

RESEARCH METHODS

Class: Tu/F 12:10-1:30pm in Campus MPR | Online Labs: Th 10:20am-12:20pm or 2:00-4:00pm via Zoom

Virtual (Zoom) Consultation Hours (booked via Calendly): W 4:00-5:00pm/F 2:00-3:00pm

Instructor

Dr. Justin Hulbert
e-mail: jhulbert@bard.edu

Book a Zoom Consultation:
calendly.com/just-hulbert

Course Materials



app.tophat.com



brightspace
by D2L

bardcollege.brightspace.com

Prerequisites

PSY 203 or equivalent

Assessment

- Top Hat Participation: **12.5%**
- Exams (3x15%): **45%**
- Lab Work: **5%**
- Literature Review: **10%**
- Group Project: **25%**
- Final Reflection: **2.5%**
- Extra Credit



Course Overview

This course is designed to provide you with the basic methodological tools to design and conduct sound, ethical research in psychological science. Building on the knowledge and skills you developed in Statistics for Psychology (or Biostatistics), our work together will help prepare you for moderation and for upper-level courses in the Psychology Program. The lab component of this course will supplement assigned readings, lectures, class discussions, and other activities to provide you with practical research experience. Working both individually as well as in groups, you will improve your skills collecting, analyzing, and presenting data. Throughout the course, you will hone your ability critique psychological research, noting that critical analysis is not necessarily negative. In fact, the best critical analysis acknowledges both the strengths and limitations of the research endeavor.



Learning Objectives

Coming out of this course, you should have:

- Developed a sound understanding of the primary research methods and designs used in psychological science, along with their respective benefits and limitations.
- Received training and certification for the ethical treatment of human research participants.
- Experience collecting data using several different methodologies and analyzing/interpreting them according to the proposed hypotheses and study design.
- Honed your ability to locate, read, interpret, evaluate, and present psychological research (including in written form, using APA style).
- Established a solid foundation for further study of psychological science.

Joint Responsibilities

Achieving the broad aims of this course requires commitments from both all of us. Below you will find an outline of some of those responsibilities. Did I leave something out? Let me know—we can discuss additional responsibilities/group norms as a class.

- **I (Justin) agree to...**
 - a) Make myself available outside of class via email, discussion forums, and during posted Zoom Consultation Hours (by appointment through calendly.com/just-hulbert) to answer questions, provide extra help, and discuss matters related to the course of study.
 - b) Respond in a timely fashion (typically by the end of the next school day) to email queries. In the event that more time is required to fully address the student query, I'll acknowledge receipt of the email and provide you with an estimated response time or suggest meeting in person.
 - c) Facilitate a thoughtful, considerate, and engaging learning environment.
 - d) Make available on Top Hat (and, if necessary, Brightspace) key materials forming the basis of synchronous activities for the purposes of review or catching up following absences.
 - e) Provide adequate time to complete assignments and notify students about any necessary changes to the course schedule/format as promptly as possible.
 - f) Provide comprehensive and fair assessments of materials presented or assigned. Assignments, with a level of feedback commensurate with the nature and aims of the task, will be returned to students in a timely fashion.
 - g) Create and welcome opportunities for students to provide feedback on the course/teaching throughout the semester.
- **You are responsible for...**
 - a) Showing up to class (in whatever form it takes) regularly, on time, and prepared while carefully



Virtual Consultations

Staying connected during a time of social distancing can be challenging. But assistance is just a few clicks away.

- Other students probably share many of your questions/concerns. Posting questions using the class discussion forums will allow everyone to benefit from (and contribute to) the exchange.
 - For more personalized issues (or if my Consultation Hours don't work), send me an email. But don't wait until the last minute before a deadline. Give yourself (and me) sufficient time to respond thoughtfully.
 - It's easy to arrange a Virtual Consultation. Think of it like dropping by my office. We can chat about life, classes, careers, and (of course) course content.
1. Simply go to calendly.com/just-hulbert
 2. Select a meeting time & let me know how I can prepare
 3. You'll get a Zoom link (and reminder) emailed to you

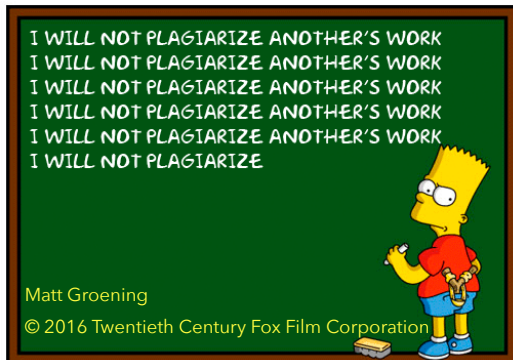
Writing/other academic help is available through [Bard Learning Commons](https://bardscholarshipcommons.com/) (lc@bard.edu).

following the relevant health and safety guidelines. I will take attendance in order to facilitate contact tracing; however, you will *not* be penalized for absences owing to the pandemic. If you are sick or feel ill, please do *not* attend class. Your classmates and I will work to provide notes and answer questions to help you catch up again. That said, it is important that you participate and complete the assigned readings/work, to the extent you are able.

- b) Checking your **Bard email** and **Brightspace** regularly for important announcements about the course. Adapting to the pandemic has made keeping in regular contact more important than ever. By clicking "Announcements" and then "Notifications" on the Brightspace landing page, you can request text and/or email alerts to be sent to you for a variety of course-related happenings.
- c) Keeping up with the assignments and readings. As the required text is now completely digital, you can access the material on your computer or smart device from anywhere. But keep in mind that there is no substitute for a deep and focused consideration of the material, spaced out over time and viewed interactively through multiple lenses.
- d) Substantively participating in course discussions (in class and/or online). Note that a top-notch level of participation *does not necessitate responding to every question* raised in class or online; active or passive efforts to welcome contributions from everyone in the class are also looked upon favorably. Though you are welcome to challenge your fellow students' and my thoughts/conclusions, please do so in a fashion that is respectful. Challenge ideas, not the person raising them.
- e) Maintaining connectivity. There are many benefits to taking handwritten notes. However, the need for social distancing and masks, along with the need to host more activities online, requires access to an

internet-connected device during and between class meetings. As such, it is strongly recommended that you bring a fully charged laptop or tablet with you to class. Smartphones are another option, though some features may be limited on such a tiny device.

- f) Submitting assignments digitally via Top Hat in .pdf format (unless prior arrangements have been made with me). If circumstances (e.g., illnesses) are likely to prevent you from turning in an assignment on time, please be proactive and inform me privately (over email or a Zoom Consultation) as soon as possible. Students requiring alternative course accommodations (including extended time/flexibility on assignments due to disability) should contact me privately as early as possible after the first class meeting.
- g) Upholding academic integrity. Plagiarism (e.g., copying other's words or ideas without proper citation) will not be tolerated. You are expected to work independently on each graded assignment, unless explicitly instructed otherwise. When in doubt as to what constitutes plagiarism within the confines of this course, you are encouraged both to consult the student handbook (<http://www.bard.edu/dosa/handbook/index.php?aid=1201&sid=705>) and to contact me for further guidance. There is absolutely no penalty for asking for clarification; however, failing to abide by Bard's standards for academic integrity can result in failing the course.



Assessment Details

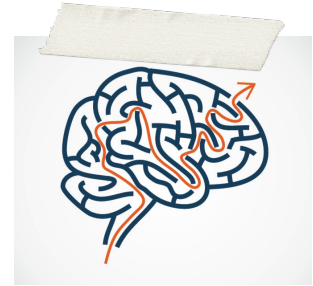


- **Top Hat** (12.5% of your final grade) will become your digital home for the course (in addition to Brightspace, which we will use primarily for announcements). In addition to Top Hat's custom-built interactive textbook, the platform will be used for attendance (used for the purposes of contact tracing), graded exams and end-of-chapter quizzes (the latter typically giving you multiple attempts to get the answer correct), lecture slides, class participation (e.g., interactive polls and the likes), homework assignments, and more. (So, yes, Top Hat access is *actually* required for this course. Sorry.)

- **Features:**

- By moving to fullscreen mode, you can then double-click to highlight and mark text passages with a bookmark, as important, and/or as confusing. After bookmarking a section, you are then invited to add your own personal note for easy reference (these notes are not shared with other students or me).
- While there is no printed version of this textbook, it is quite flexible—you can make annotations and take notes directly on the platform, use your computer's/ phone's/tablet's text-to-speech features to have the textbook read to you, or adjust the font size using your web browser's settings.
- Top Hat provides a number of "formative assessments" throughout readings and lectures, serving to reinforce your understanding between more formal, higher-stakes assessments (i.e., exams) while also helping you (and me) identify areas that may require additional attention to achieve mastery. Each module (corresponding to one or more chapters from your primary textbook) is associated with interactive quizzes, polls, writing prompts, and games that adapt to your growing expertise in research methods. You'll be able to track your progress, get immediate feedback on why an answer is correct/incorrect, and highlight gaps in understanding that could benefit from additional attention in class, lab, office hours, or during private study. Keep in mind that research from cognitive psychology indicates that repeated testing of studied information improves long-term retention (Karpicke & Roediger, 2008). That's right: Tests and quizzes can be so much more than a stressful final evaluation of your abilities; they can be used as a powerful study technique, helping to pace learning, cement your understanding, and (yes) likely improve grades on formal assessments.
- For more on taking advantage of your interactive textbook's features, see <https://support.tophat.com/s/article/Student-Using-Your-Textbook>.
- **Gaining Top Hat access:** If you are new to Top Hat (as is likely to be the case), follow the link in the email invitation I sent to your Bard email address or:
 - Go to <https://app.tophat.com/register/student>.
 - Search for our course with the following join code: **475264**.
 - When creating your account, please be sure to use your *Bard email address*. If the email on your Top Hat account does not match your school email, your Top Hat grades may not be recorded correctly :-(. I want you to get credit for your work—so please use your Bard email address.
 - The cost of the textbook and platform access is \$75 and will be applied at checkout when enrolling in our Top Hat Pro course.

- Bear in mind that course materials will be made available on Top Hat throughout the semester, so expect that the available materials will change over time.
- While you will need to gain access to our Top Hat course as soon as the semester begins, Top Hat provides students a free 7-day trial (in case you are considering dropping the class or require more time to get finances in order). Selecting the "Create 7-Day Trial Account" option will enable a free trial, in where you can participate in the course for the next 7 days. Note that, at the end of the 7 day trial, you will be required to submit payment in order to continue completing work in the course. For more information on the 7-Day Trial, go here <https://success.tophat.com/s/article/Student-7-Day-Trial-Subscription>.



- See below for more about access challenges. And feel free to let me know if I can help in any way. In some cases, it may be possible to work with Top Hat to make further accommodations.
- Importantly (if you intend to moderate in Psychology or put the research methods into practice for your Senior Project or future professional work, the cost of Top Hat includes lifetime access—imagine being able to quickly search for the relevant sections when working on your moderation papers!
 - If you already happen to have a Top Hat account, go to <https://app.tophat.com/e/475264/> to be taken directly to our course. Otherwise, follow the steps above.
- **Technical requirements:** You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message (if you do not have access to a suitable device for class, please contact me privately and we'll get you squared away. If you're accessing Top Hat through a web browser, the most recent *Chrome* and *Mozilla Firefox* browsers provide the best user experience (there are some minor issues using Top Hat with *Safari*, in my experience).
 - For more technical requirements, see <https://support.tophat.com/s/article/Top-Hat-Browser-Requirements>.
- **Support:** Should you require assistance with Top Hat at any time (e.g., you get an error message) please contact their Support Team directly by way of email (support@tophat.com), the in-app support button, or by calling 1-888-663-5491. In many cases, Top Hat's support team will be able to provide fixes faster than I can myself.
 - Top Hat's Getting Started Guide (<https://bit.ly/31TGMlw>) offers additional tips.

- **Exams** (3 in-class exams, each worth 15%, together accounting for 45% of your final grade) will involve a combination of multiple-choice, matching, fill-in, and short-answer/essay questions, focusing on the material covered in Top Hat, other assigned readings, and during our class meetings (all the more reason to read and participate fully in the class). Exams will be conducted online (via Top Hat). Thus, there is *no reason to physically show up in the classroom on exams days (unless you need a quiet place to take the exam with access to wifi)*. Exams will be timed and conducted in accordance with a *strict honor system* (you will *not* be allowed to communicate with other students, individuals, or bots while taking exams). Unlike Top Hat end-of-chapter quizzes and in-text activities, which usually give you multiple attempts to get the answer correct (as well as hints), you will only have *one attempt* to answer each exam question. Thus, it is all the more important that you have done the hard work of reading, quizzing yourself, organizing your notes, applying the material, and studying prior to the exams. The second exam will be non-cumulative in the sense that it will focus on material introduced after the first exam. That said, the coverage necessarily will build on concepts studied during the early part of the course. Thus, you will still be expected to have a firm grasp on material tested previously. The final exam will be cumulative. Study guides will be made available in advance of each exam (see tentative course schedule below), as will in-class review opportunities.
- **Lab Work** (5% of your final grade) will consist of a mixture of individual and group work assigned during the weekly (online) lab meetings. This work is designed to support your learning by providing hands-on practice with the concepts and methods covered during the lecture periods and in the assigned readings (in that sense, it will help prepare you for exams, as well). Separately, some lab time (especially in later weeks) will be dedicated to working on aspects of your semester-long Group Project (an experiment you design, run, write up, and present after analyzing the results from it). This project requires a high degree of commitment during the lab periods, as well as between meetings (in some cases, scheduled on your own). That said, the regular lab work is designed to be completed, in large part, during the relevant lab period(s), provided students maintain their focus and productivity throughout. Some students, however, occasionally may wish/need to take extra time to finish this lab work outside of the lab times.
 - **An important note about general work expectations:** Notwithstanding the above, this course requires you spend a good amount of time outside of our class/lab meetings reading, studying, completing major assignments, and otherwise preparing to participate fully and get the most out of the experience (and a commensurate grade). A general rule of thumb is that, for every hour you spend in class or lab (1.33 hours x 2 lectures + 2 lab hours = 4.66 hours/week), you should be spending at least 2 hours outside of class doing coursework/preparation. So, that would mean roughly 9-10 hours of outside work per week. Some weeks (e.g., before an exam or major deadline) may require more of your time outside class, but if you plan in advance and commit to dedicating regular outside time to your studies each week, it will be more manageable,

with fewer week-to-week fluctuations. Think of it this way: Time spent becoming comfortable with research methods in this course will save you time when preparing for moderation, the Senior Project, and any future research. While the methods we cover in class may be rather unfamiliar to many (most?) students (and, therefore, will take extra time to grasp fully), other students already may have had extensive experience conducting psychological research. If you find yourself falling behind or desiring more advanced work, simply shoot me an email and/or set up a Zoom consultation so we can discuss the way forward. I am happy to try to find additional materials to support your journey through the course and toward your personal goals (as well as the standards set by the Psychology Program and College).

- **Zoom:** In order to accommodate a class of our size under social-distancing requirements, we are being forced to hold labs remotely this semester. Unless otherwise announced, we will hold lab meetings using Zoom. The breakout rooms will help facilitate work in small groups. I have created a permanent Zoom link for us (it's the same link for both the morning and afternoon lab sections). This link can be found in the "General Course Information" folder at the top of Top Hat, in the course's first Brightspace announcement, and via the "Zoom" link at the top of the Brightspace course page. So that you can always find us easily, bookmark it and put it in your calendar.
- **Technical requirements for lab:** Please attend our virtual lab meetings *with access to a computer (not a smartphone or tablet) on which you have both high-speed internet access and permission/the ability to install applications* (which could be one of the computers in a Bard computing lab, though I may need to work with you to install the applications—so let me know in advance), as we will make use of other apps (e.g., Jamovi statistics) for our activities. Just let me know if you envision difficulty gaining access to the necessary technology, and I will work with the College to identify a suitable solution (see also the below section on access challenges).
- **Literature Review** (10% of your final grade) is a great way to explore a research area that is of interest to you, personally. As such, the literature search, along with your written summary and synthesis of the relevant published empirical findings and theorizing will be completed individually. Your review (for which additional specifications will be provided later) must be written in American Psychological Association (APA) style, giving you additional practice with this approach to formatting.
- **Group Project** (25% of your final grade) entails selecting an empirical question that you and your group members (3-4 students per group) would be able to investigate using an experiment (i.e., *not* a correlational study), designing and implementing that experiment, analyzing the resultant data, and presenting your work in a variety of formats standard to the field of psychological science. Most of these steps will be evaluated based on a single group submission; however, each group member will be responsible for writing up their own APA-style research report.

Some further details about the various steps can be found below, but you'll get further instructions about each sub-assignment as the semester progresses:

- **IRB proposal** (*one submission per group; 2.5% of final grade*) will describe your experiment protocol, including how you plan to recruit potential subjects and carry out informed consent, collect data, and (importantly) balance the risks and benefits to research subjects. As this is a class project and *not* meant to produce generalizable research according to the rules governing the Institutional Review Board (IRB, <https://www.bard.edu/irb>), the ethics of your class assignment will be assessed by me and your peers in accordance with the human subjects training you will complete as a matter of course (<https://www.bard.edu/irb/training/>). As many of you will later need to submit a full protocol for IRB review prior to conducting your Senior Project, this class exercise will provide a solid foundation for moving forward. In fact, the certificate you receive at the end of your CITI human subjects training should be retained, as you will need it for subsequent research you might conduct involving human subjects (including empirical and proposal Senior Projects in Psychology).
- **Pre-registration** (*one submission per group; 2.5% of final grade*) of empirical work is a key aspect of Open Science. As such, prior to beginning data collection, your group will be asked to pre-register your empirical plan online using the template at <https://aspredicted.org/>. We'll walk through this process in lab, but when you complete this form, be sure to include me (jhulbert@bard.edu) as a co-author and select "Class project or assignment" as the submission type for record-keeping purposes.
- **Research report** (*each and every student is responsible for a distinct report submission; 15% of final grade*) is to be written *individually* and formatted in APA-style with the following sections: (a) a **cover letter** addressed to the editor of a real journal you have selected explaining why it would make an appropriate home for your published manuscript; (b) **title page**; (c) 150-250 word **abstract**; (d) an **introduction** section—noting that this section is not explicitly labeled as such in APA style; (e) a **method** section with subsections for participants, materials, and procedure; (f) a **results** section with figures/tables embedded; (g) a **discussion** section; (h) **references**; and (i) optional **appendices**. We will review the nature of such reports more thoroughly in class/lab meetings. I expect a fair amount of overlap in the concepts, methods, references, etc. across group members (they are, after all, based on the same underlying experiment); however, each student is responsible for writing their own report *in their own words*. My purpose in assigning this component of the project individually is to provide each and every one of you the opportunity to practice the skills that will become so critical to upper-level College work in the major and beyond. To this end, you will also be required to produce your own figures/tables for this report. While it's fine (encouraged even!) to peer review each other's reports (inside the group or across

groups), it is absolutely *not* OK to plagiarize. The more seriously you take this project and the feedback you receive from it, the more prepared you'll be for moderation, the Senior Project in Psychology, and work in outside research labs. Indeed, your report will be graded much like an empirical Senior Project would (to avoid any unpleasant surprises, you should familiarize yourself with the relevant assessment guidelines before, during, and after the implementation of your experiment: <https://faculty.bard.edu/~jdainerbest/handbook/sproj.html#sprojgrading>). Note that the report will be graded, in part, based on the soundness of the design, the appropriateness of the statistics, as well as the quality of the write-up itself.

- **Poster presentation** (*one poster per group—but everyone should be involved in designing and presenting it; 2.5% of final grade*) provides a way to practice consolidating a semester's worth of detailed research and transforming it into an eye-catching, efficient, and informative visual display capturing the highlights of your Group Project. You and your group partners will have the opportunity to design and digitally present a poster illustrating the relevant background (including key citations), method, results (including at least one graph or table), and conclusions (with future directions) of your experiment. You have, no doubt, seen some examples of research posters as you traveled through the halls of RKC and Preston. We will discuss poster design in class/lab, but if you need some inspiration or further guidance, you are encouraged to check out the "Poster Tips" section at the top of our Top Hat page. Remember that research posters represent a concentrated version of a larger project. Details from your project that are not critical to understanding the "big picture" should not be included in the poster. Figuring out just what should/should not be included takes practice. That's precisely why we're practicing it!
- **Slide presentation** (*one slideshow per group—but everyone should be involved in designing and presenting it; 2.5% of final grade*) will take the format of a conference-style short (7-minute, strictly timed) talk with slides (e.g., PowerPoint, Keynote, Prezi, or Google Slides). Indeed, other than this being a group presentation as opposed to an individual one (and slightly longer, for that reason), this happens to be the general format of the required Senior Project midway presentation. Given how difficult it can be to prepare an effective short talk, this component of your group project will also help ready you for what is to come in the major.
- **Final Reflection** (*2.5% of final grade*) will provide a thoughtful account of what you (personally) learned in this course. Your reflection should be organized, go beyond simply parroting back course material verbatim, and include how some of the big lessons from this course could be applied to your education, personal life, and/or career going forward. While your submission should be a polished product, having been fine-turned through careful editing, you are welcome to adopt a format that reflects your own preferred style. You could, of course, format

this as a standard written term paper, but you could instead produce a video, animation, comic book, podcast, website, or interpretive dance... OK, maybe not an interpretive dance. But you do have pretty wide latitude here. If you're unsure as to whether your plan is appropriate, check with me. To give you a general guideline, your submission should be roughly equivalent to a 3-to-4-page (double-spaced, 11-or 12-point font) paper with reasonable margins. No matter the format, take it seriously and commit the necessary time to producing it. It is OK to submit a link to your reflection (if, e.g., you posted a video to Youtube or created a website); however, you should not continue to edit the material after the deadline (at least until I've had a chance to grade it).

- **Extra Credit**

- Not giving a s#!t about the class is a recipe for falling behind. But ***not using your "S#!T Happens" token*** this semester will be met with *5 extra percentage points added to your final exam score* (i.e., if you received a 75% on your final exam, you'd be able to get an 80% with this extra credit opportunity). Look, I get it. Life sometimes gets in the way of deadlines. Pets do sometimes eat homework. Emergencies happen (pandemic related or otherwise). And, as much as we try to avoid it, we occasionally might plain forget a deadline. In an effort to be flexible and fair to all students, I am offering everyone one "S#!T Happens" token. Think of it like a "get-out-of-a-deadline" free card. Just email me saying that you would like to use your S#!T Happens token on a particular class assignment, and I will grant what together we determine to be a reasonable extension, *no questions asked*. You don't have to explain why you are using the token. Just tell me that you are using it, so that we can set an extension (without any late penalty). Note that tokens may *not* be used for exams; however, they may be applied to the end-of-chapter quizzes on Top Hat. While it is completely reasonable to use your token during the semester and there should be absolutely no shame in doing so, if you happen to be lucky enough not to need to use it, I will grant extra credit points. Of course, if you realize that something may prevent you from completing your contribution to a pending group assignment, please give your group members (and me) as much advanced warning as possible so that everyone can adjust accordingly.
- As you've read, you will be expected to put together a short conference-style slides presentation for your group project later in the semester. To get a better sense of what to expect (and to earn extra credit), you are invited to attend the virtual **Senior Project midway slides presentations** taking place on Thursday, February 11th and Thursday, February 18th at 4:45pm. Beyond showing up (virtually—the presentations will take place over Zoom; I will share the link with you as the dates draw near), you must then write a brief (1-2 paragraph) summary together with a novel, interesting question of your own construction for up to six presentations for extra credit—don't forget to include your question to the presenter if you want full credit. (You are, of course, welcome to attend

without submitting summaries+questions, but you won't receive extra credit.) For each satisfactory set of a summary+question for the presenter, you'll earn an additional extra percentage point on your first exam score (up to a maximum of 6 extra percentage points). Be sure to identify the name of the presenter and the title of the talk for each summary/question set. Submit these materials as a single .pdf by 2/25 at 10am (uploaded to Top Hat). There will be no extensions on this extra credit opportunity.

Additional Resources

There are treasure troves of information about psychology sprinkled around the interwebs—much of it can be accessed for free. If you find yourself struggling to understand a concept (or are looking for resources for your Group Project), I'd encourage you to search around, carefully evaluate the quality of the sources, and share useful finds with the rest of the class (email it or, even better, post it to a discussion forum found under the "General Course Info" folder in Top Hat). Below are some resources I have identified:

- APA formatting and general reference:
 - Purdue Online Writing Lab (OWL): https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html
 - I posted some additional reference materials inside the "APA Style/Scientific Paper Writing Tips" folder at the top of Top Hat.
 - Middlebury Library: <https://middlebury.libguides.com/citation/apa7>
 - ECU Library: <https://libguides.ecu.edu/c.php?g=982594&p=7463742>
 - Video tutorials: <https://apastyle.apa.org/instructional-aids/tutorials-webinars>
 - APA Dictionary of Psychology: <https://dictionary.apa.org>
- Searchable article databases (and tutorials):
 - Library: <https://www.bard.edu/library/databases.php?searchtype=sub&subject=psyc>
 - APA Database Tutorials: <https://www.apa.org/pubs/databases/training/tutorials>
 - Google Scholar: <https://scholar.google.com>
- Free textbooks & related resources:
 - Research Methods:
 - Crump et al.: <https://crumplab.github.io/ResearchMethods/index.html>
 - Cuttler et al.: <https://open.umn.edu/opentextbooks/textbooks/75>
 - Saylor: <https://legacy.saylor.org/psych202a/Intro/>
 - University of Minnesota: <https://open.lib.umn.edu/psychologyresearchmethods/>
 - Bhattacharjee: https://scholarcommons.usf.edu/oa_textbooks/3/
 - Statistics:
 - De Anza: <https://openstax.org/details/introductory-statistics>
 - Saylor: <https://open.bccampus.ca/browse-our-collection/find-open-textbooks/?uuid=929d4a8d-30b2-4ced-8b50-c39447dc0b74>
 - Brown University Statistics Visualizations: <https://seeing-theory.brown.edu>

- VassarStats: <http://vassarstats.net>
- Effect Size Calculator: https://katherinemwood.shinyapps.io/lakens_effect_sizes/
- Jamovi Open Stats: <https://www.jamovi.org>
- Power analysis guide using G*Power: <http://www.mormonsandscience.com/gpower-guide.html>
- Effect size calculator: https://katherinemwood.shinyapps.io/lakens_effect_sizes/
- Help choosing an appropriate statistical test:
 - <http://www.statsflowchart.co.uk>
 - <https://stats.idre.ucla.edu/other/mult-pkg/whatstat/>
 - <https://www.statstutor.ac.uk/resources/uploaded/tutorsquickguidetostatistics.pdf>
 - http://abacus.bates.edu/~ganderso/biology/resources/stats_flow_chart_v2014.pdf
- General reference (this could be useful for your other courses, too):
 - Open Textbook Library: <https://libguides.humboldt.edu/openedu/psyc>
 - NOBA Project: <http://noba.to/d95jpvm7>
 - Simply Psychology: <https://www.simplypsychology.org>
 - Project Gutenberg: [https://www.gutenberg.org/wiki/Psychology_\(Bookshelf\)](https://www.gutenberg.org/wiki/Psychology_(Bookshelf))
 - MERLOT Project: <https://www.merlot.org/merlot/Psychology.htm> (or to search more widely <https://www.merlot.org/merlot/searchMaterials.htm>)
 - DevPsy Directory: http://www.devpsy.org/links/open_source_textbooks
 - Neuroscience Online: <https://nba.uth.tmc.edu/neuroscience/toc.htm>
 - Neuroscience Open Text: <http://neuroscience.openetext.utoronto.ca>
 - Computational Cog Neuro: <https://github.com/CompCogNeuro/ed4>
- Videos:
 - Khan Academy: <https://www.khanacademy.org/test-prep/mcat/behavior#concept-intro>
 - JoVE Peer-Reviewed Scientific Videos: <https://www.jove.com>
- Stimuli/stimulus selection for experiments:
 - Tarr Lab: <https://www.cmu.edu/dietrich/psychology/tarrlab/stimuli/index.html>
 - Kahana Lab: http://memory.psych.upenn.edu/Word_Pools
 - Latent Semantic Analysis (LSA): <http://lsa.colorado.edu>
 - MRC Psycholinguistic Database: https://websites.psychology.uwa.edu.au/school/mrcdatabase/uwa_mrc.htm
 - University of South Florida free association norms: <http://w3.usf.edu/FreeAssociation/>
- Experiment software/code:
 - Inquisit Web: <https://www.millisecond.com> (the Psychology Program has a license for this, so that you may collect data online at no additional cost to you...ask me about it)

- PsychoPy: <https://www.psychopy.org> (while this is free, in order to run a web-based experiment, you would need to host it somewhere, which does come at a cost)
- PsyToolkit: <https://www.psychtoolkit.org> (this is free, including for online data collection)
- Participate in online experiments (or get ideas for what is possible, with suggested resources):
 - Social Psychology: <https://www.socialpsychology.org/expts.htm>
- Survey platforms:
 - Qualtrics: <https://www.qualtrics.com>
 - Google Forms: <https://forms.google.com>
- Experiment design tools:
 - Balanced Latin square generator: https://cs.uwaterloo.ca/~dmasson/tools/latin_square/
 - Randomizer: <https://www.randomizer.org>
- Open Science:
 - Center for Open Science: <https://www.cos.io/services/research>
 - Open Science Framework (OSF): <https://osf.io>
- Use as an entry point for further research (with caution):
 - Wikipedia: <https://www.wikipedia.org>
 - Youtube: <https://www.youtube.com>
- Cognitive neuroscience methods:
 - Functional Neuroimaging: <https://imaging.mrc-cbu.cam.ac.uk/imaging/CbuiImaging>
 - Event-Related Potentials: <https://erpinf.org>

Diversity and Access

Students at Bard come from a variety of backgrounds and viewpoints. It is very exciting to be able to benefit from these differences, and I anticipate a learning environment in which all approaches and backgrounds are respected and challenged in a way that promotes personal growth. To this end, I expect all members of the class to foster a climate of intellectual curiosity and enthusiasm by: (1) actively engaging in our activities and discussions; (2) being prepared to recognize the impact of bias, privilege, and histories of inequity; and (3) voicing opinions in a way that respects others. As a rule of thumb to encourage more voices to be heard, after you've contributed to a conversation in class, wait for three other people to speak before sharing more. You may notice that I pause between asking a question and accepting responses from the class. This is for a similar purpose.

Bard College is committed to providing equal access to all students. If you anticipate issues related to the format or requirements of this course, please schedule a consultation with me, as I would like us to discuss ways to ensure your full participation in the course. Together, we can plan how best to support your learning and coordinate your accommodations. Students who have already been approved to receive academic accommodations through Disability Services should share their accommodation letter and make arrangements to meet as soon as possible (within the first two weeks of the semester, if at all possible).

Have a learning difference or disability—including mental health, medical, or physical impairment—and are not yet registered? Please contact Disability Support Services at disabilityservices@bard.edu. The Director of Disability Resources and Accessibility, Erika van der Velden (evandervelden@bard.edu), will confidentially discuss the process to establish reasonable accommodations. Please note that accommodations are not retroactive and require advance notice to implement.

The Bard College Accessibility Converter (<https://www.sensusaccess.com/web3/bard/>) can be used to easily convert documents to a more accessible format. While not all assignments will be equally conducive to non-written submission formats, certain accommodations can be made for audio/video submissions as necessary. Simply contact me with a concrete plan for how the novel format still captures the assignment's learning objectives. After agreeing upon a plan, I can create an audio/video assignment in Top Hat and/or Brightspace, which would allow you to record the response directly in the platform or upload a different recording.

Whether course material brings up challenging issues or you are facing another type of challenge, the Bard Counseling Service may be able to help. For more information, see: <https://www.bard.edu/counseling/>.

COVID-19 Adaptations

In another unusual semester living with the pandemic, community responsibility will continue to be especially critical to our daily lives. We all have a role to play in helping to keep others as safe as possible. Of course, no choices are risk free, but we can make choices that reduce risk for ourselves and others. To this end, there are a few additional rules and behaviors that we will all need to abide by:



- You must complete the daily check in, on the Involvio/Bard student app in order to receive your daily green pass.
- We will all need to “foam in” as we enter the space, and wipe down tables and chairs. We will do the same (wipe and “foam out”) when we are leaving the classroom.
- In class we will remain physically distant (>6 feet, except for brief moments when passing out handouts and the likes) and wear masks at all times. If you forget a mask, please get one at the nearest mask dispenser before you enter the building.
- We can't eat or drink in class, due to masking.
- Across campus, distancing and masking should happen at all times, even in dorms, Kline, or campus paths. The more we all adhere to these safety measures, the safer we will be.

The College has established the “Bard Cares Team” to address instances where students or employees are having difficulty abiding by the community norms of behavior regarding the College's established COVID-19 protocol. The Team has developed a clear set of steps based in restorative practices to ensure

compliance with health and safety measures on campus. If you see something that you are not comfortable addressing in the moment, you can send an email to cares@bard.edu.

Please do not attend class if you are sick, feel ill, know you may have been exposed to the novel coronavirus, or have any of the symptoms listed on the Involvio/Bard app. You are expected to complete the daily health screening using the app *before* showing up to class in a mask and having “foamed in.” Again, you will *not* be penalized for absences due to illness or quarantine. This course and the community we build around it will accommodate the realities of the pandemic with the flexibility they demand.

Given the above, we should expect, and plan for, occasional absences throughout the semester. We’ll implement a system of note-taking (namely, assigned scribes will be responsible for posting their notes to a Brightspace discussion forum for the benefit of their peers), stay in close touch with each other, and utilize tools on Top Hat and the Brightspace platforms to manage these disruptions. Please email me (or schedule a Zoom consultation) should you envision a significant disruption to your ability to meet the course requirements/deadlines. I will do my best to work with you (and other resources to which you have access at Bard) to support you. And, remember, you may also use your “S#!T Happens” token, no questions asked, for one deadline extension (details can be found under “Extra Credit,” above). It is important that we minimize unnecessary disruptions in the face of the pandemic. As such, please take the time now to review the course schedule below and transfer deadlines to your personal calendar. Doing so will help you avoid scheduling conflicts and allow you to carve out the necessary time to perform your best.

The pandemic has further exposed and exacerbated existing inequalities, including differing levels of access to technology (e.g., high-speed internet and personal computing devices) and other resources (e.g., quiet workspaces, as well as funds available for digital textbooks and supplementary course materials) that facilitate learning at a distance. So, while this course will make heavy use of Top Hat and Zoom videoconferencing (in and out of the classroom), classroom activities that require internet-connected devices (smartphones, tablets, and/or tablets), and online subscription services (e.g., for digital access), I am committed to working collaboratively to facilitate access. Should you not have access to a portable, internet-connected device in class, please contact the Dean of Inclusive Excellence, Kahan Sablo (ksablo@bard.edu) or let me know so that we can strategize.

Similarly, I recognize that the cost of textbooks and other course materials may add a significant burden to an already expensive education. To address this, I have eliminated one of the two required textbooks for this course. While I will not require you to obtain the APA Manual, as had been required in the past, becoming familiar with and utilizing APA style is still a requirement for the course (and the major). Thus, if you decide not to obtain the manual (<https://apastyle.apa.org>), you will need to take advantage of free APA style resources. You’ll find some free guides, including for APA style, in the resources list above. That list also points you to free textbooks on the topic of Research Methods (and related areas). While I have done my

best to select a required textbook that is less expensive than many out there, student requests for interactive, customizable learning resources and my own pedagogical goals for the course (especially during the pandemic, which requires more remote learning) have led me to adopt the Top Hat platform. Top Hat does come at a cost (\$75 for the interactive digital platform plus the accompanying textbook, when purchased online using the steps outlined above). But keep in mind, this fee grants you lifetime access to the materials, which will be handy for Psychology moderation, upper-level Psychology classes, and beyond. If Top Hat's free trial period is not sufficient to pull together the funding necessary to purchase access, please let me and/or one of the other resource contacts listed in this syllabus know.

The Scale Project is a student-led organization committed to increasing equity and access for lower-income students at Bard. They have produced a document entitled, ["Being Not-Rich at Bard College"](#) that provides additional tips for navigating some of these challenges. The Scale Project and I both welcome additional suggestions and other feedback.

When the class meets remotely via Top Hat or Zoom, we all have to work a bit harder to stay engaged and focused. I recommend removing as many distractions as possible, even if it means something as simple as closing other open windows on your device or moving some unnecessary books off your desk. Of course, I understand that we don't have the ability to control every aspect of our environments. So, while I encourage everyone to have the camera turned on while we are together on Zoom, I recognize and respect that this may not always be possible for a variety of reasons.

Land Acknowledgment

In the spirit of truth and equity, it is with gratitude and humility that we acknowledge that we are gathered on the sacred homelands of the Munsee and Muhheaconneok people, who are the original stewards of this land. Today, due to forced removal, the community resides in Northeast Wisconsin and is known as the Stockbridge-Munsee Community. We honor and pay respect to their ancestors past and present, as well as to Future generations and we recognize their continuing presence in their homelands. We understand that our acknowledgement requires those of us who are settlers to recognize our own place in and responsibilities towards addressing inequity, and that this ongoing and challenging work requires that we commit to real engagement with the Munsee and Mohican communities to build an inclusive and equitable space for all.

Tentative Course Schedule

Date (day)	#	Topic Assignments
2/2 (tu)	1	WELCOME! PSYCHED TO MEET YOU!!! <ul style="list-style-type: none"> ▶ Course overview ▶ Scribes assigned ▶ CV workshop • Optional reading: Note-taking tips (TH) ➡ Homework (to be completed by 10am—all times EST—before Thursday's lab): <ul style="list-style-type: none"> - Carefully read the syllabus - Share your CV with the class (upload to TH ad .pdf) - Get Top Hat (TH) account/textbook access - Read & complete in-text activities for these TH Reading Assignments: <ul style="list-style-type: none"> - "Welcome to Research Methods" - Module 1: "Surveys" <p>Class scribe: _____ (assigned scribe: please submit notes to <i>Brightspace</i> "Scribe Notes" discussion forum by the end of the day)</p>
2/4 (th)	2	LAB 1 (ONLINE): Survey design <ul style="list-style-type: none"> ♦ Have uploaded your CV as a .pdf (TH) & completed TH "Welcome to Research Methods" & Module 1 "Surveys" Reading Assignments by 10am ▶ Syllabus roundup: Your notable picks & questions ▶ Introduction to Qualtrics <ul style="list-style-type: none"> - Go to https://bardpsych.co1.qualtrics.com/, click "Don't have an account," and enter a class code that Justin will provide during lab ▶ In-lab getting-to-know-you survey activity ▶ In-lab reading/discussion (TH): Putnam et al. (2016) • Optional readings/activities: <ul style="list-style-type: none"> - Additional survey tips (TH) - Review: TH Module 1: End of Chapter Questions "Surveys" ➡ Homework (to be completed by 10am before Friday's class): <ul style="list-style-type: none"> - Submit your class survey responses - Listen to: https://bit.ly/38OMUAh (just "Act One") <p>Class scribe: _____</p>

Date (day)	#	Topic Assignments
2/5 (f)	3	WHAT IS SCIENCE? <ul style="list-style-type: none"> ◆Have listened to https://bit.ly/38OMUAh Act One & completed the survey by 10am ▶ Discuss class survey results ▶ Mini-lecture: The empirical approach, different types of claims ▶ In-class reading (TH): LaCour & Green (2016) ▶ In-class listening: https://bit.ly/2KsgLoW ▶ Retraction Watch tour: https://bit.ly/3oUgYAd • Optional readings/practice: <ul style="list-style-type: none"> - TH Module 2: Reading Assignment & End of Chapter Questions "What is Science" (<i>this should be a refresher, but you will be responsible for the basic ideas/terms on the exams</i>) - Broockman & Kalla (2016): https://bit.ly/38TvJHv ➡Homework (to be completed by 10am before Tuesday's class): <ul style="list-style-type: none"> - TH Module 3: Reading Assignment "Conducting Ethical Research" <p>Class scribe: _____</p>
2/9 (tu)	4	CONDUCTING ETHICAL RESEARCH <ul style="list-style-type: none"> ◆Have completed TH Module 3: Reading Assignment "Conducting Ethical Research" by 10am ▶ Mini-lecture: Ethics ▶ In-class activities: Module 3 Activity–Informed Consent & Mock IRB ➡Homework (to be completed by 10am before Thursday's lab): <ul style="list-style-type: none"> - TH Module 3: End of Chapter Questions "Conducting Ethical Research" <p>Class scribe: _____</p>
2/11 (th)	5	LAB 2 (ONLINE): Avoiding plagiarism & developing novel, testable research questions <ul style="list-style-type: none"> ◆Have completed TH Module 3: End of Chapter Questions "Conducting Ethical Research" by 10am ▶ Plagiarism FAQ: https://bit.ly/3quKTz8 • Optional reading, training, & certification: <ul style="list-style-type: none"> - https://plagiarism.iu.edu - https://ori.hhs.gov/plagiarism-0 ★Extra credit opportunity: Attend (virtual) Senior Project midway slide presentation (2/11 @ 4:45pm EST) & provide a short written summary of 3 presentations (with questions of your own)–due by 2/25 @ 10am ➡Homework (to be completed by 10am before <i>next Thursday's lab</i> on 2/18): <ul style="list-style-type: none"> - Human subjects training certificate (screen grab/downloaded final certificate) (click "Instructions for CITI Program Human Subject Research Training" on https://www.bard.edu/irb/training/). <i>Note this takes a few hours to do.</i> <p>Class scribe: _____</p>
2/12 (f)	6	THE SCIENTIFIC ENTERPRISE <ul style="list-style-type: none"> ➡Homework (to be completed by 10am before Tuesday's class): <ul style="list-style-type: none"> - TH Module 4: Reading Assignment "The Scientific Enterprise" <p>Class scribe: _____</p>

Date (day)	#	Topic Assignments
2/16 (tu)	7	AUDITING CLAIMS WITH THE BIG 4 VALIDITIES ♦Have completed TH Module 4 Reading Assignment "The Scientific Enterprise" by 10am ➡Homework (to be completed before Friday's class): - TH Module 4: End of Chapter Questions "The Scientific Enterprise" Class scribe: _____
2/18 (th)	8	LAB 3 (ONLINE): APA style basics ♦CITI human subjects training certificate uploaded to TH by 10am ▶Mendeley/Zotero tutorial & practice ★Extra credit opportunity: Attend (virtual) Senior Project midway slide presentation (2/18 @ 4:45pm EST) & provide a short written summary of 3 presentations (with questions of your own)–due by 2/25 @ 10am Class scribe: _____
2/19 (f)	9	CONSUMING SCIENCE ♦Have completed TH Module 4: End of Chapter Questions "The Scientific Enterprise" by 10am ▶Mini-lecture: Healthy skepticism, evaluating sources, & the peer review process ▶In-class reading/activity (TH): Mueller & Oppenheimer (2014) w/ QALMRI ➡Homework (to be completed by 10am before Tuesday's class): - TH Module 5: Reading Assignment "Communicating Science" - Upload completed QALMRI worksheet (.pdf format to TH) Class scribe: _____
2/23 (tu)	10	QUANTITATIVE DESCRIPTIVE RESEARCH ♦Have completed TH Module 5: Reading Assignment "Communicating Science" & uploaded completed QALMRI worksheet in .pdf format (TH) by 10am • Optional activity: - TH Module 5: End of Chapter Questions "Communicating Science" ✓Study Guide for Exam #1 released by today ➡Homework (to be completed by 10am before Friday's class): - TH Module 6: Reading Assignment & End of Chapter Questions "Quantitative Descriptive Research" Class scribe: _____
2/25 (th)	11	LAB 4 (ONLINE): Variables & validity ♦Extra credit summary(ies) from the Senior Project midway slides presentations due (.pdf format) by 10am (TH) Class scribe: _____
2/26 (f)	12	GET READY: Exam #1 review session ♦Have completed TH Module 6: Reading Assignment & End of Chapter Questions "Quantitative Descriptive Research" by 10am • Bring your exam questions to class (review will be driven entirely by your questions) No scribe today

Date (day)	#	Topic Assignments
3/2 (tu)	13	EXAM #1 (ONLINE) No scribe today
3/4 (th)	14	LAB 5 (ONLINE): Preparing a literature review & brainstorming a group project topic ► Group Project members assigned Class scribe: _____
3/5 (f)	15	OBSERVATION • Suggested (yet optional) readings/practice: – TH Module 8: Reading Assignment & End of Chapter Questions "Descriptive Statistics" (<i>this should be a refresher, but you will be responsible for the basic ideas/terms on the exams</i>) ➡ Homework (to be completed by 10am before Tuesday's class): – TH Module 7: Reading Assignment & End of Chapter Questions "Observation" Class scribe: _____
3/9 (tu)	16	BIVARIATE CORRELATION ♦ Have completed TH Module 7: Reading Assignment & End of Chapter Questions "Observation" by 10am ► Brainstorming: Short moderation paper ideas Class scribe: _____
3/11 (th)	--	NO LAB - RESPITE DAY
3/12 (f)	17	BIVARIATE TO MULTIVARIATE CORRELATION Class scribe: _____
3/16 (tu)	--	NO CLASS - RESPITE DAY
3/18 (th)	18	LAB 6 (ONLINE): Naturalistic observation & informed consent ♦ Literature Review (.pdf format) uploaded to TH by 10am ► Course feedback survey (online, anonymous) Class scribe: _____
3/19 (f)	--	NO CLASS - RESPITE DAY ✓ Note for moderating students: Short moderation papers due today by 5pm (to Registrar's office and the Psychology Program)
3/23 (tu)	19	MEASUREMENT • Suggested (yet optional) readings/practice: – TH Module 10: Reading Assignment & End of Chapter Questions "Inferential Statistics" (<i>this should be a refresher, but you will be responsible for the basic ideas/terms on the exams</i>) ➡ Homework (to be completed by 10am before Friday's class): – TH Module 9: Reading Assignment & End of Chapter Questions "Measurement" Class scribe: _____

Date (day)	#	Topic Assignments
3/25 (th)	20	LAB 7 (ONLINE): Statistics with Jamovi & experiment programming with Inquisit Web ♦ IRB Proposal (single group submission in .pdf format) due by 10am (TH) Class scribe: _____
3/26 (f)	21	INDEPENDENT GROUPS ♦Have completed TH Module 9 Reading Assignment & End of Chapter Questions "Measurement" by 10am ➡Homework (to be completed by 10am before Tuesday's class): - TH Module 11: Reading Assignment & End of Chapter Questions "Independent Groups" Class scribe: _____
3/30 (tu)	22	CONFOUND & BIAS ♦Have completed TH Module 11: Reading Assignment & End of Chapter Questions "Independent Groups" by 10am ➡Homework (to be completed by 10am before Friday's class): - TH Module 12: Reading Assignment & End of Chapter Questions "Repeated Measures" Class scribe: _____
4/1 (th)	23	LAB 8 (ONLINE): Avoiding bias/confounds & drafting the method section ➡Any changes to your approved group project protocol will require an IRB amendment prior to data collection (email any amendment requests to jhulbert@bard.edu) Class scribe: _____
4/2 (f)	24	REPEATED MEASURES ♦Have completed TH Module 12: Reading Assignment & End of Chapter Questions "Repeated Measures" by 10am ➡Homework (to be completed by 10am before Tuesday's class): - TH Module 13: Reading Assignment "Complex Experimental Designs" Class scribe: _____
4/6 (tu)	25	FACTORIAL DESIGNS ♦Have completed TH Module 13: Reading Assignment "Complex Experimental Designs" by 10am ✓Study Guide for Exam #2 released by today ➡Homework (to be completed by 10am before Friday's class): - TH Module 13: End of Chapter Questions "Complex Experimental Designs" Class scribe: _____
4/8 (th)	26	LAB 9 (ONLINE): Factorial designs & pre-registration Class scribe: _____
4/9 (f)	27	FACTORING IN EXTRA TIME FOR FACTORIAL DESIGNS ♦Have completed TH Module 13: End of Chapter Questions by 10am Class scribe: _____

Date (day)	#	Topic Assignments
4/13 (tu)	28	GET READY: Exam #2 review session & practice critiquing journal articles <ul style="list-style-type: none"> • Bring your exam questions to class (review will be driven entirely by your questions) • Optional advice on critiquing journal articles (TH) <i>No scribe today</i>
4/15 (th)	29	LAB 10 (ONLINE): More writing advice, & time for data collection <ul style="list-style-type: none"> ♦ Pre-Registration (submit one per group as a "class project" using https://aspredicted.org and include jhulbert@bard.edu as a co-author for verification purposes) by 10am—note that data collection cannot begin until after pre-registration has been submitted Class scribe: _____
4/16 (f)	30	EXAM #2 (ONLINE) <ul style="list-style-type: none"> ✓ <i>Note for moderating students: Writing days are April 17-21</i> <i>No scribe today</i>
4/20 (tu)	31	QUASI-EXPERIMENTAL DESIGNS <ul style="list-style-type: none"> ➡ Homework (to be completed by 10am before Friday's class): <ul style="list-style-type: none"> - TH Module 14: Reading Assignment & End of Chapter Questions "Quasi-Experiments and Program Evaluation" Class scribe: _____
4/22 (th)	32	LAB 11 (ONLINE): Data analysis & drafting results section Class scribe: _____
4/23 (f)	33	QUALITATIVE METHODS <ul style="list-style-type: none"> ♦ Have completed TH Module 14: Reading Assignment & End of Chapter Questions "Quasi-Experiments and Program Evaluation" by 10am ➡ Homework (to be completed by 10am before Tuesday's class): <ul style="list-style-type: none"> - TH Module 15: Reading Assignment "Qualitative Methods" - Prepare a rough draft of your group poster Class scribe: _____
4/27 (tu)	34	POSTER WORKSHOP <ul style="list-style-type: none"> ♦ Have completed TH Module 15: Reading Assignment "Qualitative Methods" by 10am & bring a rough draft of your group's poster to class today ✓ <i>Study Guide for Exam #3 released by today</i> ➡ Homework (to be completed by 10am before Friday's class): <ul style="list-style-type: none"> - TH Module 15: End of Chapter Questions "Qualitative Methods" - Finalize your poster and practice your poster presentation ♦ Submit your group's final Poster (single group submission in .pdf format) by 10am tomorrow (Wednesday 4/28)* so that I can get it ready for the digital poster session during Thursday's lab (TH) Class scribe: _____
4/29 (th)	35	LAB 12 (ONLINE): Digital poster session & oral presentation prep Class scribe: _____

Date (day)	#	Topic Assignments
4/30 (f)	36 OPEN SCIENCE	<p>♦Have completed TH Module 15: End of Chapter Questions "Qualitative Methods"</p> <ul style="list-style-type: none"> Optional readings (TH): Munafò et al. (2017); Nosek & Bar-Anan (2012) <p>Class scribe: _____</p>
5/4 (tu)	--	NO CLASS - ADVISING DAY
5/6 (th)	37 LAB 13 (ONLINE):	<p>Exam review</p> <ul style="list-style-type: none"> ► End-of-semester student survey (TH) ► Group project collaboration evaluation <p>No scribe today</p>
5/7 (f)	38 EXAM #3 (ONLINE)	No scribe today
5/11 (tu)	39 GROUP PRESENTATIONS	<p>♦Final presentation slides (single group submission) uploaded to Brightspace by 10am (Top Hat can't handle .pptx or .key submissions)</p> <p>No scribe today</p>
5/13 (th)	--	NO LAB - PSYCHOLOGY BOARDS
5/14 (f)	--	NO CLASS - PSYCHOLOGY BOARDS
5/18 (tu)	--	NO CLASS - PSYCHOLOGY BOARDS
5/20 (th)	--	<p>NO CLASS - COMPLETION DAYS</p> <p>♦Final Research Report (individual submission in .pdf format) due by 10am (TH)</p>
5/21 (f)	--	NO LAB - COMPLETION DAYS
5/25 (tu)	--	<p>NO CLASS - COMPLETION DAYS</p> <p>♦Final Reflection (individual submission) due by 10am (TH)</p>

Schedule is subject to change to improve pacing and/or accommodate unforeseen events (e.g., severe weather, pandemic, alien abduction). Check announcements on Brightspace/over email.