Research Methods Syllabus

Winter 2025

Part 1: Course Information

The Basics

Course designation and section: PSY 300, Section 8

Meeting times: N/A – This course will be conducted in an asynchronous format

Meeting location: N/A – All lectures will be posted on Blackboard

Instructor Information

Instructor: Katarina Rotta, PhD, BCBA-D, LBA

Office:

https://gvsu-edu.zoom.us/j/4167027990?pwd=NVZ0MHFDVkxpMFhyOXZPVFBJYllVQT09

Office hours: By appointment only

If you are interested in meeting, please email me 2-3 days/times that you are

available.

E-mail: rottak@gvsu.edu

official GVSU email account to contact the course instructor.
Emails sent from other accounts will not receive a

response.

*NOTE - Use your

Course Description

This course covers how to consume, design, implement, and report research in a manner that is consistent with modern professional academic standards. The

course will include information on measurement, validity, experimental design (including group and single-subject designs), surveys, qualitative research, APA style, and the interpretation and creation of visual displays of quantitative information.

Textbooks & Course Materials

Required Course Materials:

 A computer that is compatible with Zoom, Blackboard, Respondus Lockdown, and the DESKTOP VERSIONS of Microsoft Office (NOT online versions like Google Docs or Google Sheets).

Required Texts:

1. (FREE PDF) Jhangiani, R., Chiang, I., Cuttler, C., & Leighton, D. (2019). Research Methods in Psychology (4th ed.). British Columbia: Kwantlen Polytechnic University. Retrieved from https://kpu.pressbooks.pub/psychmethods4e/

Optional:

1. American Psychological Association (2010). *Publication manual of the American Psychological Association (7th ed.)*. Washington, DC: American Psychological Association.

Part 2: Primary Course Objectives

- 1) Comprehension/Describe: Describe the details of and summarize the essence of research articles.
- 2) Application/Write: Write clearly and cogently in a scientific way.
- 3) Evaluation/Evaluate: Evaluate strengths and weaknesses of empirical studies consistent with the standards of psychological science.

Part 3: Format and Assignments

General Format

Each week, students will be expected to watch 1-2 lectures and complete any corresponding readings, activities, and/or assessments. All activities will be completed virtually via Blackboard.

Quizzes and Exams

Quizzes and exams are based on weekly readings, lectures, and assignments. All quizzes and exams are multiformat, which means they may include multiple choice, fill-in-the-blank, matching, true/false, short answer, or other types of questions. Any given quiz may or may not include any particular format for questions, so be prepared to answer questions in any format.

All quizzes and exams will be administered virtually through Respondus LockDown. All students must download Respondus LockDown browser for quizzes and exams to a compatible computer/operating system that has a functioning webcam. Failure to do so will result in a zero. Respondus Monitoring is a specialized browser that will launch, activating your computers webcam and microphone in order to record exam activity. All quizzes will be open note/book; however, you are **not** permitted to use your cell phone or the worldwide web. In essence, Respondus LockDown will be used to prevent students from: (a) using their cellphones during the assessment, (b) searching the internet for the answer, and (c) consulting with friends, family, etc. Engaging in any of the three aforementioned behaviors will be considered cheating and will result in a failing grade for that assessment.

All abnormal activity during Respondus sessions will be flagged and reviewed.

Quizzes: Each lecture will be accompanied by a corresponding quiz of the lecture content and corresponding readings/activities. These quizzes will include 12 questions and will be non-cumulative. You will have 15 minutes to take each quiz. If you require more time due to a disability, please contact the course instructor as soon as possible. All quizzes will be due by Sunday at 11:59pm for the week they are assigned (unless otherwise specified).

Midterm & final: The midterm and final are cumulative assessments that cover the entire semester up to their administration. You will have 75 minutes to complete each exam. If you require more time due to a disability, please contact the course instructor as soon as possible.

The final exam must be completed by **Friday** at 11:59pm for the week it is scheduled.

Assignments

Activities: Over the course of the semester, a variety of activities will be assigned, all of which correspond with the weekly readings and lectures. These activities may be instructor- or self-guided. For example, some activities may require following along with a video, while others may require following along with an instruction sheet. All activities are due on Wednesday at 11:59pm for the week they are assigned (unless otherwise specified).

Homework: Each activity will have a corresponding homework assignment linked to the same topic. All homework assignments are due by Friday at 11:59pm for the week they are assigned (unless otherwise specified).

Article Summaries: Four times throughout the semester, you will be required to read an assigned research article and write a 1-2 page summary of that article. APA style and formatting are required (i.e., double-spaced with one-inch margins and 12pt. Times New Roman font). All article summaries will be due by Sunday at 11:59 for the week they are assigned (unless otherwise specified).

Extra Credit: There are a limited number of activities you can engage in to earn extra course credit. The extra credit is applied as a bonus to your final percentage (see grading for further details). You may earn up to 2 percentage points for participating in research activities, a $\frac{1}{2}$ percentage point provided for each hour of research activity ($\frac{1}{2} \times 4 = 2$). You may also earn up to 2 percentage points for attending research-related presentations, 1 percentage point per presentation attended ($1 \times 2 = 2$). You will earn the point(s) contingent on the provision of an acceptable, one-page summary. APA format is required, of course!

| Activity | Point Breakdown | Max Points Possible | Final Grade |
|---|-------------------------------------|---------------------|-------------------------|
| Research activity | Research activity ½ pt. per hour of | | +2 percentage points on |
| | research activity | | final grade |
| Research presentation 1pt. per presentation | | 2 percentage points | +2 percentage point on |
| | | | final grade |

Additional Assignments: The course instructor reserves the right to require individual students to complete additional assignments based on their performance, progress, and needs related to course materials. Contingencies related to these assignments will be described on an as-needed basis.

Part 4: Grading

Grades are determined by a weighted system based on the categories shown in the table below. Within each category, each instance (e.g., each homework assignment or quiz) counts for an equal proportion of the category weight. Thus, it is possible to determine the number of percentage points each instance contributes to your final grade as shown below. All instances are graded on a 0 to 100 scale. The relationship between final percentage points and the letter grade assigned in the class is shown in the table below.

| Final Percentage Required | To Earn the Grade |
|---------------------------|-------------------|
| 94 | A |
| 90 | A- |
| 87 | B+ |
| 84 | В |
| 80 | B- |
| 77 | C+ |
| 74 | С |
| 70 | C- |
| 67 | D+ |
| 64 | D |
| 59 | F |

| Category | Individual instance contribution to final grade | Instances Within Category | Category Weight (% of total for all category instances combined) |
|-------------------|---|---------------------------------|--|
| Activities | 1.5 | 6 | 9 |
| Homeworks | 1.5 | 8 | 12 |
| Quizzes | 2 | 15 | 30 |
| Midterm | 8 | 1 | 8 |
| Final | 9 | 1 | 9 |
| Article Summaries | 8 | 4 | 32 |

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Part 5: Schedule

| ٧ | Veek | Date | Lecture(s) | Activity | Homework/ Assignment(s) | Quiz(zes)/Exam |
|---|------|-----------|---|-----------------------------|--|---|
| | 1 | 1/6-1/12 | Course overview | Review syllabus (no points) | Introduction video | Syllabus |
| | 2 | 1/13-1/19 | Developing research ideas & Reading scientific articles | - | - | Developing research ideas & Reading scientific articles |
| | 3 | 1/20-1/26 | Causation/control & Literature search | Literature search | Literature search & Threats to internal validity | Causation/control |
| | 4 | 1/27-2/2 | Research design & Experimental design (group) | - | - | Research design & experimental design (group) |
| | 5 | 2/3-2/9 | Experimental design (single) | - | - | Experimental design (single) |
| | 6 | 2/10-2/16 | Visual analysis & Measurement (basic) | - | - | Visual analysis & Measurement (basic) |
| | 7 | 2/17-2/23 | Operational definitions | Operational definitions | Operational definitions | Midterm (cumulative) |
| | 8 | 2/24-3/2 | Measurement (methods and procedures) & Measurement/IOA | Measurement/IOA | Measurement/IOA | Measurement (methods and procedures) |

| Week | Date | Lecture(s) | Activity | Homework/ Assignment | Quiz/Exam |
|------|-----------|--|-----------------------|-------------------------|--|
| 9 | 3/3-3/9 | - | - | - | - |
| 10 | 3/10-3/16 | - | Spreadsheets & Graphs | Spreadsheets & Graphs | - |
| 11 | 3/17-3/23 | Survey research | Tables | Tables | Survey research |
| 12 | 3/24-3/30 | Qualitative research | - | Article Summary 1 | Qualitative research |
| 13 | 3/31-4/6 | Research ethics | - | Article Summary 2 | Research ethics |
| 14 | 4/7-4/13 | Science vs. pseudoscience | - | Article Summary 3 | Science vs. pseudoscience |
| 15 | 4/14-4/20 | Scientific careers and professional issues | - | Article Summary 4 | Scientific careers and professional issues |
| 16 | 4/21-4/25 | - | - | - | Final exam (cumulative) |

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Part 6: Course Policies

Attendance

Since the class will be delivered in an asynchronous format, attendance is irrelevant. However, if you want to earn a good grade in the class, you will watch and "attend" all posted lectures and complete all readings, activities, and assignments with full effort.

Professional Behavior

- ✓ Behave in a professional manner in course-related correspondence.
- ✓ Class related interactions should be courteous and respectful.

Email

Email etiquette is an important piece of professionalism. Consequently, your instructor will begin shaping this repertoire throughout the course. During weekdays, please check your GVSU email daily for course-related correspondence. The only email address that should be used for communication between students and instructional staff is the email address associated with GVSU. Emails sent from non-GVSU accounts will not receive replies. Appropriately channeled and composed emails will generally receive a reply within one business day. All emails should be composed using formal salutations, subject line, signature, professional tone, and without casual abbreviations or other informal means of communication. Please proofread your content before hitting send. Include proper punctuation and spelling. Missing punctuation, or the wrong letter, can send a very different message (e.g., "Let's eat Grandpa" versus "Let's eat, Grandpa"). In doing these things, you are showing respect for your reader and increasing the probability of a successful email exchange. Your instructor wants the best for you and does not want to see you prematurely dismissed for a future job or academic opportunity for these reasons. For more details on email etiquette, please see this link (e.g., https://www.thebalancecareers.com/how-to-write-and-send-professional-email-messages-2061892. Repeated failure to properly compose emails may result in delayed reply.

Religious Observances

Students may observe religious holidays without penalty. To ensure that you are not penalized for an absence related to a religious observance, you must contact me at least one week in advance to make arrangements.

Late Assignments

Electronic files that are corrupted or otherwise inaccessible and "incorrect" files (i.e., a file other than the file you intended to submit) are counted the same as if you have not submitted anything, and you will be subject to the late assignment policy. Late assignments receive a point penalty. The largest applicable penalty from the list will be applied:

| Late by | Penalty |
|------------|--------------|
| one second | -5% |
| 24 hours | -10% |
| 48 hours | NOT ACCEPTED |

Regrading

After assignments, quizzes, and exams have been graded, if you believe that there is something in error, you may email a regrade request to the instructor. You may also email the instructor, at any time, with any additional questions or concerns related to course content.

Regrade requests must email to the instructor and include the following information:

- ✓ Name of the assignment, quiz, paper, or exam
- ✓ If applicable, the item number
- ✓ Clear description of the discrepancy
- ✓ Justification for why more points should be awarded
- ✓ References to specific lecture or reading materials will increase the probability of your instructor approving your request.

Fairness and grading consistency in grading is a high priority for your instructor, but they are only human. It is possible that there was a mistake made during the grading process. Please consider regrade requests an intellectual rather than an emotional exercise. This means that the tone of your request should be professional and respectful. Your instructor reserves the right to deny angry, hateful, or disrespectful requests, regardless of their legitimacy. Again, it is their job to shape your professional repertoire.

Equal Opportunity in Education

Your course instructor is committed to equal opportunity in education for all students regardless of race, color, religion, national origin, sex, sexual orientation, or gender identity, age, protected disability, veteran status, height, weight, or marital status. It is the responsibility of students with documented disabilities to contact the instructor during the first week of class to discuss appropriate accommodations to ensure equity in grading, classroom experiences, and outside assignments. If necessary, the instructor will meet with the student and staff members of the Disability Support Resources office to formulate a written plan for appropriate accommodations.

COMPLAINT PROCESS

If you have a complaint/problem

Here is a recommended sequence of steps for resolving a complaint or a problem with the instructor:

- 1. Discuss the situation with the instructor
 - a. During office hours or at an arranged appointment time

During the meeting explain the situation in a professional manner. Have ideas about a possible remedy and be willing to entertain multiple perspectives. If the meeting does not

result in an acceptable explanation and resolution then move to the next step in this sequence.

- 2. Contact the Psychology Department Chair, Dr. Mary Bower
- 3. Contact the Dean of the College of Arts & Sciences.
- 4. Contact the GVSU Ombuds Office.

(Note: For complaints about discrimination or sexual harassment, go to the Office of Institutional Equity.)

Class Cancellations

Because this course will be offered in an asynchronous format, official GVSU class cancellations will not affect our course schedule. You should also note that holidays will not affect our course schedule. You have a full week to complete each week's assignments; thus, weeks in which there are holidays should still allow for 3-4 days to complete assignments. I encourage you to look ahead on the course calendar and work ahead as needed, considering holiday breaks and personal plans.

Incompletes

In keeping with the University's policy, your instructor will not give an incomplete as a substitute for a failing grade (i.e., anything lower than a C) – the failing grade stands. However, if an extended illness or injury prevents you from completing the class, do let me know about it. Depending upon the number of classes and exams that you missed, and your attendance and performance on the exams you took before the problem arose, the instructor may be willing to give you an incomplete for the course.

Academic Dishonesty

All instances of academic dishonesty will be handled according to university policy. You are responsible for accessing and understanding the academic policies and procedures in the Undergraduate or Graduate Catalogs that pertain to student rights and responsibilities. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity, and computer misuse.

Please consult with the course instructor if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.

Cheating on a quiz or exam includes using your cell phone or the internet to search for answers, receiving or giving assessment-related information during or after the assessment, looking at another student's assessment, and/or talking to others during the assessment. If you are found to be responsible for any such acts, you will receive a failing grade in the course.

Special Note on Collaboration with Other Students: Extensive similarity between student assignments may be considered evidence of academic misconduct. For assignments in this course, reading the assignment and preparing your own answer, then working closely with other students, comparing answers, and attempting to resolve different understandings is an excellent learning technique and is strongly encouraged. Copying someone else's answers is not legitimate; it is cheating. Completing an assignment as a group project is cheating. You must make your own decisions about every detail of your answers and written work. If you are unsure about boundaries of legitimate group work, please (1) ask for clarification from me, and (2) make full disclosure so that there is no question about your intentions (e.g., if you use someone else's words directly, you should put them in quotation marks and cite that person).

Special Note on Plagiarism: Any ideas or material taken from another source (INCLUDING AI-ARTIFICIAL INTELLIGENCE) for either written or oral presentation must be fully acknowledged. Offering the work of someone else as one's own is plagiarism. The language or ideas taken from another may range from isolated formulas, sentences, or paragraphs to entire articles copied from books, periodicals, speeches, or the writing of other students. The offering of materials assembled or collected by others in the form of projects or collections without acknowledgment also is considered plagiarism. 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.

Any student caught engaging in plagiarism will be brought before the Office of Student Conduct and recommended for failure in this course. Any student caught engaging in complicity (i.e., inappropriate sharing of their work) will receive a 50 percentage point penalty on the relevant assignment. It is your responsibility to familiarize yourself with this policy. Simply claiming you were unaware of the policy or that you plagiarized or engaged in complicity on accident will not be accepted as an excuse.

Additional tutorials on plagiarism are available at http://library.acadiau.ca/tutorials/plagiarism/ and at http://library.camden.rutgers.edu/EducationalModule/Plagiarism/.

Your Responsibility

You are responsible for all of the information presented in this syllabus. Therefore, you should keep this document where you can refer to it for the entire semester. Furthermore, the instructor reserves the right to make adjustments or changes to the syllabus at any point throughout the semester. Students will be notified of any changes in advance.

Part 7: How to succeed in this course

Academic Support

The instructor is dedicated to helping you meet your academic and career goals. Please do not hesitate if you wish to contact the instructor to discuss your course performance or other academic issues.

Psych Friends: If you feel you could use some extra help/guidance/support in any academic domain or for your well-being, please consider scheduling an appointment with a mentor through Psych Friends. Psych Friends mentors are upper-level undergraduate peer mentors who are trained to provide support in many areas including: effective study and time management techniques, exam preparation and reflection skills, comprehension of the psychology and behavioral neuroscience major requirements, tips for engaging in the

field, strategies for education continuation, methods for maintaining physical and mental health. Schedule an appointment here: https://www.gvsu.edu/navigate and Questions? Email psychfriends@gvsu.edu

The (Maybe Not So) Obvious Stuff

Watch the lectures; complete the readings, activities, assignments; and take notes. There are plenty of points available for assessments and activities/assignments, but you cannot get the points if you don't watch the lectures or complete the activities/assignments. What's more, the activities are designed to build skills that are useful on the assignments (and in many careers), so failing to complete them may hurt your grade in indirect ways as well. Lectures are designed to support your knowledge of research methods. Make sure to take good notes. This means that you should prepare an electronic or printed version of the PowerPoint slides that are made available to you through Blackboard. Supplement these notes by writing down relevant lecture content during class time. Taking notes this way will allow you to pinpoint the essential content and do well on the quizzes.

Ask questions. Your instructor is available during bi-weekly office hours. She is also available 24-7 via email. Don't hesitate to reach out and ask questions. You are only hurting yourself by failing to do so.

Study. This is a demanding class. You will need to log many hours of focused study time each week, as well as complete your homework and writing assignments on time. The grade you get out will be a direct function of the work that you put in.

Set goals and track your progress. In order to get somewhere, you need to know where it is you want to go, and where you are right now. Create goals for yourself in this class that are consistent with your larger academic and career goals. See the course instructor if you would like help with this. If a grade on an assignment appears to be missing, inform the instructor immediately. If there is a grading mistake on an assignment or quiz, then follow the regrading procedure and remember to be as professional as possible in making the regrade request.

No Tricks, Clear Expectations

The course instructor will try to be as clear as possible about expectations and will never intentionally try to confuse or trick you. Quiz questions will not be designed to be difficult because they are confusing, but they might sometimes be difficult anyway. While you are taking a quiz, the safest assumption is that the question is not intentionally designed to trick you. If you have questions about a quiz question, raise your hand and the instructor will come to assist you as much as possible without revealing the answer.

Course Evaluations

If you email me a screenshot of your completion page for the end of course evaluation, you will earn 1% extra credit towards your final grade.

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