# PSY300: Research Methods in Psychology Section 07, T/Th 10-11:15 (Online)

## Instructor

Dr. Ellen Shupe shupee@gvsu.edu (616) 331-2905

## Office hours & appointments (via Bb Collaborate Ultra)

Weekly hours: T, 1:30-2:30pm Th, 9-10am

See Google schedule for other available meeting times

## **Class format**

The course is designed to balance flexibility with structure and to maximize consistency and communication. The general format and schedule for the semester is as follows:

Classes (synchronous): Tuesdays, at 10am
Tests (synchronous): Thursdays, at 10am
Thursdays, at 11:59pm

## **Course readings**

Shaughnessy, J.J., Zechmeister, E.B., & Zechmeister, J.S. (2015). Research methods in psychology (10th Ed.). Boston, MA: McGraw-Hill.

A set of posted readings (see schedule and list below for more information)

## **Welcome & Overview**

This course provides an introduction to research in psychology, in terms of planning and conducting research and in terms of understanding, evaluating, and writing about the research of others. Welcome!

Most students find the course challenging and relatively time-consuming, but those who are willing to commit the necessary time and effort not only "get through" it but earn good grades and learn a great deal. I recommend that you **plan on spending 8-10 hours** each week on course-related work.

Other tips for doing well in the course:

- Come to all synchronous classes, keep your camera on, and participate (ask questions!)
- · Keep up with the readings and assignments
- <u>Review</u> material from classes and readings <u>early & often</u>
- Don't put off writing assignments; if possible, turn in drafts and ask for feedback
- When you review material & study for tests, <u>use deep processing</u> of the information (don't just read through notes or otherwise "go through the motions")
- <u>Meet with Prof. Shupe</u> regularly to check in, ask questions, and/or communicate your concerns (I truly want you to learn and have a good experience in the class!)

## **Course Content & Objectives**

PSY300 provides an introduction to research methods in psychology **from the perspective of a researcher and from the perspective of a "consumer"** of research-related reports. We'll cover a broad range of topics related to each stage of the research process, with a particular emphasis on the logic of research, study design and implementation, and a theory-guided interpretation of the results. Among other things, you will be required to develop a detailed understanding of methodology, write reports using APA-style, and demonstrate critical thinking skills.

An important step in the scientific method is transforming data into results, a process that generally requires the use of statistical analyses. It's important to have a good understanding of basic statistics, so if you have not successfully completed STA215 you will have a distinct disadvantage in this course.

After researchers complete data analysis, they typically discuss the results and their interpretation of the results in formal scientific reports. To do this successfully they must have strong writing skills and understand formatting and structural issues related to the reports. PSY300 is designed to foster this learning and writing skill acquisition, and as such is designated as an SWS course. **You will be required to do a significant amount of writing**, in the form of in-class exercises, research-related writing assignments, and essay exams and quizzes. For more information about SWS courses, visit <a href="GVSU's SWS website">GVSU's SWS website</a> or see the information below.

## **Course Objectives**

Topics covered in the course and methods of evaluation are designed to help you develop knowledge, skills, and abilities related to methods used in psychological research. These include the following:

## Knowledge/Understanding

- The 4 types validity & their implications
- Importance of theory in the development of hypotheses and interpretation of results
- Common methods used in psychological research, and the types of hypotheses & questions they're best suited to address
- The effects of confounds and how to prevent them
- The NHST approach to hypothesis testing, its limitations, & alternatives
- The importance of replication in psychological research
- The importance of effect sizes, statistical power, & confidence intervals
- The purposes, uses, limitations, and logic of common parametric and nonparametric tests

## Skills and Abilities

- Identify confounds and other common biases in the research process
- Conduct a thorough literature search and describe the details of and summarize the essence of research articles
- Design an empirical study consistent with the standards of psychological science
- Write a well-developed, narrative review in APA-style
- Identify strengths and weaknesses in own and other' scientific writing Think critically in reading about and interpreting research reported by others
- Think critically in the development of psychological research reports

# **Contacting Prof. Shupe**

Please feel free to contact me if you have any questions, clarifications, or concerns. The best ways to contact me are via email (<a href="mailto:shupe@gvsu.edu">shupe@gvsu.edu</a>) or phone, or by posting a message on our Blackboard discussion board. I typically check my email daily and respond to messages within 24 hours. If for some reason you do not receive a response from me within 48 hours, feel free to email a follow-up message. Please use the discussion board to post general questions, so others in the class will be able to see the questions and answers, and contact me by phone or email if you have questions that are more specific to you. If you would like to speak to me about something urgent, you may call my office (616-331-2905). The call will be forwarded to my cell phone and identified as a GVSU call (i.e., I won't see your phone number).

I always encourage students to meet with me outside of class because it helps them get to know me and provides a good way to ask questions or get clarifications. Although checking in with your professors is always a good idea, it's particularly important in online classes, which are more likely to lead to disengagement and feelings of exclusion. So please plan to meet with me (I look forward to getting to know you!) I'll have virtual office hours several times each week, and I'll be available to meet most other days by appointment. Each week I'll post a two week schedule of my office hours and appointment times using Google Sheets, the link to which will be available on our class Blackboard site. Office hours and appointments will take place through Blackboard Collaborate Ultra or by phone.

## **Class Format & Technology Requirements**

This course is fully online, with both synchronous and asynchronous components.

Most Tuesdays we will meet for synchronous classes using Blackboard Collaborate Ultra or Zoom. These classes will provide a relatively structured time for questions and discussions, lectures, group discussions and activities, and review. I'm hoping to make these virtual classes as similar to in-person classes as possible, in part because the course works best when everyone participates and there is a lot of discussion. So, unless you're ill or have an emergency, you're expected to attend all classes. And make sure you have your camera on and are ready to participate (I promise it won't be painful)!

We generally won't meet for class on Thursdays. Instead, you'll cover those topics independently (i.e., asynchronously) using narrated Powerpoint lectures, videos, and readings (textbook and academic journal articles). Although we won't be meeting together for class, most of your tests will take place on Thursdays during our class time. This means that **you must be available to take the tests during class time on Thursdays**.

The course will be conducted through the Blackboard online course management system, with course materials and/or relevant links accessible through the main content area of the class Blackboard site. Zoom and Bb Collaborate Ultra will be used for synchronous classes, and Blackboard Collaborate Ultra will be used for group meetings and office hours. Google Sheets will be used for scheduling individual and group appointments with Prof. Shupe. Links to Blackboard Collaborate Ultra, Zoom, and Google Sheets will all be available through our class Blackboard site, identified with clearly labeled tabs.

To fully participate in the course, you will need to own or have dependable access to the following:

- · High speed internet
- Computer with a sound card and speakers; operating system that meets current Blackboard requirements (Windows 8.1 or above; OS 10.14 or above)
- Computer microphone (built in or external (most laptops have these)
- Computer camera built in or external (most laptops have these)

For more information about technology needs and support, see GVSU's technology support site.

## **Class Policies & Expectations**

### **Professionalism & respect**

In order to learn at their potential, students need to feel as if they are heard and respected in and outside of the classroom. Thus, maintaining a climate that is inclusive and respectful is not only socially responsible and ethical, it is key to a successful learning experience. We live in a time of incredible divisiveness, stress, and loss, when personal attacks and the public expression of strong emotions have become more and more commonplace. It is particularly important, therefore, that we use considerate language and behavior toward one another, and that we make a conscious effort to affirm the contributions of all. We have different beliefs, values, and opinions, but we are all members of the same GVSU community.

Although you obviously don't have to agree with everyone in the class or with me, you are required to treat others with dignity and respect. This includes communicating in a way that acknowledges and validates others. Misunderstanding in interpersonal communication is common – particularly in online contexts and in written communications – due to the perception of anonymity, and a lack of body language, intonation, and gestures that communicate meaning and context. Keep this in mind as you offer comments and examples in the virtual classroom and when you post written comments in a public forum.

## **Academic integrity**

At GVSU we believe that "academic honesty and integrity are fundamental to a community of scholars" and that academic dishonesty "compromises the integrity of university grades, and scholarship and research" (GVSU Policy, STU 4.0). Thus, in PSY300 you are expected to do your own work and to not engage in any form of academic dishonesty.

This includes 1) taking or receiving help from others during exams; 2) attempting to pass off someone else's work as your own; 3) using ideas, sentences, or phrases from a source without proper citation; 4) copying part or all of another student's answers on assignments; 5) completing part or all of an assignment for another student; and 6) submitting part or all of an assignment that has been previously graded or is being submitted concurrently for another course. Cheating and plagiarism are likely to result in a zero on the relevant exam, quiz or assignment, reported to the Chair of the Psychology Department, and documented in your student record. If you are unsure if a specific action in this course constitutes a breach of academic integrity, please discuss it with me. If you want more information about what is considered academic dishonesty at GVSU, see GVSU's guidelines.

## **Disability support**

Your success in this course is important, and I want to ensure that students with a diverse range of abilities are provided with a positive learning environment that provides them with the same opportunity to learn. If you require formal accommodations, please contact me early in the term so we can work together to make appropriate arrangements. If you encounter difficulties in this course that interfere with your learning, please let me know, and if you think you may benefit from formal accommodations, contact GVSU's Office of Disability Support Resources (gvsu.edu/dsr/) at (616)331-2490 or dsrgvsu@gvsu.edu.

## Other university policies

In addition to the policies described above, you'll be expected to comply with other course-related policies at GVSU (http://www.gvsu.edu/coursepolicies/).

## **Course Requirements & Evaluation**

## Literature review and related assignments (80 points)

Your most substantial writing assignment will be a **35 point literature review**, a systematic review of the formal literature on theory and research related to a specific topic. Early in the semester you will choose a topic, and in subsequent weeks you will work under the guidance of Prof. Shupe to organize and write the literature review. Your literature review must be written in APA style and incorporate at least 15 primary sources, including at least 10 peer-reviewed articles.

In addition to the literature review itself, you will have three assignments designed to help you plan and write the review, including the "Overview and Analysis Plan" (15 points), the "Part 1 of the Literature Review" (15 points); and the "Part 2 of the Literature Review" (15 points).

Grades on the final literature review and related assignments will be based on writing quality (e.g., grammar, clarity, organization, and coherence), appropriateness and completeness of content, and APA style. Although not mandatory, it is a good idea to submit drafts of the papers to Prof. Shupe for feedback. Instructions and rubrics for the assignments will be posted on Blackboard and discussed in class. Late papers will be accepted up to three days after the deadline. Except in the case of an emergency, 10% of the total possible points will be deducted for each day a paper is late.

## Critical evaluation assignments (15 points)

There will also be **two relatively short writing assignments** requiring you to critically evaluate descriptions of psychological theory and/or research found in the popular media. The assignments will be worth 5 and 10 points; instructions and rubrics for the assignments will be posted and discussed in class.

## Participation (25 points)

You will be asked to **meet with Prof. Shupe four times** during the semester (twice individually, and twice in small groups). These informal, scheduled meetings will provide the opportunity to discuss the writing assignments with Prof. Shupe, and to ask questions about the material or assignments. Each of these check-in meetings will be worth 5 points. If you miss one of your group's scheduled meetings, you can earn the participation points by meeting individually with Prof. Shupe within a week of the missed meeting. During the first week of class you will also be asked to create and post a Google slide introducing yourself; the slide will count 5 points toward your participation grade.

## Tests (135 points)

You will have **six online, synchronous tests** over material covered in class, readings, and narrated videos. Five of the tests will take place during the semester, and the sixth test will take place during finals week. The tests will be worth **20 to 25 points** and will consist of a mix of multiple choice and free response questions. The tests will be "open book," so you may use your notes, readings, and other course materials as references. However, you will not be allowed to give or receive help from others during the tests, or copy content from any source to use in your responses. Also, keep in mind that you'll have limited time to complete them. While you'll have time to quickly locate and check something you're unsure about, you won't have time to search for and learn new concepts. If you want to do well in the course, you'll need to study and learn the material before you take the tests.

## **Flexibility**

One thing we've all learned from life during a pandemic is that we must be flexible and expect some unpredictability and bumps along the way. It's possible that the number and format of assignments, quizzes, and tests will be modified in response to factors related to the pandemic, social events in our nation or larger community, newly published research, and/or technological problems or other issues related to the class. I will only make a change to the schedule or requirements if there is a good reason to do so, and I will provide plenty of time for you to adjust your schedule to accommodate the change. It's unlikely the changes would increase or decrease the overall number of possible points by more than 10%.

#### **Grade Determination**

Semester grades will be based on 6 tests (worth 135 points), a literature review and related writing assignments (worth 80 points), 2 critical evaluation assignments (worth 15 points), and participation (worth 25 points), for a total of 255 points. Grades will be determined using the grading scale below.

<u>Grade</u>	<u>Percentages</u>
Α	92.5-100%
A-	90-92%
B+	87.5-89.5%
В	82.5-87%
B-	80-82%
C+	77.5-79.5%
С	72.5-77%
C-	70-72%
D+	67.5-69.5%
D	60-67%
F	0-59.5%

## **Tentative Class Schedule & Requirements**

#### Week 1 (1/18 - 1/22)

#### Scheduled events and due dates

T (1/19) Synchronous class (Intro to research methods; Critically evaluating research)

## Requirements/work for this week

- Read Ch. 1 in the textbook
- · Watch the narrated Powerpoint video on Ch. 1
- Watch John Oliver video and answer questions (but don't turn them in)
- Complete & submit the Google slide assignment (due Fri, 1/22)

### Preparation for next week

• Read Ch. 2 in the textbook

## Week 2 (1/25 - 1/29)

#### Scheduled events and due dates

T (1/26) Synchronous class (Ch. 2: The role of theory)

Th (1/28) "Critical Evaluation Assignment" due

## Requirements/work for this week

- Complete and submit the critical evaluation assignment
- Read posted reading on reviews & replications (Stangor, pp. 265-72)
- Watch the narrated Powerpoint video on APA style/format

## Week 3(2/1 - 2/5)

#### Scheduled events and due dates

T (2/2) Synchronous class (Types of APA-style reports; Discuss literature review; Review for test)

Th (2/4) **20-pt test** (Ch. 1, Ch. 2, and Reviews & replications)

## Requirements/work for this week

- · Study for Thursday's test
- Read posted reading on ethics in research (Passer, p. 72 & pp. 76-89)

#### Preparation for next week

Read posted reading on reliability & validity (Stangor, pp. 90-101)

## Week 4 (2/8 - 2/12)

## Scheduled events and due dates

T (2/9) Synchronous class (Reliability of measures)

## Requirements/work for this week

Watch the narrated Powerpoint video on validity of measures

## Preparation for next week

• Read pp. 158-171 in the textbook on self-report measures

# Week 5 (2/15 – 2/19)

## Scheduled events and due dates

T (2/16) Synchronous class (Common measures: self-report)

Th (2/18) **20-pt test** (Ethics and Reliability & validity)

### Requirements/work for this week

- · Study for Thursday's test
- Read pp. 93-97 & 107-114 in the textbook on observational, archival, & trace measures
- Watch the narrated Powerpoint presentation on observational, archival, & trace measures

## Preparation for next week

· Work on "Overview & analysis" assignment (due next week)

## Week 6 (2/22 - 2/26)

## Scheduled events & due dates (no scheduled classes)

T (2/23) Meet with Prof. Shupe

Th (2/25) "Overview & Analysis Plan" assignment due

#### Requirements/work for this week

- Meet with Prof. Shupe to discuss writing assignment
- Finish and submit the overview & analysis plan assignment
- Read pp. 135-157 in the textbook, on surveys
- Watch the narrated Powerpoint presentation on surveys

#### Preparation for next week

• Read pp. 97-106 in the textbook, on naturalistic observation methods

## Week 7 (3/1 - 3/5)

#### Scheduled events & due dates

T (3/2) Synchronous class (Naturalistic observational methods & content analysis)

Th (3/4) **25-point test** (Self-report, Observational, archival, & trace; Surveys; and Naturalistic obs.)

## Requirements/work for this week

- · Study for Thursday's test
- Watch the narrated Powerpoint video on naturalistic observation methods

#### Preparation for next week

- · Read Ch. 6 in the textbook, on experiments
- · Work on "Part 1 of the Literature Review" assignment

## Week 8 (3/8 - 3/12)

## Scheduled events & due dates (no scheduled classes)

T (3/9) Meet with Prof. Shupe to discuss literature review (no class)

### Requirements/work for this week

- Meet virtually with Prof. Shupe to discuss literature review
- Watch the narrated Powerpoint video on independent groups experiments
- Read pp. 235-236 in the textbook, on repeated measures designs
- Watch the narrated Powerpoint video on repeated measures designs

## Preparation for next week

- Work on "Part 1 of the Literature Review" assignment (due next week)
- Read pp. 243-253 in the textbook, on experiments with complex designs

## Week 9 (3/15 - 3/19)

#### Scheduled events & due dates

T (3/16) Synchronous class (complex designs)

Th (3/18) "Part 1 of the Literature Review" assignment due

## Requirements/work for this week

- Work on and submit "Part 1 of the Literature Review" assignment
- Read Ch. 10 in the textbook, on quasi-experimental designs & program evaluation
- Watch the narrated Powerpoint video on guasi-experimental designs & program evaluation

## Preparation for next week

Study for next week's test

## Week 10 (3/22 - 3/26)

#### Scheduled events & due dates

T (3/23) Synchronous class (Wrap up experiments & quasi-experiments; Review for test)

Th (3/25) 25-point test (Randomized experiments; RMD; Complex designs; Quasi & Program eval)

## Requirements/work for this week

- Read posted reading on "describing single variables" (Price et al., pp. 231-239)
- Watch the narrated Powerpoint video on describing single variables
- Read posted reading on "describing relationships" (Price et al., pp. 240-246)
- Watch the narrated Powerpoint video on "describing relationships"

## Preparation for next week

- · Read pp. 379-386 in the textbook, on the null hypothesis statistical testing (NHST) approach
- · Work on the "Part 2 of the Literature Review" assignment

## Week 11 (3/29 - 4/2)

## Scheduled events & due dates

T (3/30) Synchronous class (Descriptive statistics exercise; NHST approach)

## Requirements/work for this week

Watch the narrated Powerpoint video on criticisms of and alternatives to NHST

## Preparation for next week

• Work on "Part 2 of the Literature Review" assignment (due next week)

## Week 12 (4/5 - 4/9)

## Scheduled events & due dates (no scheduled classes)

Th (4/8) "Part 2 of the Literature Review" assignment due

#### Requirements/work for this week

- · Finish and submit "Part 2 of the Literature Review" assignment
- Read posted reading on *t*-tests (Wilson, 2005)
- Watch the narrated Powerpoint video on t-tests
- Read pp. 392-406 in the textbook on 1-way ANOVAs
- · Watch the narrated Powerpoint video on 1-way ANOVAs

### Preparation for next week

Study for next Thursday's test

#### Week 13 (4/12 - 4/16)

#### Scheduled events & due dates

T (4/13) Review for test; Wrap up t-tests and 1-way ANOVAs

Th (4/15) **20-point test** (Describing single variables; Describing relationships; and NHST)

## Requirements/work for this week

- · Study for Thursday's test
- Read pp. 407-413 in the textbook, on 2-way ANOVAs
- Watch the narrated Powerpoint video on 2-way ANOVAs

### Preparation for next week

• Work on "Final Literature Review" paper (due next week)

## Week 14 (4/19 - 4/23)

## Scheduled events & due dates

T (4/20) Review of *t*-tests and ANOVAs; Exercises Th (4/22) "Final Literature Review" paper due

## Requirements/work for this week

• Finish and submit "Final Literature Review" paper

## Preparation for next week

Study for final test

## **Finals Week**

M (4/26), 10am 25-point Test (*t*-tests and ANOVAs)

## **Sources for Posted Readings**

Passer, M. (2013). Research methods: Concepts and connections (1st Ed.). New York, NY: Worth.

Price, P.C., Jhangiani, R., & Chiang, I.A. (2015). Research methods in psychology: Second Canadian edition. <a href="https://opentextbc.ca/researchmethods/">https://opentextbc.ca/researchmethods/</a>

Stangor, C. (2015). Research methods for the behavioral sciences (5th Ed.). Belmont, CA: Wadsworth.

Wilson, J.H. (2005). Essential statistics. Upper Saddle River, NJ: Pearson Education.

## **Useful Resources & Contacts**

Online and hybrid courses pose unique challenges, but there are a number of sources that are available to help you navigate those challenges. Please don't hesitate to use them, as soon as you need (or think you may need) help.

## Tutoring Center (free online tutoring and drop-in sessions for many GVSU courses/subjects)

Web: <a href="http://www.gvsu.edu/tc">http://www.gvsu.edu/tc</a>
Email: <a href="mailto:tutoring@gvsu.edu">tutoring@gvsu.edu</a>
Phone: (616) 331-3451

## IT Helpdesk (for help with Blackboard, Collaborate, Zoom, etc.)

Web: <a href="http://www.gvsu.edu/it">http://www.gvsu.edu/it</a> Email: helpdesk@gvsu.edu

Phone: (616) 331-2101 and (855) 435-7488 (Toll-free)

## Tips for Successful Learning in Online Classes

https://www.gvsu.edu/library/km/tips-for-online-learning-43.htm

## **Disability Support Resources**

Web: <a href="http://www.gvsu.edu/dsr">http://www.gvsu.edu/dsr</a> Email: <a href="mailto:dsrgvsu@gvsu.edu">dsrgvsu@gvsu.edu</a> Phone: (616) 331-2490

## Writing Center (for online help with writing)

Web: <a href="http://www.gvsu.edu/wc">http://www.gvsu.edu/wc</a> Phone: (616) 331-2922 Email: dsrgvsu@gvsu.edu

## Library & Knowledge Market Help

Samantha Minnis, Library Liason for Psychology

Email: minniss@gvsu.edu

Online help with research and library resources

Web: <a href="http://www.gvsu.edu/library">http://www.gvsu.edu/library</a>;

https://www.gvsu.edu/library/library-online-services-88.htm#help

## Additional Information Related to SWS Courses

## Requirements

As with other SWS courses, completion of WRT 150 with a grade of C or better (not C-) is a prerequisite for PSY300. SWS credit will not be given to a student who completes this course before completing the prerequisite. SWS courses adhere to certain guidelines. Students turn in a total of at least 3000 words of writing. Part of that total may be essay exams, but a substantial amount of it is made up of essays, reports, or research papers. The instructor works with the students on revising drafts of papers, rather than simply grading the finished piece of writing. At least four hours of class time will be devoted to writing instruction. At least one third of the final grade in the course is based on the writing assignments. Students must complete the course with a grade of "C" or better in order to receive SWS credit.

## Resources available at GVSU

The Fred Meijer Center for Writing, with locations at the Allendale and Pew/Downtown Grand Rapids campuses, is a peer service available to assist you with writing for any of your classes. Writing consultants, who are fellow GVSU students, are trained to help you with all stages of your writing process, from brainstorming to organizing to editing your papers. Simply bring an idea, prompt, or draft of your paper along with the assignment sheet to any of the Center's locations. The Center's services are free and you can drop in and work with a consultant or make an appointment, either through their website or by calling the Center (331-2922). Peer support is available for research and speech/presentation through the Knowledge Market, where the Writing Center partners with the Speech Lab and the Peer Research Center. Additional information about the Knowledge Market (<a href="https://www.gvsu.edu/library/km/">https://www.gvsu.edu/library/km/</a>) and information about Writing Center services and locations can be found at <a href="https://www.gvsu.edu/wc/">https://www.gvsu.edu/wc/</a>