

# PSY 300: Research Methods – Fall 2024

## Section 1 - Online

### Wolfgang Friedlmeier

#### Instructor

Wolfgang Friedlmeier  
1317 Au Sable Hall  
331-2415  
Email: [friedlmw@gvsu.edu](mailto:friedlmw@gvsu.edu)

#### Office Hours

Monday 1 to 2 pm  
Wednesday 1 to 2 pm  
Friday 1 to 2 pm  
**Virtual Office Hours:** by appointment  
Meeting ID: 406 828 8089  
Passcode: 3UYDhZ or 490450

#### Textbook

Stangor, C. (2015, 5<sup>th</sup> ed.). *Research methods for the behavioral sciences*. New York: Houghton Mifflin Company. (available as e-book – GVSU Save)

#### Articles

Readings of specific research articles will be announced and the articles are available under “Relevant Articles” in Bb.

Cheng, C.Y., Lee, F., & Benet-Martinez, V. (2006). Assimilation and contrast effects in cultural frame switching. Bicultural identity and valence of cultural cues. *Journal of Cross-Cultural Psychology*, 37, 742–760.

#### APA Style

American Psychological Association (2020). *Publication Manual of the American Psychological Association* (Seventh Edition). Washington, D.C.: APA.

#### Course Overview

The aim of this course is to acquaint students with basic research methods in psychology while exploring practical, theoretical, and ethical issues regarding research design and its implementation in psychology. Upon completion of this course you should (1) be able to understand and to summarize the essence of research articles, (2) you should be able to write clearly and cogently in a scientific way, and (3) you should understand how to design an empirical study. A good understanding of basic statistics is a must as some statistical procedures will be presented that afford such basic knowledge.

The course is organized in a way that you get a broad overview about the whole research process in the beginning. Discussing a specific research article may make the different issues of the research process more concrete. Across the semester we will then go through the different steps of the research process in a more detailed way in order to deepen the understanding of each relevant topic.

Beside the textbook you are asked to read and work with several research articles in an intensive way.

## Learning Outcomes

The aim of this course is to acquaint students with basic research methods in psychology while exploring practical, theoretical, and ethical issues regarding research design and its implementation in psychology. Upon successful completion of this course students will become more critical consumers of scientific information. writing clearly and cogently in a scientific way. identify the strengths and weaknesses of your own writing processes,

More specifically, the course has specific learning outcomes:

- (1) Knowing about biases how scientific information is presented through media
- (2) Recognizing criteria to identify predatory journals and articles
- (3) Being able to carry out systematic literature search for scientific information
- (4) Summarize the essence of an introduction of a research article (hypotheses, definitions of concepts, arguments)
- (5) Understanding the concept of operational definition as central to empirical research
- (6) Being able to evaluate the quality of scientific measures (reliability and validity)
- (7) Being able to recognize research designs and the results that refer to hypothesis testing
- (8) Critically evaluate articles along internal and external validity

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

## SWS Course

This course is designated SWS. Completion of WRT 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 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.*

The writing instruction will focus on APA style (running head, titles and subtitles, citation and quotation, references, tables, figures, appendix). Writing instructions will be taught for at least four hours. You will be taught to locate peer-reviewed scholarship in a systematic way.

The written assignments serve the purpose to train and test your writing skills. You will get feedback to all written assignments and you will be able to submit revisions for one of the assignments. The word count for each assignment is mentioned below.

## Prerequisites

### **WRT150, PSY 101 and STA 215**

This course is designated SWS. Completion of WRT 150 with a grade of C or better (not C-) is the prerequisite. SWS credit will not be given to the student who completes this course before completing the prerequisite.

## General Information

This course will be taught online. There are some requirements regarding the course organization:

**Withdrawal.** The deadline for withdrawing from the class is **November 8, 5 p.m.**, through one of the Student Assistance Centers.

**Academic Integrity.** Students will do original work and will not take or receive the efforts of another person on any test or assignment, use unauthorized resources on quizzes or tests, plagiarize, or give/sell other students papers or assignments *not authorized by the instructor*. **You are responsible** for making yourself aware of and for understanding the policies and procedures that pertain to academic integrity. To that end, be sure to familiarize yourself with the GVSU Student Code [Section 223.01] related to academic integrity. **Furthermore, be sure to reference sources at all times.** If you are uncertain about such an issue prior to submission of an assignment, project, or test, please contact the instructor so we can eliminate that uncertainty. **Plagiarism or cheating will result in an F for the course.**

**IMPORTANT: When you use ChatGPT or similar devices to create text you are asked to cite these passages.** Here is some information how to do this. <https://apastyle.apa.org/blog/how-to-cite-chatgpt>. Failing to mark such text as citation counts as plagiarism and will be graded as Failed.

Example:

When prompted with “Is the left brain right brain divide real or a metaphor?” the ChatGPT-generated text indicated that although the two brain hemispheres are somewhat specialized, “the notation that people can be characterized as ‘left-brained’ or ‘right-brained’ is considered to be an oversimplification and a popular myth” (OpenAI, 2023).

In References Section

OpenAI. (2023). ChatGPT (Mar 14 version) [Large language model]. <https://chat.openai.com/chat>

### **Special Needs**

If there is any student in this class who has special needs because of a learning, physical, or other disability, please contact me and Disability Support Services (DSS) at (616) 331-2490. Furthermore, if you have a disability and think you will need assistance evacuating this classroom and/or building in an emergency, please make me aware so that the university and I can develop a plan to assist you. It is the *student's responsibility* to request assistance from DSS.

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

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 and online support is available during all hours of operation. Students can access one-to-one writing support by connecting through Book It (<https://www.gvsu.edu/bookit/>) to schedule online appointments, virtually drop-in to work with a consultant (first-come/first-serve), or connect with asynchronous email support (72 hour response time). In addition to synchronous and asynchronous support, the Writing Center also maintains educational resources about a variety of topics and we look forward to working with you!

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.

Web: Program information – <http://www.gvsu.edu/wc>

Appointment scheduling - (<https://www.gvsu.edu/bookit/> )

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

### **LIBRARY Support**

Each department has a designated librarian to support your research needs. Christine Malmsten is your liaison librarian for Psychology. Her email is [malmstec@gvsu.edu](mailto:malmstec@gvsu.edu) and her office is in Mary Idema Pew Library (Allendale), room 240. You are welcome to make an appointment with her. The psychology library subject guide (<http://libguides.gvsu.edu/psych>) contains links to all of the psychology databases and other specific resources for psychology students.

### **Library Research Center**

<https://www.gvsu.edu/library/km/library-research-center-11.htm>

Library Research Center is part of the Knowledge Market, where peer consultants are available to assist students with their research needs.

## Assignments

You will be asked to submit eight written assignments (see below). Detailed information about each assignment and related files will be provided on Bb with deadlines. Feel free to ask questions when you are not sure how to proceed on a task. All assignments are turned in by assignment manager through Blackboard. More than half of the final grade in the course is based on writing assignments.

You can submit a revision based on my comments for the assignments 2 to 7. The deadline will be set for about one week after my comments are posted. Points for the revised versions will not be added to the total points but your original assignment points will be increased if the revised version shows improvements.

### **Assignment 1: Science and Media (20 points)**

Task: Write up three reasons why and how scientific knowledge may be distorted by the media and two reasons how science contributes to such biases based on the video by John Oliver.

### **Assignment 2: Criteria of Predatory Journals (20 points)**

Task: Look for three predatory open access journals <https://beallslist.net/> <https://beallslist.weebly.com/> and report how you can identify that they are predatory (give at least three criteria for each journal).

### **Assignment 3: Hypotheses (20 points)**

Task: Read the introduction (up to Method section) of the article by Cheng, Lee and Benet-Martinez (2006). Write down the hypotheses and elaborate the arguments and evidence that allow the researchers deriving these hypotheses. Include definitions of the main concepts that form the hypotheses. You find the article under electronic Course Reserve (see eReserve button in Bb).

### **Assignment 4: Literature Search (20 points)**

Task: Search for 10 relevant journal articles that focus on a research topic of your choice in a systematic way in PsycInfo.

### **Assignment 5: Operational Definition (20 points)**

Task: Identify the independent and dependent variables; describe the exact operational definitions of all variables that were assessed (see attached file).

### **Assignment 6: Reliability and Validity (20 points)**

Task: Report the reliability and validity of the variables and measures in the article by Cheng et al. (2006). Draw some conclusions regarding the strength how much we can be sure that the measures are reliable and assess the concepts of interest.

### **Assignment 7: Hypotheses Testing and Result Report (20 points)**

Task: Report for the Cheng et al. (2006) article, how the researchers tested the hypotheses and whether the hypotheses were confirmed.

### **Assignment 8: Critical Analysis of Research Articles (20 points)**

Task: Read each article intensively. Identify and discuss critical points.

## Quizzes

There will be 13 short online multiple choice quizzes for each chapter with five questions. The quiz will test the content of the related chapter in the textbook. You will have about ten days to answer. The answer time will be limited to 10 minutes. Ten of the quizzes will go into your final grade. If you miss the deadline of the quiz, 0 points will be in your record for the respective quiz.

## Exams

There will be two exams during the semester. Prior to the exams, you will get about 50 test questions online that are similar to the exam questions. You can go through these test questions by yourself as often as you want. They may serve as a test before the exam for your level of preparedness.

The online exam will be available throughout the day of the exam (from 8 am to 11 pm). You can decide the time to start the exam. When you start it, you have 60 minutes available to finish the test. The midterm exam will be on **Wednesday, October 9**.

The final exam will be on **Wednesday, December 11**.

### **Respondus Lockdown and Monitor**

Exams will require Respondus Lockdown and Monitor. The software allows for fair, secure tests by preventing students from accessing other programs and ensuring that student knowledge is being validly measured. It's best to think of this software as a way to simulate the experience of students taking a proctored exam in a regular classroom.

Download and Install link:

<https://download.respondus.com/lockdown/download.php?id=936312756>

### **Tips for taking an online exam**

- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach.
- Clear your desk or workspace of all external materials not permitted - books, papers, other devices.
- Remain at your computer for the duration of the test.
- To produce a good webcam video, do the following:  
Ensure your computer or device is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed, or other surface where the device (or you) are likely to move. If using a built-in webcam, avoid readjusting the tilt of the screen after the webcam setup is complete.
- Take the exam in a well-lit room, but avoid backlighting (such as sitting with your back to a window)

## How to Succeed in an ONLINE COURSE

Self-Management is Key: Online courses require perseverance, self-discipline, self-motivation, and the ability to work independently – more so than face-to-face on-campus classes. Make sure to:

- Log onto Blackboard at least 4 to 5 times per week to check announcements and interact with course material.
- Stay organized and track of due dates.
- Plan weekly study times and stick to a schedule. Plan on spending roughly 10 to 15 hours per week on this course. (Re)watching video lectures, completing readings and taking notes, completing assignments, and preparing for quizzes and exams.
- Read! Complete the Connect Reading Assignment associated with each lecture before you watch the videos. This will provide you with a broader context for understanding the material presented in the recordings.
- Take Good Notes when you read the chapters and listen to recordings.
- Turn in all Assignments on time. Late Assignments receive a 0. Missing one homework assignment will substantially lower your grade in the course.
- Prepare for Exams Well in Advance. You should re-read your lecture notes. You may create flashcards. Work through the test questions posted two weeks before the exams. Do not wait with the exam preparations until the last minute.
- Communicate with me! Email me or make an appointment to meet with me on Zoom if you need to discuss anything pertaining to this course.

## Grade Distribution

A	94 - 100%	A-	90 - 94%		
B+	87 - 90%	B	83 - 87%	B-	80 - 83%
C+	77 - 80%	C	73 - 77%	C-	70 - 73%
D+	64 – 70%	D	60 - 64%		
F	60% and lower				

## Preliminary Deadlines for Assignments and Quizzes

### Deadlines for quizzes

If not specified differently, quizzes will start on Wednesday and be open until Friday in the week after.

### Deadline for assignments

If not specified differently, assignments start on Mondays and are due on the Tuesdays of the following week.

### Assignments are due on Tuesdays

AS1 – September 3  
 AS2 – September 10  
 AS3 – September 17  
 AS4 – September 24

### Quizzes are due on Fridays

Quiz 1 – September 13  
 Quiz 2 – September 20  
 Quiz 3 – September 27  
 Quiz 4 – October 4

AS5 – October 1  
 AS6 – October 8  
 AS7 – November 15  
 AS8-1 – December 4  
 AS8-2 – December 6

Quiz 5 – October 11  
 Quiz 6 – October 18  
 Quiz 7 – October 25  
 Quiz 8 – November 1  
 Quiz 9 – November 8  
 Quiz 10 – November 15  
 Quiz 11 – November 22  
 Quiz 12 – November 29  
 Quiz 13 – December 6

IMPORTANT: Due dates can change. Please refer primarily to the due dates given with the assignments and quizzes during the semester.

<b>Assignment 1: Science and Media</b>	<b>20 points</b>	<b>6.5%</b>
<i>Word count: 400-500</i>		
<b>Assignment 2: Criteria of Predatory Journals</b>	<b>20 points</b>	<b>6.5%</b>
<i>Word count: 500-700</i>		
<b>Assignment 3: Hypotheses</b>	<b>20 points</b>	<b>6.5%</b>
<i>Word count: 600 to 800</i>		
<b>Assignment 4: PsycInfo Search</b>	<b>20 points</b>	<b>6.5%</b>
<i>Word count: 700 to 900</i>		
<b>Assignment 5: Operational Definition</b>	<b>20 points</b>	<b>6.5%</b>
<i>Word count: 400 to 600</i>		
<b>Assignment 6: Reliability and Validity of measures</b>	<b>20 points</b>	<b>6.5%</b>
<i>Word count: 400-600</i>		
<b>Assignment 7: Hypotheses Testing</b>	<b>20 points</b>	<b>6.5%</b>
<i>Word count: 500-700</i>		
<b>Assignment 8: Critical Analysis of Research Articles</b>	<b>20 points</b>	<b>6.5%</b>
<i>Word count: 400 to 500 per paper</i>		
<b>Quizzes</b>	<b>50 points</b>	<b>16.1%</b>
<b>Midterm Exam</b>	<b>50 points</b>	<b>16.1%</b>
<b>Final Exam</b>	<b>50 points</b>	<b>16.1%</b>

**Total** **310 points**

Note: This is a preliminary list of tasks and assignments that may still be subjected to change.

## Semester Schedule for PSY 300 – Fall 2024

### Wolfgang Friedlmeier

(updates may be included in some learning modules – refer to the info in the learning modules as guiding information)

#### Week 1 – 8/26 to 8/30

**TOPICS: Structure of Research**

TOPICS: Science and Media: Biases in providing scientific knowledge to the public

**Read chapter 1**

**Overview of course: Structure, content and organization**

What is Science; Scientific knowledge; theory, empirical evidence, method

**Watch three videos related to chapter 1**

**Assignment 1: Science and Media**

Write up four reasons why and how scientific knowledge may be distorted by the media; Watch

John Oliver <https://www.vox.com/2016/5/9/11638808/john-oliver-science-studies-last-week-tonight>

**AS1: Tuesday, September 3**

#### Week 2 – 9/2 to 9/6

**TOPICS: Predatory journals, three research designs**

**Read chapter 1**

Advantages and disadvantages of Open Access Journals, research designs

**Watch the videos related to Chapter 1 (1.4 Research Designs)**

**Assignment 2: Recognizing predatory open access journals**

Look for three predatory open access journals <https://beallslist.net/> and report how you can identify that they are predatory (give at least three criteria for each journal).

**Take Quiz 1: Friday, September 13**

**AS2: Tuesday, September 10**

#### Week 3 – 9/9 to 9/13

**TOPICS: Research Hypotheses, APA Style**

**Read chapter 2**

**Watch the three videos related to chapter 2**

**Work on Assignment 3: Hypotheses, evidence, and arguments**

Write the hypotheses and add arguments and evidence as presented in the article (Chen, Lee, & Benet-Martinez, 2006)

**Take Quiz 2: Friday, September 20**

**AS3: Tuesday, September 17**

#### Week 4 – 9/16 to 9/20

**TOPICS: Introduction to PsycInfo, Ethics in Research**

**Read chapter 3**

**Watch the two videos related to chapter 3**

**Assignment 4: Literature search**

*Decide for a research topic and carry out a systematic literature search*

**Quiz 3: Friday, September 27**

**AS 4: Tuesday, September 24**

**Week 5 – 9/23 to 9/27**

**TOPICS: Measurement, forms of measures**

**Read chapter 4**

**Watch the three videos related to chapter 4**

**Work on Assignment 5: Operational Definitions**

*Identify measures in Cheng, Lee, & Benet-Martinez, and describe detailed operational definitions.*

**Take Quiz 4: October 4**

**AS5: Tuesday, October 1**

**Week 6 9/30 to 10/4**

**TOPICS: Reliability and Validity; exam preparation**

**Read chapter 5-Reliability and Validity**

**Check the test questions to prepare for midterm exam**

**Watch the videos related to chapter 5**

**Work on Assignment 6: Reliability and Validity**

*Report and discuss the reliability and the validity of the variables and measures in the article by Cheng et al. (2006).*

**Take Quiz 5: October 11**

**AS6: Tuesday, October 8**

**Week 7 – 10/7 to 10/11**

**TOPICS Sampling, Midterm Exam**

**Wednesday, 10/9: Midterm Exam**

**Read chapter 6**

**Take Quiz 6: Friday, October 18**

**Week 8 – 10/14 to 10/18**

**TOPICS Observation Methods**

**Read Chapter 7**

**Take Quiz 7: Friday, October 25**

**Week 9 – 10/23 to 10/25**

**TOPICS: Hypothesis Testing**

**Read chapter 8**

**Watch the four videos related to chapter 8 and three videos related to chapter 9**

**Take Quiz 8: Friday, November 1**

**Work on Assignment 7: Hypothesis Testing and Result Report**

*Report for the Cheng et al. (2006) article, how the researchers tested the hypotheses and whether the hypotheses were confirmed.*

**Week 10 – 10/28 to 11/1**

**TOPICS: Correlational Designs**

**Read chapter 9**

*Watch the three videos related to chapter 9*

*Work on Assignment 7: Hypothesis Testing and Result Report*

*Take Quiz 9: Friday, November 8*

**Week 12 – 11/4 to 11/8**

**Read chapter 10**

*Watch the video related to chapter 10 (1-way ANOVA)*

*Work on Assignment 7: Hypothesis Testing and Result Report*

*Take Quiz 10: Friday, November 15*

**Week 13 – 11/11 to 11/15**

**Read chapter 11**

**TOPICS: Research Designs, one-way ANOVAs and two-way ANOVAs**

*Watch the three videos related to chapter 11 (2-way ANOVAs)*

*Work on Assignment 7: Hypothesis Testing and Result Report*

*AS7: Tuesday, November 19*

*Take Quiz 10 and 11: Friday, November 22*

**Week 14 – 11/18 to 11/22**

**TOPICS: Internal validity – prepare for final exam**

**Read chapter 12**

*Watch the video related to chapter 12*

*Take Quiz 12: Friday, November 29*

**Week 15 – 11/25 to 11/26**

**TOPICS: External Validity**

**Read chapter 13**

*Watch the videos related to chapter 13*

*Take Quiz 13: Friday, December 6*

**Week 16 – 12/2 to 12/6**

**TOPICS: Evaluation of Research Articles**

**Revisit and apply relevant methodological criteria**

*Read the Exercise paper for AS8*

*Work on Assignment 8: Evaluation of research papers*

*Submit AS8-1: Wednesday, December 4*

*Submit AS 8-2: Friday, December 6*

**Week 16 - Final Exam**

The exam will be available on **Wednesday, December 11, from 8 am to 11 pm**. When you start taking the exam you have 60 minutes to go to the end.