PSY 300: Research Methods – Fall 2021 Wolfgang FriedImeier Section 01 and Section 09 Online Synchronous sessions: W 9-9:50 am (1), 10-10:50 am (9) (join with VIDEO)

Instructor

Wolfgang Friedlmeier 1317 Au Sable Hall 331-2415 Email: <u>friedlmw@gvsu.edu</u>

Virtual Office Hours

M 2 to 3 pm W 2 to 3 pm F 2 to 3 pm and by appointment Meeting ID: 406 828 8089 Passcode: 3UYDhZ

Textbook and other materials

Stangor, C. (2015, 5th ed.). *Research methods for the behavioral sciences*. New York: Houghton Mifflin Company. ISBN: 9781285077024

Articles

Readings of all research articles will be announced and the articles are available under eReserve in Bb.

Castillo, P. A., & Mallard, D. (2012). Preventing cross-cultural bias in deception judgments: The role of expectancies about nonverbal behavior. *Journal of Cross-Cultural Psychology*, *43*, 967-978.

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.

SPSS

Virtual computer lab: <u>https://winlab.gvsu.edu/</u>

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 have an understanding of 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. 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. I will guide you through these topics and make sure to facilitate the learning process as I really aim for students' success in this class.

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

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General Information

This course will be taught online. We will have some synchronous sessions but most content will be solely presented online. There are some requirements regarding the course organization:

Class Time. We will set up some regular meeting time through Blackboard Collaborate (synchronous meetings). The virtual class time serves partly for clarifications and discussions, partly for guiding you through some applications.

Netiquette. I expect you to join the synchronous sessions WITH VIDEO to create a more vivid virtual classroom environment. Please, keep your microphones mute. Raise your symbolic hand if you have a question and open the mic for these purposes.

Withdrawal. The deadline for withdrawing from the class is October 29, 5 p.m., through one of the Student Assistance Centers.

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.

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.

Support for Writing. Fred Meijer Center for Writing and Michigan Authors

Web: https://www.gvsu.edu/wc/

Contact: virtualwc@mail.gvsu.edu (616-331-2922)

Location: Lake Ontario Hall, Room 120 (Allendale)

Online: Virtual writing support is available during all hours of operation for both dropins 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 across majors and disciplines. Consultants are trained to help writers brainstorm, organize, 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, assignment prompt, or draft of their paper. Students can virtually drop in or schedule an appointment; both appointments and drop-ins are available during all service hours: (Mon-Thurs 9am-11pm, Friday 9am-3pm, Sunday 2pm-11pm). Due to COVID-19, all writing center services are available online. Limited in-person consulting may be available; please check the Writing Center's website for up-to-date information. All service options (drop-ins, appointments, email support) can be accessed via the Writing Center's online scheduling system - Book It. We look forward to working with you!

Research Assistance. Hazel McClure is the psychology librarian and she can provide you with individualized research assistance for all of your classes. Her office is in the Mary Idema Pew Library on the Allendale campus and she can be reached at <u>mcclureh@gvsu.edu</u> or 331-7730. Her psychology library subject guide (<u>http://libguides.gvsu.edu/psych</u>) contains links to all of the psychology databases and other specific resources for psychology students.

Assignments

You will be required to fulfill nine 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.

Assignment 1: Science and Media (20 points)

Task: Write up reasons why and how scientific knowledge may be distorted by the media based on the video by John Oliver.

Assignment 2: Criteria of Predatory Journals (20 points)

Task: Investigate open access journals https://beallslist.net/ https://beallslist.weebly.com/ and report your findings and conclusions.

Assignment 3: Hypotheses (20 points)

Task: Read the introduction (up to Method section) the suggested article. 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 (a training will be provided).

Assignment 5: Operational Definition (20 points)

Task: Identify the independent and dependent variables; describe the exact operational definitions of all variables that were assessed in the suggested article.

Assignment 6: Reliability and Validity (20 points)

Task: Report the reliability and validity of the variables and measures in the suggested article. 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 (30 points)

Task: Report for the results for the suggested article, how the researchers tested the hypotheses and whether the hypotheses were confirmed.

Assignment 8: Documenting results of ANOVA (30 points)

Task: Write a result section, add a table and figure in APA style.

Assignment 9: Critical Analysis of Research Articles (40 points)

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

Assignment 10: Moderator Role for a Session (30 points)

Task: Prepare questions and moderate one session.

Quizzes

There will be 12 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 seven days after the announcement to answer and submit the questions. 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 course of the semester. Each exam is comprised of 50 multiple choice questions. 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 **Monday**, **October 13** The final exam will be on **Wednesday**, **December 15**.

Grade Distribution

А	94 - 100%	A-	90 - 94%		
B+	87 - 90%	В	83 - 87%	B-	80 - 83%
C+	77 - 80%	С	73 - 77%	C-	70 - 73%
D+	64 – 70%	D	60 - 64%	F	<= 60%

Current (Preliminary) Deadlines for Assignments and Quizzes

Assignments are due on Thursdays	Quizzes start Wednesdays and are due on
AS1 – September 9	Tuesdays
AS2 – September 16	Quiz 1 – September 15
AS3 – September 23	Quiz 2 – September 22
AS4 – September 30	Quiz 3 – September 29
AS5 – October 7	Quiz 4 – October 6
AS6 – October 21	Quiz 5 – October 20
AS7 – November 4	Quiz 6 – October 27
AS8 – November 19	Quiz 8 – November 3
AS9 – November 25/December 2	Quiz 9 – November 10
	Quiz 10 – November 17
	Quiz 11 – November 24
	Quiz 12 – December 8
	Quiz 13 – December 13

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

Evaluation and Grading

Your final grade in this class will be based upon the following achievements:

Assignment 1: Science and Media	20 points	5%
Word count: 400-500 Assignment 2: Criteria of Predatory Journals	20 points	5%
Word count:500-700 Assignment 3: Hypotheses Word count: 600 to 800	20 points	5%
Assignment 4: PsycInfo Search Word count: 700 to 900	20 points	5%
Assignment 5: Operational Definition	20 points	5%
Assignment 6: Reliability and Validity of measures Word count: 400-600	20 points	5%
Assignment 7: Hypotheses Testing Word count: 500-700	30 points	7.5%
Assignment 8: Results Word count: 400 to 600	30 points	7.5%
Assignment 9: Critical Analysis of Research Articles	40 points	10%
Word count: 400 to 500 per paper Assignment 10: Moderating one session Quizzes Midterm Exam	30 points 50 points 50 points	7.5% 12.5% 12.5%
Final Exam	50 points	12.5%

Total

400 points

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

Semester Schedule

Deadlines for quizzes:

If not specified differently, quizzes will start on a Wednesday and be open until the following Tuesday.

Deadline for assignments:

If not specified differently, assignments start on Wednesdays and are due on the Thursdays following the week of being assigned. You can still ask question in the following Wednesday sessions and work on the assignment for one day.

Wednesday, September 1: Introduction and Overview

Week 1 Read Chapter 1

TOPICS: Introduction and Structure of Research

Science and Media: Biases in providing scientific knowledge to the public Session: Overview of course: structure, content and organization Watch Welcome Video and John Oliver Show (Science and Media) Watch three videos related to chapter 1

Work on Assignment 1: Science and Media

Write up four reasons why and how scientific knowledge may be distorted by the media; Watch John Oliver <u>https://www.vox.com/2016/5/9/11638808/john-oliver-science-studies-last-week-tonight</u> Discussion: What is Science; Scientific knowledge; theory, empirical evidence, method

Week 2 Read Chapter 1 TOPICS: Predatory journals, three research de Session: Predatory journals	Quiz 1 esigns, research hypot	9/8 to 9/14 heses				
Watch the videos related to Chapter 1 (1.4 Research Designs Work on 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 Finish AS1: Thursday, September 9						
Week 3 Read Chapter 2 TOPICS: Research Hypotheses, APA Style	Quiz 2	9/15 to 9/21				
Session: Discuss AS2, present AS3, Hypotheses 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)						
Finalize Quiz 1: Deadline: September 15 Submit AS 2: Thursday, September 16						

9/1 to 9/7

Week 4 – Read Chapter 3 TOPICS: Introduction to PsycInfo, Ethics in Res Session: PsycInfo Search Watch the two videos related to chapter 3 Work on Assignment 4: Literature search Decide for a research topic and carry out a sys Finalize Quiz 2: Deadline: September 21 Submit AS 3: Thursday, Sepember 23		9/22 to 9/28		
Week 5 Read Chapter 4 TOPICS: Measurement, Forms of measures Session: Discuss AS4, present AS5, measure Watch the three videos related to chapter 4 Work on Assignment 5: Operational Definiting Identify measures in Cheng, Lee, & Benet-Mark Finalize Quiz 3: Deadline: September 28 Submit AS 4: Thursday, September 30	ons	9/29 to 10/5		
Week 6 – Read Chapter 5-Reliability TOPICS: Reliability and exam preparation Session: Discuss AS5 related task, reliabilit Watch the videos related to chapter 5 Finalize Quiz 4: Deadline: October 5 Submit AS 5: Thursday, October 7	у	10/6 to 10/12		
Week 7 - Read Chapter 5-Validity/Midterm examQuiz 510/13 to 10/19TOPICS: ValiditySession: Present AS6, discuss validityWatch all the videos related to chapter 5Prepare for midterm exam including test questionsWork on Assignment 6: Reliability and ValidityReport and discuss the reliability and the validity of the variables and measures in the article by Cheng et al. (2006).Midterm EXAM on Thursday, March 4				
Week 8 – Read Chapter 6 TOPICS Sampling, APA style Session: Discuss AS6, sampling, APA style Finalize Quiz 5: Deadline: October 19 Submit AS 6: Thursday, October 21	Quiz 6	10/20 to 10/26		
Week 9 Read Chapter 8	Quiz 8	10/27 to 11/2		

Session: Hypothesis Testing, present AS7 Work on Assignment 7: Hypothesis Testing Report for the Cheng et al. (2006) article, how the researchers tested the hypotheses and whether the hypotheses were confirmed. Finalize Quiz 6: Deadline: October 26 Quiz 9 11/3 to 11/9 Week 10 Read Chapter 9 **TOPICS:** Correlational Designs Session: Discuss AS7, open topic Watch the three videos related to chapter 9 Finalize Quiz 8: Deadline: November 2 Submit AS7: Thursday, November 4 Quiz 10 11/10 to 11/16 Week 11 Read Chapter 10 **TOPICS: Research Designs and One-way ANOVAs** Session: Present, AS, Introduction to Research Designs and one-way ANOVA Work on Assignment 8: ANOVA Document ANOVA results with table and figure Finalize Quiz 9: Deadline: October 9 Quiz 11 11/17 to 11/23 Week 12 – Read Chapter 11 **TOPICS: Two-way ANOVAs** Session: Discuss AS8, guidance for 2-way ANOVAs Watch the three videos related to chapter 11 (2-way ANOVAs) Work on Assignment 8: ANOVA Document ANOVA results with table and figure Work on Assignment 9: Evaluation of research papers – part 1 Evaluate the internal and external validity of the study by Beauchamp et al. Finalize Quiz 10: Deadline: November 16 Submit AS8: Thursday, November 19 Week 13 -11/24 to 11/30 THANKSGIVING Quiz 12 12/1 to 12/7 Week 14 - Read Chapter 12 **TOPICS:** Internal validity Session: Discussing paper related to AS9, internal validity

Watch the videos related to chapter 12 and 13 Work on Assignment 9: Evaluation of research papers – part 2 Evaluate the internal and external validity of the study by Eusis-Lang & Reveles Finalize Quiz 11: Deadline: November 23 Submit AS9-1: Thursday, November 25

TOPICS: Hypothesis Testing

Week 15 - Read Chapter 13

Quiz 13

TOPICS: External Validity Session: Discussing paper related to AS9, external validity Watch the videos related to chapter 12 and 13 Finalize Quiz 12: Deadline: November 30 Submit AS 9-2: Thursday, December 2 Finalize Quiz 13: Deadline: April 27 Prepare for Final exam including test questions

Final Exam: Wednesday, December 15

The exam will be available from 8 am to 11 pm. When you start taking the exam you have to go to the end.