

## PSY 300: Research Methods – Fall 2025

### Section 2

Wolfgang Friedlmeier

LSH 174

M,W,F 10 to 10:50am

#### Instructor

Wolfgang Friedlmeier

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#### 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 7, 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 midterm exam will be on **Wednesday, October 8.**

The final exam will be on **Wednesday, December 10.**

## 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.

### **Quizzes are due on Fridays**

Quiz 1 – September 12

Quiz 2 – September 19

Quiz 3 – September 26

Quiz 4 – October 3

Quiz 5 – October 10

Quiz 6 – October 17

Quiz 7 – October 24

Quiz 8 – October 31

Quiz 9 – November 7

Quiz 10 – November 14

Quiz 11 – November 21

Quiz 12 – November 28

Quiz 13 – December 5

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

Date	Readings	Topic	Specific tasks
<b>Week 1 Introduction and Overview</b>			
8/25	Introduction		
8/27	Stangor, ch. 1	Structure of Research I	Discussion
		Scientific knowledge; theory, empirical evidence, method	
8/29	Stangor, ch. 1	Structure of Research II	Science and Media
		Scientific Method, Science and Media	AS1
<b>Week 2 Research Hypotheses</b>			
9/1	MLK		
9/3	Stangor, ch. 1		AS2
		Predatory Journals and Research Designs	Quiz 1
9/4			<i>Deadline AS1</i>
9/5	Stangor, ch. 2	Developing research hypotheses I	
<b>Week 3 Research Hypotheses and Ethics</b>			
9/8	Stangor, ch. 2	Developing research hypotheses II	AS3
9/10	Stangor, ch. 2	Developing research hypotheses III	
		Hypotheses and Arguments: Discuss	Quiz 2
9/11			<i>Deadline AS2</i>
9/12	Stangor, ch. 3	Ethics in research 1	Watch Recording
<b>Week 4 Ethics, Literature Search and Measurement</b>			
9/15	Stangor, ch. 3	Ethics in research 2	EX: Discuss ethical
		problems	
9/17	Introduction to PsycInfo		AS4
		Discussion AS3 article	Quiz 3
9/18			<i>Deadline AS3</i>
9/19	Stangor, ch. 4	Measurement 1	
<b>Week 5 Reliability</b>			
9/22	Stangor, ch. 4	Measurement 2	AS5
9/24	Discussion of Method section of main article		Quiz 4
		APA Style	
9/25			<i>Deadline AS4</i>
9/26	Stangor, ch. 5	Reliability 1	
<b>Week 6 SPSS Reliability</b>			
9/29	Stangor, ch. 5	Reliability 2	
10/1	Stangor, ch. 5	Validity	
10/2			<i>Deadline AS5</i>
10/3	Stangor, ch.5	Validity	AS6
			Quiz 5
<b>Week 7 Midterm Exam, Validity, Sampling</b>			

10/6 Stangor, ch. 5 – Discussion of article

**10/8 Midterm Exam**

10/10 Stangor ch. 6 – Sampling I

**Week 8 Sampling and Naturalistic Methods**

10/13 Stangor, ch. 6 Sampling Methods II

10/15 Stangor, ch. 7 Natural Methods

10/16

10/17 Stangor, ch. 7 Natural Methods II

Quiz 6

*Deadline: AS6*

Quiz 7

**Week 9 Fall Break and Hypothesis Testing**

10/20 Fall Break

10/22 Stangor, ch. 8 Hypothesis Testing I  
Discuss Article 6

10/24 Stangor, ch. 8 Hypothesis Testing II

Quiz 8

**Week 10 Hypothesis Testing**

10/27 Stangor, ch. 9 Correlational Designs

10/29 APA Style

10/31 Stangor, ch. 10 ANOVA – One-way

Quiz 9

Exercises

AS7

**Week 11 Correlational and ANOVA Designs**

11/3 Stangor, ch. 10 – ANOVA II

11/5 Stangor, ch. 11- Experimental Designs

11/7 Stangor, ch. 11 – Experimental Designs

Quiz 10

**Week 12 ANOVA Design**

11/10 Stangor, ch. 11 Two-way ANOVA 1

11/12 Stangor, ch. 11 Two-way ANOVA 2

11/14 Stangor, ch. 11 ANOVA example (group work)  
Discussion of AS7

Quiz 11

**Week 12 Internal and External Validity**

11/17 Stangor, ch. 12 Internal validity

11/19 Stangor, ch. 12 Internal validity

11/20

11/21 Stangor, ch. 13 External Validity

Quiz 12

*Deadline AS7*

Quiz 13

**Week 13 Evaluating Articles – Critical Reading and THANKSGIVING BREAK**

11/24 Exercise: Partes & Fites (1998)

11/26 THANKSGIVING BREAK

11/28 THANKSGIVING BREAK

AS8

**Week 14 Internal and External Validity**

12/1	Beauchamp, Greenfield & Campobello (1998)	AS8-1
12/3	Eusis-Lang & Reveles (1998)	AS8-2
12/5	Kahl & Ferguson (1998)	Deadline AS8-1
		Deadline AS8-2

**Week 15: Final Exam**

12/10 Final Exam – Section 2 - 12 to 1:50 p