

# Research Methods in Psychology (PSY 300)

Grand Valley State University

Department of Psychology

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Welcome to PSY 300! We will be exploring how to apply the scientific method to answer important questions about our world. I love teaching this class and look forward to spending the semester learning together. The point of a syllabus is to give an overview of how that learning will be structured. I have organized the syllabus into the following sections to try to do that in a user-friendly way.

- A. Course content & Learning objectives
- B. How to succeed in PSY 300
- C. Learning Communities and R.E.S.P.E.C.T.
- D. (Tentative) Course schedule
- E. Grading procedures
- F. Some useful things to know
- G. Writing & SWS information
- H. AI Policy Statement
- I. Useful Resources at GVSU

## A. Course Content and Learning Objectives

### GVSU Catalog Course Description

Examination of basic research methods in psychology. Emphasis on the logic of psychological research, the formulation and testing of hypotheses, research design, sampling procedures, data collection and analysis, and the ethics of conducting research. Prerequisites: PSY 101 or HNR 234, and STA 215 or STA 312.

### GVSU Course objectives:

By the end of the semester each student will be able to:

1. describe the details of and summarize the essence of research articles
2. write clearly and cogently in a scientific way
3. evaluate strengths and weaknesses of empirical studies consistent with the standards of psychological science.

### Dueker Course objectives:

By the end of the semester each student will be able to:

1. understand the scientific method
2. understand the basic concepts of validity in measurement

3. understand the ethical principles and obligations associated with research with living organisms
4. **be a critical consumer of Psychological/Scientific information and research presented in the general media and the research literature.**
5. **demonstrate an understanding of how scientific information and public policy can positively impact human outcomes.**

## B. How to succeed in PSY 300

### Mindset required for course participation and success in PSY 300:

1. Willingness to learn new and challenging material
  - a. If you already knew everything about science & research methods, you wouldn't be taking this class.
  - b. Learning requires changing our minds. Be curious. Expect to learn new and sometimes surprising things. We all have assumptions about why people behave the ways that they do. Expect to have your assumptions challenged by scientific data about human behavior.
2. Willingness to practice to attain mastery of material
  - a. Learning requires time and practice.
  - b. If you are signed up for this class then you must want to learn about scientific research methods
  - c. I am an expert on that topic. I will guide your learning. However, I can't do the learning for you just like you (unfortunately) can't do my sit-ups for me.
  - d. So, what is the key for success?...**Do the work!**
  - e. All assignments and activities are designed to help you acquire and practice the pertinent knowledge and skills. See below for descriptions of the tools and behaviors that will help you to complete the course work.

### Tools required for course participation and success in PSY 300:

1. Access to the **textbooks**:
  - O'Neil, C. (2016). *Weapons of math destruction: How big data increases inequality and threatens our democracy*. Crown. New York, New York. USA. **(Physical Copy Required)**
  - Morling, B. (202). *Research methods in psychology: evaluating a world of information*. W. W. Norton & Company. The text is available via the GVSU Saves Program (see lots of info on the course website). You are not required to use that electronic copy and can opt out of the GVSU saves program, but you will absolutely need access to the textbook in some form.
2. Access to **technology**, including:
  - Access to a laptop computer that you can bring with you to class. (This course cannot be completed with only a phone or tablet.)
  - reliable internet access multiple times a week
  - Software:
    - i. BlackBoard Ultra
    - ii. Microsoft office (excel, word, powerpoint)
    - iii. Google suite (e.g., google docs)

## Behaviors/skills required for course participation and success in PSY 300:

Really, there is only one: **Engage!** What do I mean by that?

1. **Engage** with the other humans in the class:
  - a. Come to class!!!!!! We can learn a lot from each other.
  - b. Please contribute to lectures, discussions, and activities to in respectful (see respect section) and helpful ways.
  - c. Did I mention that class attendance is important?!?!
2. **Engage** with the course materials
  - a. Access the course BB site regularly.
  - b. Take the time to read the textbook and supplemental readings.
    - i. I chose them for a reason. I promise not to give you busy work.
  - c. Take the time to watch the supplemental videos
    - i. I will also post or link to videos available on the web or through the library (e.g. TED talks) when those videos can help enhance your learning.
  - d. Expect to spend between 6-8 hours a week OUTSIDE of classtime working on this class.
    - i. Some weeks the time required might be shorter or longer, depending on your interest and speed, but I have tried to pace it all consistently.
    - ii. Time alone isn't enough though. Learning requires S.W.E.E.T.:
      - Sleep (8 hours really matters!)
      - Water
      - Exercise
      - Eating
      - Time

Note: Taking care of your physical needs allows for healthy engagement in the complex material we will be studying. Please be mindful of your physical needs. Prioritize sleep (that's why it is first on the list) because it has strong effects on memory and cognitive function. If at any time in the semester you are struggling to meet basic physical needs (e.g. access to nutritious food, shelter, a safe place to sleep) please contact me ASAP and I will help connect you to available supports so that you can be healthy and safe and able to engage with this course.

## C. Learning Communities and R.E.S.P.E.C.T.

We will be working together to create a meaningful learning community this semester. Learning is challenging and people learn best when they feel safe and respected. So, I want to set some respect ground-rules/expectations for how we (prof. and students) will demonstrate respect for the learning community during this course:

1. **Academic Honesty.** Academic honesty and integrity are expected from all students at all times.
  - a. Academic dishonesty is defined as an attempt to obtain or to help another student obtain a grade higher than what is honestly earned – this includes getting information about exams or assignments from students in an earlier or previous section of the course. Do not assume that any assignment for this course is a group assignment unless I specifically tell you that it is. Anything you turn in to me, whether a written assignment or an exam, needs to be your own,

individual work. It is your responsibility to properly cite all sources in your written work and to avoid plagiarism.

- b. An occurrence of academic dishonesty will result, minimally, in failure of the course and a recommendation for University judicial action. It is every student's responsibility to avoid even the appearance of cheating.
- c. For more information about academic honesty please see the GVSU student code because this course is subject to the GVSU policies listed at <http://www.gvsu.edu/coursepolicies/>.

**2. Respectful Communication.** Communicating with other members of the learning community is good!

- a. We will maintain a respectful atmosphere during all class activities for all students (and professors) regardless of age, gender, favorite type of music, ethnicity, sexual orientation, learning ability, or driving skills. By that I mean (a) respectfully attending to the contributions that others make in the class and (b) consciously examining your own contributions to ensure that they are respectful to others around you.
- b. If you experience a lack of respect at any point during this class, please contact me, and I will work with you to address the problem. Students who are consistently disrespectful towards the classroom community will be dropped from the course.

**3. Communicating with Prof D.** Being responsive is respectful. I try to respond to student questions as quickly as possible during business hours (and often other times too, but don't count on me being awake at 2 a.m. to answer a last-minute question ☺).

- a. Questions about the course or assignments:
  - i. The fastest way to get a question about the course or assignment answered will be to post to the COURSE QUESTIONS board in BB.
  - ii. Using the COURSE QUESTIONS board allows other members of the class to learn from your question and possibly to answer your question sooner than I would be able to.
- b. Questions specific to your own, personal circumstances:
  - i. Attend office hours or schedule an appointment with me
  - ii. Send me an email – [duckerg@gvsu.edu](mailto:duckerg@gvsu.edu)
    - 1. I have lots of filters on my email account to try to weed out spam. Student emails are less likely to get lost in those filters if they have your name and course number listed in the topic line of the email.
  - iii. PLEASE DO NOT USE THE MESSAGING CAPABILITY IN BB. It isn't reliable. I have posted an "Email Prof D" link at the top of the main BB page for this class. Please use that.

***Note: I don't purposely ignore anyone so if you haven't heard back from me within 1 business day (48 hours on weekends) then assume I didn't get the message and please try again (perhaps using a different contact method). I want to respond to you – interacting with students is the best part of my job!***

# (Tentative) Course Schedule

The course schedule is below. Please note that there are two partial weeks during the semester.

M = Morling Textbook. WMD = Weapons of Math Destruction Book. C=Chapter

Week	Breaks	Class meetings:	
1		Aug 26 & Aug 28	MC1 & What is science? Prakash Project intro
2		Sept. 2 & Sept. 4	MC2 Why science? & Reading Science; MC3 Three types of claims & CER Writing
3		Sept. 9 & Sept. 11	MC3 Four validities; MC4 Ethics
4		Sept. 16 & Sept. 18	MC5 Measurement & Validity
5		Sept. 23 & Sept. 25	MC5 Measurement & Validity; <b>Research Summit 1</b>
6		Sept. 30 & Oct. 2	<b>Exam 1 Oct 2</b>
7		Oct. 7 & Oct. 9	WMD Intro – C2; WMD C3-5
8		Oct. 14 & Oct. 16	WMD C6-8; WMD 9-end; Disarmament
9	Fall break (Oct. 19-21)	Oct. 23 only	<b>Research Summit 2</b>
10		Oct. 28 & Oct 30	MC6 Surveys & Observations; ; MC 7 Sampling
11	Nov 7 Last day to drop	Nov. 4 & Nov. 6	MC 8-9 Understanding Correlational designs
12		Nov. 11 & Nov.13	Correlation & Causation MC10 & 11 Understanding Experimental design
13		Nov. 18 & Nov. 20	MC10 & 11 Understanding Experimental design; <b>Prakash Proposal Presentation &amp; Peer Review</b>
14	Turkey Break Nov 26-30	Nov. 25 only	<b>Exam 2 on Nov 25</b>
15		Dec. 2 & Dec. 4	MC12 Complex Experimental Designs & Interactions; Wrap up and Meet with Prof D for individual paper feedback.
<b>Exam</b>	<b>Week</b>	December 6- December 13	<b>Final exam &amp; Final Prakash Proposal due.</b>

## D. Grading Procedures

I expect that everyone will make a genuine effort to participate in the course, engage with the material and complete their work in a timely fashion. That is how learning happens.

Sometimes, life is messy though.

- Computers and internet access can sometimes not work.
- People get sick.
- We are sometimes overwhelmed by work and family obligations.

All of this is real. So, I have planned for “[grace](#)” throughout the course and in the grading. This [grace](#) is designed to help you weather the bumps and minor surprises that are part of everyone’s lives without getting derailed from your learning in this class. Your health and your family's health should always be your priority. Please reach out as soon as possible if you have circumstances needing significant accommodation beyond what this [grace](#) policy allows and I will work with you to determine how to move forward.

Note: I will apply the grace conditions at the end of the semester during final grade calculation. BB grade calculations prior to final exam week will include all submitted (or missed) work.

Credit for this course will be based on student performance in these areas:

	<u>% of final grade</u>
Research Summits	20
In-class activities and individual short writing	20
Evidence-based Prakash project	21
Exam1	12
Exam 2	12
Final Exam	15
<b>Final Weighted Grade</b>	<b>100%</b>

## Research summits

There will be research summits during the semester to help students practice reading and discussing scientific information.

- Summits will have both written and an oral presentation components.
- *Grace: Although the oral presentation cannot be made up, students may complete an additional written assignment to earn partial credit for a missed oral presentation.*

## In-class activities and individual short writings

Individual assignments and in-class activities are designed to promote understanding and application of course concepts and will be given throughout the semester. These might include reflections on assigned readings or videos, web and library searches etc. Learning is enhanced through collaboration. We will be using discussions & activities during the class to give students a chance to share their work and ideas with each other. Assignments & activities are crafted to help students master specific content at specific points in the course so it is important to complete them on time to get the maximum learning benefit. Missed in-class activities can NOT be made up and late assignments will be penalized.

- Specific written descriptions of some assignments will be posted on BB.
- Assignments must be completed by the specified deadline and may not be accepted after a deadline has passed.
- *Grace: The two lowest grades in this category will be dropped from final grade calculations.*

## Evidence-based Project

The project for the class will be a chance to apply what you have learned in the class to improving human outcomes in our communities and to practice writing about science. Specific instructions for the project will be posted on BB later in the semester.

## Exams and Final exam

Cumulative exams help to improve student long-term retention and understanding of course materials.

## Grading Scale

B+	87-89	A	93-100	A-	90-92
C+	77-79	B	83-86	B-	80-82
D+	67-69	C	73-76	C-	70-72
		D	63-66	F	62 or lower

\* I reserve the right to adjust this scale downward if I see the need. I follow scientific rounding rules.

## E. Useful things to know

1. Submitting course materials:
  - All course assignments and materials must be submitted during class to Prof D or via BB. **Emailed assignments will not be accepted.**
  - Pay attention to the instructions for submitting materials to BB. Attach a file when asked or copy and paste text when asked.
  - You are required to keep an electronic copy of all work that you submit to me.
    - Get in the habit of creating all assignments and posts in a separate, savable document outside of BB first.
    - Then you can either directly submit the document or copy and paste the information into BB while always retaining your own copy of the assignment.
2. If you need special accommodations for accessing any of the materials for this class (e.g. testing) please let me know and I will work with you and Student Accessibility Resources (SAR) to set up the necessary accommodations to support your learning. Before I can discuss accommodations, you must present a memo to me from SAR documenting necessary accommodations. If you have not already done so, please contact the SAR office (215 the Blue Connection) by calling 331-2490 or email to [access@gvsu.edu](mailto:access@gvsu.edu). Please note that I cannot provide accommodations until I have received a copy of the SAR issued memo. All discussions will remain confidential.
3. Any changes or updates to assignments/grading/schedule or other course materials will be posted as announcements in the course BB site.

## F. Writing and SWS information

This course is designated SWS. Completion of WRT 120 & WRT 130 or 150 with a grade of C or better (not C-) is a prerequisite. 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. Students may receive SWS credit for taking the course as Credit/No Credit provided the student passes the course with a "Credit" grade.

Because the ability to write clearly is a means for critical thinking, exploration of values, and self-discovery—goals of the general education program—the university requires that all students take two Supplemental Writing Skills courses. These courses, which have Writing 150 with a grade of C (not C-) or better as a prerequisite, are designated SWS in each semester's course schedule.

Courses that have received the SWS designation are not merely courses that require written assignments; they adhere to certain guidelines. Students turn in a total of at least 3,000 words of writing during the term. Part of that total may be essay exams, but a substantial amount of it is made up of finished essays or reports or research papers. The instructor works with the students on revising drafts of their papers, rather than simply grading the finished piece of writing. At least four hours of class time are devoted to writing instruction. For a three-credit course at least one third of the final grade is based upon the writing assignments. Students must pass the writing skills courses (Writing 150 and the two SWS courses) with a grade of C or better in each course. PSY 300 is a designated SWS course. How writing will be incorporated into PSY 300.

Writing instruction in this course will focus on:

1. Understanding different types of claims.
2. Differentiating between the three components of scientific writing: Claims, Evidence & Reasoning.
3. Communicating properly cited and evidence-based inferences about concepts.
4. Communicating understandable interpretations of the results of scientific studies.

## G. AI Policy Statement

**BY: David A. Joyner @davidjoyner@fediscience.org and adopted by Professor Dueker**

We treat AI-based assistance, such as ChatGPT and Copilot, the same way we treat collaboration with other people: you are welcome to talk about your ideas and work with other people, both inside and outside the class, as well as with AI-based assistants.

However, all work you submit must be your own. You should never include in your assignment anything that was not written directly by you without proper citation (including quotation marks and in-line citation for direct quotes).

Including anything you did not write in your assignment without proper citation will be treated as an academic misconduct case. If you are unsure where the line is between collaborating with AI and copying from AI, we recommend the following:

1. Never hit "Copy" within your conversation with an AI assistant. You can copy your own work into your conversation, but do not copy anything from the conversation back into your assignment. Instead, use your interaction with the AI assistant as a learning experience, then let your assignment reflect your improved understanding.
2. Do not have your assignment and the AI agent open at the same time. Similar to above, use your conversation with the AI as a learning experience, then close the interaction down, open your assignment, and let your assignment reflect your revised knowledge. This includes avoiding using AI directly integrated into your composition environment: just as you should not let a classmate write content directly into your submission, so also avoid using tools that directly add content to your submission.

## H. Useful GVSU Resources

All GVSU resources are free and available to ALL students (online, IRL, resident or commuter) so don't hesitate to reach out and ask for help! The Assist item in the main BB menu links to descriptions and

contact information for GVSU support services. Or you can just come see me and I will help connect you to meaningful support services.

### **Fred Meijer Center for Writing and Michigan Authors**

Web: Program information - [gvsu.edu/wc](https://www.gvsu.edu/wc); Appointment scheduling - <https://www.gvsu.edu/bookit/>

Contact: virtualwc@mail.gvsu.edu - (616) 331-2922 or Patrick Johnson (Director - johpatri@gvsu.edu - (616) 331-8077)

Main Location: Lake Ontario Hall, Room 120 (Allendale)

Satellite Locations: Mary Idema Pew Knowledge Market (1st floor) and Steelcase Knowledge Market (Devos Building A)

Online: Virtual writing support is available during all hours of operation for both drop-ins or scheduled appointments. Email support is also available (provided within 72 hours of submission).

The Fred Meijer Center for Writing provides writing assistance to all GVSU students, on any type of project and at any stage of the process. The Writing Center employs both undergraduate and graduate writing consultants from a variety of majors and disciplines. Consultants are trained to help writers brainstorm, organize, and/or develop their ideas; and they can help writers edit their own work and document sources correctly. The Center's services are free and students can work with an idea or assignment prompt all the way through drafting and finalizing their paper.

Writing Center services are available in-person and online during all hours: (Mon-Thurs 9 a.m.-11 p.m., Friday 9 a.m.-3 p.m., Sunday 2 p.m.- 11 p.m.). Students can schedule appointments in advance via [Book It](#) or drop-in (first-come/first-serve) at any service location or virtually. Hours vary by location so please check [Book It](#) and our program website for up-to-date information - [gvsu.edu/wc](https://www.gvsu.edu/wc).

This course is subject to the GVSU policies listed at <https://www.gvsu.edu/coursepolicies/>

Thanks for reading all the way to the end!!!!!! 😊