#### RESEARCH METHODS IN PSYCHOLOGY

PSY 300 - Winter 2017 Prof. Katie Corker E-mail: corkerka@gvsu.edu

Section 15, T/Th 8:30am-9:45 am, 1320 Au Sable Hall Section 16, T/Th 11:30am-12:45 pm, 1179 Kindschi Hall of Science

Computer classroom: Section 15 (8:30am), HON 114
Section 16 (11:30am), KHS 2207 (begins at 12p only)

Prerequisites: PSY 101 or HNR 234, STA 215 or STA 312, & WRT 150 (grade of C or better)

Office Hours: T/Th 10-11am, Weds 10:30am-12pm

Appointments during Office Hours:

https://katiecorker.youcanbook.me/
Appointments at other times (email to request)

Office Location: 2128 Au Sable Hall

Office Phone: (616) 331-2932 (but email is recommended)

#### I. Course Overview

Research methods are foundational to the study of psychology. The scientific method is what allows us to ask and answer questions about how the mind works, why humans behave the way they do, and how we can best structure society and the workplace to support human flourishing. Some students believe that studying research methods is boring and difficult. This needn't be the case, and this course is designed to be very hands-on, so that students can learn about research by doing research. Students in this course will learn how psychologists come to know the things they know. They will learn how to tell the difference between good and bad research designs. They will learn how to report on the results of research using APA style. Most important, this course will lay the groundwork for future study and research in psychology.

"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 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."

#### II. About Your Instructor

- A. Contacting me. The best way to contact me is via e-mail. I typically check e-mail throughout the day, but only during normal business hours (9 am 5 pm). If you send me an email in the evening, you should not expect to get a response until the next business day.
- B. Office hours. Office hours are listed above, but I am available to meet with you during other times, if you make an appointment with me by e-mail.
- C. My expertise. I was trained as a personality and social psychologist with a specialization in quantitative methods. I earned a Ph.D. and a master's degree from Michigan State University and a bachelor of arts from the University of Northern Iowa. I have conducted research in the areas of motivation, goal setting, academic achievement, and the role of personality in influencing all of these variables.

#### III. Required Reading

Required Text: Research Methods in Psychology: Evaluating a World of Information (2014; 2<sup>nd</sup> Edition) by Beth Morling, ISBN: 978-0-393-93693-3

Required Readings: Additional required readings will be posted on the course website.

#### Recommended:

1. A Short Guide to Writing about Psychology, 3<sup>rd</sup> Edition (2011) by Dana S. Dunn, ISBN:

978-0-205-75281-2

2. Publication Manual of the American Psychological Association,  $6^{\rm th}$  Edition

# IV. Course Objectives

This course is designed to help students develop their skills in the following areas:

- A. Psychological research, from start to finish. In addition to those skills mentioned in the course overview (above), students will learn how to think like a psychological scientist. They will learn how to recognize a good research design from a poor one. They will learn how to select valid and reliable instruments for their research. They will learn how to recognize confounds in research design. In short, they will learn everything they need to know to ask and answer questions using psychological research methods.
- B. Analytic writing. Students will develop their capability to present an argument persuasively in written language. Research papers, like many other forms of writing, seek to pose a question and answer it. That is, they contain a central argument supported by evidence. Furthermore, they tell a story taking the reader on a journey along a line of reasoning. In this course, students will begin to learn how to craft such arguments persuasively.
- C. Quantitative reasoning. Students will review a basic grounding in statistics as used in psychological research. This course focuses on measures of central tendency, variability, correlation, and simple null hypothesis significance testing (t-test, ANOVA). Students will apply this knowledge to the interpretation of statistical reporting in the psychological research literature.
- D. Graphical displays and interpretation. Students will learn to interpret graphical displays of data, as well as produce graphical displays and figures for their lab reports.
- **E. Oral presentation and civil discourse.** Oral communication is a critical skill for success in your life at GVSU and

beyond. Students in this course will work to improve their formal presentation skills, as well as hone their ability to speak candidly and civilly when discussing psychological research. Upon completing this course, students should be able to verbally explain the design of a research study, emphasizing what makes the study important and interesting as well as elaborating on strengths and weaknesses in the study's design.

It is the instructor's goal that students become proficient in each of these key areas. Evaluations are designed to assess the extent to which proficiency in these areas has been attained.

#### V. Evaluation

- A. Research article critiques. To gain familiarity with the psychological research literature, students will write two critiques of psychological research articles. There will also be a corresponding in-class discussion of the articles.
- B. Lab reports. To train in both conducting and reporting research, students will complete two lab reports, one with an experimental design and one correlational study. Students will report on study methods and results, and they will construct tables and figures.
- C. Literature review. Individually, students will choose a research question and will review the published literature on this topic. A final paper containing this review is due at the end of the course, but students will also submit an outline, a first draft, and a revised draft, in addition to doing an in-class presentation to propose their topic.
- D. Exams. There will be two midterm exams and one cumulative final exam. The purpose of midterms is to give early feedback on your understanding of course material and make sure you are keeping up with the material. Exams will be a mix of multiple choice and short-answer format. The dates of the exams are firm I will not change them on you at the last minute.
- E. Quizzes. Each topic in the course (14 chapters in the

book, plus APA style) will have an associated reading quiz for you to complete on Blackboard. Quizzes are due on Fridays at 5 pm, and the schedule is appended to this syllabus. There are no late quizzes, but we do drop the lowest three scores.

F. Attendance. I expect that you will attend all classes and participate actively. If you are absent from class, it is your responsibility to make up any missed material by consulting a classmate. Only then may you make an appointment to meet with me to ask follow up questions. Students must come to office hours prepared; students who are habitually absent (> 2 classes missed) should expect limited access to office hours.

There are no make-up presentations. There are no make-up exams, except in the following cases:

- 1. Excused absence for approved extracurricular/ religious holiday: Students should make arrangements with me at least one week before the exam to take the exam early.
- 2. Excused absence for illness: Students with documented illness or injury should (1) notify me immediately and provide documentation, and (2) make arrangements to take the exam at the soonest possible opportunity, but no later than one week following the scheduled exam. I reserve the right to give the exam in an alternative form.
- G. Homework & Participation. This component of the course will be a combination of small assignments and an assessment of your contribution to (and attendance in) class discussions.
- H. Extra credit. Students may complete article critiques for extra credit, worth up to 5 points each. Additionally, students may identify research methods concepts in popular culture or the news, and then write a one page reflection explaining the concept and its relation to the event in question. These Cultural Applications are to be submitted on Blackboard no later than 7 days after the news story or event in question. Reflections are worth up to 5 points each. Students may

earn no more than 20 points of extra credit through any combination of extra credit possibilities. <u>All extra credit is due</u>, via Blackboard, no later than 11:59 pm on 4/20/16.

I. Late policy. Unless otherwise noted above, the late policy for written work is as follows. Work may be submitted early, via Blackboard, for any assignment. Each student is allotted up to 3 grace days, to be used at your discretion, throughout the term. Each 24 hour period an assignment is late counts as one grace day. Work that is submitted late and beyond the allotment of grace days FOR ANY REASON receives a two full letter grade (20%) deduction (e.g., a paper that earns an 80% is worth a 60% if 0-24 hours late; a paper that earns an 80% is worth a 40% if 24-48 hours late). Furthermore, no work may be submitted after the official close of the semester without an approved course extension. (Such extensions are granted in only the most extreme, and documented, circumstances.)

## J. Point breakdown by category.

ASSIGNMENT	POINTS	% OF TOTAL	
Critiques (2x)	20 + 20 = 40	8000	
Lab Reports (2x)	40 + 40 = 80	16%	
Participation	20	4%	
Topic Presentation	20	4%	
Drafts (2x)	15 + 15 = 30 6%		
Final Draft	50 10%		
Quizzes	5 * 12 = 60	12%	
Midterm Exams (2x)	50 + 50 = 100 20%		
Final Exam	100	20%	
Extra Credit	Up to 20 pts.	4%	

### VI. Grading Scale

GRADE	POINTS	PERCENT	
А	463-500	93%-100%	
A-	448-462	90%-92%	
B+	433-447	878-898	

В	413-432	83%-86%	
B-	398-412	80%-82%	
C+	383-397	77%-79%	
С	363-382	73%-76%	
C-	348-362	70%-72%	
D+	333-347	67%-69%	
D	313-298	60%-66%	
F	<297	<60%	

THESE ARE FIRM CUT-OFFS. I round up to the nearest percent (e.g., 86.5% rounds up to 87% and equals a B+, but 86.4% rounds down to 86% and equals a B). The point categories listed above reflect this rounding. DO NOT attempt to negotiate grades with me. It is your responsibility to make sure your grade ends up where you want it to be. I have provided ample extra credit opportunities for students who wish to improve their grades. Students who want to improve their learning (and therefore their grades) should see me early in the class for assistance. I will not negotiate grades with you, but I will do everything in my power to help you put in the necessary work to be as successful as you desire.

## VII. Disability Accommodation

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.

# VIII. Academic Honesty

Unless otherwise noted, all work for this course should be independently completed. Students should take special care to provide proper citation of sources when submitting written work. Adopting words, passages, or ideas without citation is plagiarism and will be treated as such per GVSU guidelines. Furthermore, students should not self-plagiarize, that is, reuse their own work from another course. The penalties for academic dishonesty range from zero on that assignment to failure in the course.

The following are statements provided by the university and can be found in the Student Code, Sections, 223.00 and 223.01.

"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 223.00 and 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 see me so we can eliminate that uncertainty.

No student shall knowingly plagiarize or copy the work of another person and submit it as his/her own. Offering the work of someone else as one's own is plagiarism. Any ideas or material taken from another source for either written or oral presentation must be fully acknowledged. The language or ideas taken from another may range from isolated formulas, sentences, or paragraphs to entire articles copied from the internet, books, periodicals, speeches, or from the writing of other students. The offering of materials assembled or collected by others in the form of projects or collections without acknowledgement also is considered plagiarism. In short, any student who fails to give credit in written or oral work for the ideas or materials that have been taken from another is guilty of plagiarism."

#### IX. Our Social Contract

In order for this course to function optimally, we both have parts to play, and when we each do our part, everyone benefits.

As professor, I promise to always do my very best to select interesting and thought-provoking course material. I will prepare course materials to the best of my abilities, and I will make decisions about the course according to the learning goals I have outlined here. I will act fairly - holding every student to the same high standard and providing equal opportunities for success.

As student, you promise to prepare diligently for class, to always contribute to the best of your abilities, to never cheat or act dishonestly, and to treat your classmates and me with the highest respect. You will do your best to attend class and be on time. You will not ask me to grant you special privileges that

aren't available to the rest of your classmates, in order that I may adhere to my promise to be fair and just to all of you.

# X. Course Calendar

Wk.	Date	Topic	Reading/Homework/Due		
1		Introduction	<b>3</b> , ,		
	1/10	Research Questions &	Read: Morling Ch. 1		
		Research Methods	3		
		mi oli i	Read: Morling Ch. 3		
	1/12	Three Claims, Four	Drop by 1/13 for 100%		
		Validities	refund		
	1/17	Searching Psychological	Read: Morling Ch. 2		
2	1/1/	Literature; APA Style	Meet: CC		
	1/19	NO CLASS - SPSP	Read: The Belmont		
	1/1/	NO CHASS SISI	Report		
	1/24	Research Ethics	Read: Morling Ch. 4		
3		Reading & Critiquing	Read: ARTICLE TBD		
	1/26	Psychological Research 1	Due 1/25, 11:59pm:		
		Is your research i	Critique #1 (BB)		
		Writing Lab 1			
	1/31	Methods, Results	_		
4		Tables, Figures			
	2/2	EXAM 1: APA Style &	EXAM 1		
		Ch. 1-4			
	2/7	Experimental Designs	Read: Morling Ch. 10-12		
5	2/9	Analyzing & Reporting	Read: TBD		
	·	Experimental Data			
6	2/14	Experiment Lab	Meet: CC		
	2/16	Experiment Lab	Meet: CC		
	2/21	Measurement & Scale	Read: Morling Ch. 5-6		
_	,	Development	_		
7	2/23	2/23 Surveys & Sampling	Read: Morling Ch. 7		
			Due 2/22, 11:59pm:		
			Experiment Lab		
	3/2	Review & Catch Up			
8		EXAM 2: Ch. 5-7 & 10-12	EXAM 2		
	Drop by 3/10 for W				
	SPRING BREAK				
9		Writing Lab 2			
	3/14	Literature Review,	_		
		Introduction, Discussion			
	3/16	Correlational Designs	Read: Morling Ch. 8-9		

10	3/21	Reading & Critiquing Psychological Research 2	Read: ARTICLE TBD  Due 3/20, 11:59pm:  Critique #2 (BB)
	3/23	Topic Presentations	Bring: Outline + 10 APA formatted sources
	3/28	Topic Presentations	-
11	3/30	Analyzing & Reporting Correlational Data	<pre>Due 3/29, 11:59pm:</pre>
1.0	4/4	Correlational Lab	Meet: CC
12	4/6	Correlational Lab	Meet: CC
13	4/11	Other Designs	Read: Morling Ch. 13 Due 4/10, 11:59pm: Correlational Lab
	4/13	Writing Lab 3 Peer Review	<b>Due:</b> 2 Paper Copies Revised Rough Draft
14	4/18	The Real World & Replicability	Read: Morling Ch. 14
	4/20	Catch up	<pre>Due 4/20, 11:59pm:   Final Draft (BB)</pre>
15	Mon. 4/24	CUMULATIVE FINAL EXAM Sec. 15 (Normally 8:30am)	FINAL EXAM (10a-12p) Au Sable 1320
	Weds. 4/26	CUMULATIVE FINAL EXAM Sec. 16 (Normally 11:30am)	<b>FINAL EXAM</b> (12p-2p) Kindschi 1179

# Quiz Schedule - Each topic is its own quiz. Some weeks have multiple topics. We drop the three lowest scoring topics. No late quizzes!

Wk.	Date	Quiz Topic	Time Due	Points	Items
1	1/13	Chapter 1 & 3	Fri, 5 pm	10	20
2	1/20	Ch. 2 & APA Style	Fri, 5 pm	10	20
3	1/27	Chapter 4	Fri, 5 pm	5	10
4	2/3	None - Exam 1	None		
5	2/10	Chapter 10 & 11	Fri, 5 pm	10	20
6	2/17	Chapter 12	Fri, 5 pm	5	10
7	2/24	Chapter 5 & 6	Fri, 5 pm	10	20
8	3/1	Chapter 7	Wed, 5 pm	5	10
9	3/17	Chapter 8	Fri, 5 pm	5	10
10	3/24	Chapter 9	Fri, 5 pm	5	10
11	3/31	None	None		
12	4/7	None	None		_
13	4/14	Chapter 13	Fri, 5 pm	5	10
14	4/21	Chapter 14	Fri, 5 pm	5	10