PSY 300: Research Methods - Fall 2020 Wolfgang Friedlmeier

Section 04 and Section 10

Online / Synchronous sessions: M 9-10am (4), 10-11am (10)

Instructor

Wolfgang Friedlmeier 1317 Au Sable Hall 331-2415

Email: friedlmw@qvsu.edu

Virtual Office Hours in Zoom:

M 11 to 12 pm W 1 to 2 pm W 4 to 5 pm Meeting ID: 406 828 8089

Passcode: 3UYDhZ or 490450

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.

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: https://winlab.gvsu.edu/

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

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. 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. Please, keep your micro 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 **November 20, 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: <u>virtualwc@mail.gvsu.edu</u> (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 mcclureh@gvsu.edu or 331-7730. Her psychology library subject guide (http://libguides.gvsu.edu/psych) 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 (10 points)

Task: Write up four 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: 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 (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 (see attached file).

Assignment 6: Reliability and Validity (30 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 (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: 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.

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 two 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 **Wednesday**, **October 14** The final exam will be on **Wednesday**, **December 16**.

Grade Distribution

Α	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% and lower				

Current (Preliminary) Deadlines for Assignments and Quizzes

Assignments are due on Tuesdays	Quizzes start Fridays and are due on
AS1 – September 8	Wednesdays
AS2 - September 15	Quiz 1 – September 16
AS3 – September 22	Quiz 2 – September 23
AS4 – September 29	Quiz 3 – September 30
AS5 – October 6	Quiz 4 – October 7
AS6 – October 20	Quiz 5 – October 21
AS7 – October 27	Quiz 6 – October 28
AS8 – November 17	Quiz 8 – November 4
AS9 – December 7	Quiz 9 – November 11
	Quiz 10 – November 18
	Quiz 11 – November 18
	Quiz 12 – November 25
	Quiz 13 – December 2

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	10 points	2.9%
Word count: 400-500		
Assignment 2: Criteria of Predatory Journals	20 points	5.7%
Word count:500-700		
Assignment 3: Hypotheses	20 points	5.7%
Word count: 600 to 800		
Assignment 4: PsycInfo Search	20 points	5.7%
Word count: 700 to 900		
Assignment 5: Operational Definition	20 points	5.7%
Word count: 400 to 600		
Assignment 6: Reliability and Validity of measures	20 points	5.7%
Word count: 400-600		
Assignment 7: Hypotheses Testing	30 points	8.6%
Word count: 500-700		
Assignment 8: Results	20 points	5.7%
Word count: 400 to 600		
Assignment 9: Critical Analysis of Research Articles	40 points	11.4%
Word count: 600 to 800 per paper		
Quizzes	50 points	14.3%
Midterm Exam	50 points	14.3%
Final Exam	50 points	14.3%
Total	350 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 Friday and be open until the following Wednesdays.

Deadline for assignments:

If not specified differently, assignments are due on the Tuesday following the week of being assigned. You can still ask question in the Monday sessions and reword the assignment if necessary for one day.

Week 1 Chapter 1

8/31 to 9/4

TOPICS Introduction

Structure of Research

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

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

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

Week 2 Chapter 1

QUIZ 1

9/7 to 9/11

TOPICS:

Predatory journals, three research designs, research hypotheses

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).

Discussion: Examples for the various research designs

Week 3 Chapter 2

QUIZ 2

9/14 to 9/18

TOPICS

Research Hypotheses, APA Style

Assignment 3: Hypotheses, evidence, and arguments

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

Week 4 – Chapter 3

Quiz 3

9/21 to 9/25

TOPICS

Introduction to PsycInfo, Ethics in Research

Assignment 4: Literature search

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

Week 5 Chapter 4

Quiz 4

9/28 to 10/2

TOPICS

Measurement, Forms of measures

Assignment 5: Operational Definitions

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

Week 6 - Chapter 5

10/5 to 10/9

TOPICS

Reliability and exam preparation

Week 7 – Exam

Quiz 5

10/12 to 10/16

TOPICS

Validity

Midterm EXAM (10/14)

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).

Week 8 – Chapter 6 Quiz 6 10/19 to 10/23

TOPICS

Sampling, APA style

Week 9 Chapter 8 Quiz 8 10/26 to 10/30

TOPICS

Hypothesis Testing

Assignment 7: Hypothesis Testing

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

Week 10 Chapter 9 Quiz 9 11/2 to 11/6

TOPICS

Correlational Designs

Week 11 Chapter 10/11 Quiz 10 and 11 11/9 to 11/13

One-way ANOVAs, Two-way ANOVAs

Assignment 8: ANOVA

Document ANOVA results with table and figure

Week 12 – Chapter 12 Quiz 12 11/16 to 11/20

TOPICS

Internal Validity

Assignment 9 – part 1

Evaluate the internal and external validity of the study by Cheng et al.

Week 13 Thanksgiving Week – Chapter 13 Quiz 13 11/23 to 11/27

TOPICS

External validity

Week 14 Chapter 12 and 13 11/30 to 12/3

TOPICS

Evaluation of Studies, Exercises for AS9 (Partes & Fites, Kahl & Ferguson)

Assignment 9: Evaluation of research papers – part 2

Evaluate two papers critically

Week 15 Synthesis 12/6 to 12/10

TOPICS

Final discussion about the course and preparation for final exam

12/16 Final Exam