1472. <https://doi.org/10.1037/dev0000709>

**Assignment Due:**

**Article review quiz –**

Due Wednesday, October 27<sup>th</sup>, 2021 at 5PM ET

Week 9    November 3, 2021    **Circuits – Neural networks and other physiological systems**

**Readings:** (approx. 44 pages)

- Bryant, R. A., Felmingham, K. L., Malhi, G., Andrew, E., & Korgaonkar, M. S. (2020). The distinctive neural circuitry of complex posttraumatic stress disorder during threat processing. *Psychological Medicine*, 1-8. <https://doi.org/10.1017/S0033291719003921>
- Kvadsheim, E. Fasmer, O. B., Osnes, B., Koenig, J., Adolfsdottir, S., Eichele, H., Plessen, K. J., & Sørensen, L. (2020). Lower cardiac vagal activity predicts self-reported difficulties with emotion regulation in adolescents with ADHD. *Frontiers in Psychiatry*, 11, #244. <https://doi.org/10.3389/fpsy.2020.00244>
- McTeague, L. M., Rosenberg, B. M., Lopez, J. W., Carreon, D. M., Huemer, J., Jiang, Y., Chick, C. F., Eickhoff, S. B., & Etkin, A. (2020). Identification of common neural circuit disruptions in emotional processing across psychiatric disorders. *American Journal of Psychiatry*, 177, 411-421. <https://www.doi.org/10.1176/appi.ajp.2019.18111271>
- Reininghaus, E. Z., Platzer, M., Kohlhammer-Dohr, A., Hamm, C., Mörkl, S., Bengesser, S. A., Fellendorf, F. T., Lahousen-Luxenberger, T., Leitner-Afschar, B., Schögl, H., Amberger-Otti, D., Wurm, W., Queissner, R., Birner, A., Falzberger, V. S., Painold, A., Fitz, W., Brunnmayr, M., Rieger, A., Wager-Skacel, J., ... & Dalker, N. (2020). PROVIT: Supplementary probiotic treatment and vitamin B7 in depression – A randomized controlled trial. *Nutrients*, 12, #3422. <https://doi.org/10.3390/nu12113422>

**Assignment Due:**

**Specific aims and hypotheses section** (including references for anything cited) –

Due Wednesday, November 3<sup>rd</sup>, 2021 at 5PM ET

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Week 10 November 10, 2021 **Individuals – Within-subject and single-subject designs, behavior vs. self-report**

**Readings:** (approx. 41 pages)

- Gordon-Smith, K., Perry, A., Di Florio, A., Forty, L., Fraser, C., Dias, M. C., Warne, N., MacDonald, T., Craddock, N., Jones, L., & Jones, I. (2020). Symptom profile of postpartum and non-postpartum manic episodes in bipolar I disorder: A within-subjects study. *Psychiatry Research, 284*, #112748. <https://doi.org/10.1016/j.psychres.2020.112748>
- Helmich, M. A., Wichers, M., Olthof, M., Strunk, G., Aas, B., Aichhorn, W., Schiepek, G., & Snippe, E. (2020). Sudden gains in day-to-day change: Revealing nonlinear patterns of individual improvement in depression. *Journal of Consulting and Clinical Psychology, 88*(2), 119-127. <https://doi.org/10.1037/ccp0000469>
- Kelly, M. E., Lawlor, B. A., Coen, R. F., Robertson, I. H., & Brennan, S. (2019). Cognitive remediation for early stage Alzheimer's disease: A pilot study with an Irish population. *Irish Journal of Psychological Medicine, 36*, 105-119. <https://doi.org/10.1017/ipm.2017.23>
- Le, J., Kou, J., Zhao, W., Fu, M., Zhang, Y., Becker, B., & Kendrick, K. M. (2020). Oxytocin biases eye-gaze to dynamic and static social images and the eyes of fearful faces: Associations with trait autism. *Translational Psychiatry, 10*, #142. <https://doi.org/10.1038/s41398-020-0830-x>

**Assignment Due:**

**Background and significance section** (including references) –  
Due Wednesday, November 10<sup>th</sup>, 2021 at 5PM ET

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Week 11 November 17, 2021 **Groups – Descriptive studies and clinical trials, behavior vs. self-report**

**Readings:** (approx. 54 pages)

- Carl, E. Stein, A. T., Levihn-Coon, A., Pogue, J. R., Rothbaum, B., Emmelkamp, P., Asmundson, G. J. G., Carlbring, P., & Powers, M. B. (2019). Virtual reality exposure therapy for anxiety and related disorders: A meta-analysis of randomized control trials. *Journal of Anxiety Disorders, 61*, 27-36. <https://doi.org/10.1016/j.janxdis.2018.08.003>
- Hawley, L. L., Rector, N. A., DaSilva, A., Laposa, J. M., & Richter, M. A. (2021). Technology supported mindfulness for obsessive compulsive disorder: Self-reported mindfulness and EEG correlates of mind wandering. *Behaviour Research and Therapy, 136*, #103757. <https://doi.org/10.1016/j.brat.2020.103757>
- McCauley, E., Berk, M. S., Asarnow, J. R., Adrian, M., Cohen, J., Korslund, K., Avina, C., Hughes, J., Harned, M., Gallop, R., & Linehan, M. (2018). Efficacy of Dialectical Behavior Therapy for adolescents at high risk for suicide: A randomized clinical trial. *Journal of the American Medical Association Psychiatry, 75*(8), 777-785. <https://doi.org/10.1001/jamapsychiatry.2018.1109>
- Stice, E., Desjardins, C. D. (2018). Interactions between risk factors in the prediction of onset of eating disorders: Exploratory hypothesis generating analyses. *Behaviour Research and Therapy, 105*, 52-62. <https://doi.org/10.1016/j.brat.2018.03.005>

**Assignment Due:**

**Method section** (including references) –  
Due Wednesday, November 17<sup>th</sup>, 2021 at 5PM ET

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Week 12 November 24, 2021 **NO CLASSES – Thanksgiving Holiday!**

**Assignment Due:**

**Human subjects and abstract sections** (including references) –  
Due TUESDAY, November 23<sup>rd</sup>, 2021 at 5PM ET

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Week 13    December 1, 2021    **Systems – Implementation, dissemination, and prevention**

**Readings:** (approx. 63 pages)

- Bohnenkamp, J. H., Schaeffer, C. M., Siegal, R., Beason, T., Smith-Millman, M., & Hoover, S. (2021). Impact of a school-based, multi-tiered emotional and behavioral health crisis intervention on school safety and discipline. *Prevention Science, 22*, 492-503. <https://doi.org/10.1007/s1121-020-01195-3>
- Kahn, J. P., Cohen, R. F., Tubiana, A., Legrand, K., Wasserman, C., Carli, V., Apter, A, Balazs, J., Banzer, R., Baralla, F., Barzilai, S., Bobes, J., Brunner, R., Corcoran, P., Cosman, D., Guillemin, F., Haring, C., Kaess, M., Bitenc, U. M., Mészáros, ... & Wasserman, D. (2020). Influence of coping strategies on the efficacy of YAM (Youth Aware of Mental Health): A universal school-based suicide preventive program. *European Child & Adolescent Psychiatry, 29*, 1671–1681. <https://doi.org/10.1007/s00787-020-01476-w>
- Keen, A., Thoele, K., Oruche, U., & Newhouse, R. (2021). Perceptions of the barriers, facilitators, outcomes, and helpfulness of strategies to implement screening, brief intervention, and referral to treatment in acute care. *Implementation Science, 16*, #44. 16:44 <https://doi.org/10.1186/s13012-021-01116-0>
- Lyon, A. R., Cook, C. R., Duong, M. T., Nicodimos, S., Pullman, M. D., Brewer, S. K., Gaias, L. M., & Cox, S. (2019). The influence of a blended, theoretically-informed pre-implementation strategy on school-based clinician implementation of an evidence-based trauma intervention. *Implementation Science, 14*, #54. <https://doi.org/10.1186/s13012-019-0905-3>
- Shelton, R. C., Lee, M., Brotzman, L. E., Wolfenden, L., Nathan, N., & Wainberg, M. L. (2020). What is dissemination and implementation science? An introduction and opportunities to advance behavioral medicine and public health globally. *International Journal of Behavioral Medicine, 27*, 3-20. 020) 27:3-20. <https://doi.org/10.1007/s12529-020-09848-x>

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Week 14    December 8, 2021    **Populations – Epidemiology, public health, and global mental health**

**Readings:** (approx. 49 pages)

- Glantz, M. D., Bharat, C., Degenhardt, L., Sampson, N. A., Scott, K. M., Lim, C. C. W., Al-Hamzawi, A., Alonso, J., Andrade, L. H., Cardoso, G., De Girolamo, G., Gureje, O., He, Y., Hinkov, H., Karam, E. G., Karam, G., Kovess-Masfety, V., Lasebikan, V., Lee, S., Levinson, D., ... & Kessler, R. C., on behalf of the WHO World Mental Health Survey Collaborators. (2020). The epidemiology of alcohol use disorders cross-nationally: Findings from the World Mental Health Surveys. *Addictive Behaviors, 102*, #106128. <https://doi.org/10.1016/j.addbeh.2019.106128>
- Indig, D., Lee, K., Grunseit, A., Milat, A., & Bauman, A. (2018). Pathways for scaling up public health interventions. *Biomed Central Public Health, 18*, #68. <https://doi.org/10.1186/s12889-017-4572-5>
- Morrissey, K., & Kinderman, P. (2020). The impact of childhood socioeconomic status on depression and anxiety in adult life: Testing the accumulation, critical period, and social mobility hypotheses. *Social Science and Medicine – Population Health, 11*, #100576. <https://doi.org/10.1016/j.ssmph.2020.100576>
- Weinberger, A. H., Gbedemah, M., Martinez, A. M., Nash, D., Galea, S., & Goodwin, R. D. (2018). Trends in depression prevalence in the USA from 2005 to 2015: Widening disparities in vulnerable groups. *Psychological Medicine, 48*, 1308-1315. <https://doi.org/10.1017/S0033291717002781>

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Week 15    December 15, 2021    Project Presentations

**Assignment Due:**

**Final proposal, including “response to reviewers” –**  
Due Wednesday, December 15<sup>th</sup>, 2021 at 5PM ET

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Week 16    December 22, 2021    Project Presentations

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