

PSY 400 – Advanced Research Methods in Psychology
Winter 2025

Section 01: MWF 11:00pm-11:50pm Mackinac Hall (MAK) A2165
Section 08: MWF 12:00pm-12:50pm Mackinac Hall (MAK) A2165

Instructor: Dr. Christopher A. Kurby
Office: ASH 2207
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E-mail: kurbyc@gvsu.edu
Office Hours: MWF 10am-11am; or by appointment.

Required text: Cozby, P. C. (2008). *Methods in Behavioral Research*. (10th ed.). McGraw Hill ISBN-13: 9780073531816

Follow this link for useful information: <http://methods.fullerton.edu/>

Recommended texts (but not required):

American Psychological Association (2001). *Publication manual of the American Psychological Association* (6th Ed.). Washington, D. C.: APA.

Stanovich, K.E. (2010). *How to think straight about Psychology*. (9th ed.). Allyn & Bacon, Inc. ISBN-13: 9780205685905.

Coarse Description and Objectives: Experimental and survey methods in psychology. Topics covered include philosophy of science; theory development; measurement; reliability and validity of methods; experimental, quasi-experimental, survey, and qualitative research designs; biases in experimentation; univariate and multivariate data analysis; and research ethics.

Students who complete the course should be able to:

- Critically evaluate research studies
- Conduct efficient literature searches
- Understand the different types of research design and to employ them well
- Design an experimental study
- Interpret data
- Communicate research results effectively
- Know how to conduct ethical research
- Do good science

Course format and brief description of kinds of activities used: This class will be mostly lecture supplemented with discussion and in-class demonstrations and assignments. We will also spend a large amount of time on writing, critical evaluation of research, data management and analysis. You will also work in groups to produce a novel research project. The course will be heavy on writing and reading from outside of the textbook, and we will also have some lab-based classes about statistics and the use of

SPSS. Some of the extra reading will be listed on the syllabus and some will be announced in class.

Grading and requirements: There will be 2 exams, each of which will be composed of both multiple-choice and short answer or essay questions. Almost every week we will have low-stakes quizzes designed to help you remember key information from that week. You will receive one point for having completed each quiz. However, each quiz will be self-graded in class so that you can see how you are doing. You will also complete some in-class activities, including experimental design and statistics exercises. There will be a group-based research project. Your group will complete this project in a series of stages across the semester. Grades for the project will be determined by group performance. However, I reserve the right to grade individually if I see that there are individuals who engage in social loafing. You will rate the performance of your group members after you turn in each assignment. As part of this project, you will each write three research paper summaries. Details of these summaries will be discussed during class. The points will break down as follows:

200 pts – 2 exams (100 pts each): ~33% of total grade

265 pts – Research project: ~43% of total grade

- Topic/Idea list (20 pts)
- Proposal sheet (20 pts)
- Research project abstract and proposal (40 pts)
- Ethics protocol (35 pts)
- Methods and Results (40 pts)
- Group presentation (40 pts)
- Final research project paper (70 pts)

146 pts – Individual assignments ~ 24% of total grade

- 2 summaries (60 pts: 30 pts each)
- SPSS worksheet (40 pts)
- ethics training certificate (20 pts)
- 6 low-stakes quizzes (6 pts: 1 pt each)
- Group participation (20 pts)

Grading scale: I will announce the official grading scale during class further in the semester.

Academic Honesty: Violations of the standards of Academic Honesty will be met with severe penalties. Anyone known to be plagiarizing material or copying from another person's exam will receive a grade of zero on that assignment or exam, and possibly an F in the course. Students are particularly urged to familiarize themselves with the provisions of the Code of Student Behavior (online at <http://www.gvsu.edu/studentcode/index.cfm>) and avoid any behavior that could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Any offense will be reported to the Chair of the Psychology Department, Dr. Mary Bower, who will determine if further action is necessary.

Disability Accommodations: Any student who requires accommodation because of a physical or learning disability must contact Student Accessibility Resources (<http://www.gvsu.edu/accessibility>) at 616-331-2490 as soon as possible. It is the student's responsibility to request assistance from SAR. After you have documented your disability, please make an appointment or see me during office hours to discuss your specific needs. Accommodations are always designed to maintain the academic integrity of the course; student with disabilities are held to the same academic standards as all other students. Accordingly, if no additional costs (including staff time) are involved, the instructor will extend such accommodation to anyone who requests them, whether or not the student has a declared disability. If a requested accommodation requires special equipment, space, personnel, staff time, or other resources beyond those normally available to the class, the accommodation will be offered only if the student has gone through the process that begins by declaring the disability with Student Accessibility Resources.

If you have a disability and think you might need assistance evacuating the classroom and/or building in an emergency situation, please make Dr. Kurby aware, so he can develop a plan to assist you.

Late assignments: Assignments can be handed in late, however, late assignments will lose 25% of the total points earned for that assignment every day they are late (i.e., 4 days late = 100% point loss. Weekend days are *included* in the count.). Assignments are to be handed in to me by the start of class, on the day listed in the syllabus, or announced in class, for that assignment. Any assignment turned in after that time – even if it is turned in later that day – will be counted as late. Please make sure you that have your assignment completed early enough so that last minute technical errors (e.g., computer/printer malfunction) do not occur. **Last minute technical errors, such as printer malfunctions, will not be accepted as an excuse for why an assignment was turned in late.** If a special extenuating circumstance has come up that will cause your assignment to be late, you must speak with me about it as soon as possible after it presents itself.

Missed exams: It is your responsibility to set up make-up exams with me if you miss an exam. If you missed an exam and were not excused to do so, you must contact me within 48 hours of the exam date. The only acceptable reasons for missing an exam unannounced or unexcused are family/personal emergency or medical reason. If you had a medical reason that kept you from class that day, then I need medical documentation proving so (e.g., note from physician). I will then give you an opportunity to make up the exam. Missing the exam for any other reason may result in forfeiture of some or all of the points for that exam. If you know you are going to miss an exam for a planned reason (e.g., out of town), let me know beforehand. **For all class points, regardless of whether the type of class activity (e.g., exams, assignments, etc), vacations and other pre-planned personal events are not excused absences and make-ups for those reasons will not be allowed.**

Good citizenship in group work: After each component of your research project is handed in, I will solicit peer-reviews of your group partners to obtain your peer's evaluations of how well you contributed to your group. The scores from those reviews will be tabulated, and if your score is an outlier (either below or above the threshold) your score on that assignment will be adjusted accordingly. I also reserve the ability to make changes to group membership at any point if I have evidence of social loafing, dysfunction that I deem unacceptable or irreconcilable, and/or turn group projects into individual ones at my discretion.

Emergency closings: If for any reason the university cancels, or if I cancel, class on an exam day (e.g., severe weather), the exam will be moved to the next class meeting.

Electronic devices: Please turn off all cell phones, pagers and other electronic devices with audible signals or alarms during class time.

Artificial intelligence: Artificial intelligence (AI) cannot be used to write any portions of the assignments in this class. If the use of AI is detected, it will be treated as a case of academic dishonesty.

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

SCHEDULE ON NEXT PAGE

TENTATIVE COURSE SCHEDULE & READING ASSIGNMENTS

| Week | Topic | Readings |
|---------------------------------|--|--|
| 01/06-01/10 | Coarse overview, discussion of research project, begin research | Cozby Chapter 1 |
| 01/13-01/17 | Research summaries, Describe initial group assignments, Theory and Prediction | Stanfield & Zwaan (2001) Begin reading in area of interest, Stanovich Chapters 1 and 2 Cozby Chapter 2 |
| 01/20-01/24 | Design Challenge, Discuss projects (Topic/Idea List due 01/24) | Witt & Proffitt (2005) Witt et al. (2008) |
| 01/27-01/31 (no class 01/31) | Design and interactions (Proposal Sheet due 01/31) | Cozby Chapters 9 and 10 |
| 02/03-02/07 | Design and interactions (Summaries due 02/07) | |
| 02/10-02/14 | Interactions (Abstract & Proposed Design due 02/14) | Cozby Chapter 3 |
| 02/17-02/21 | Ethics (Ethics protocol due 02/21) | Cozby Chapter 3, TBA |
| 02/24-02/28 | Exam 1 02/24 Design Challenge, Running subjects, Statistical inference and analysis | Have you been collecting your data? Simons & Levin (1998); Cozby Chapter 13 |
| 03/10-03/14 | Statistical inference and analysis (Ethics certificate due 03/14) | Stanovich Chapters 5, 11 |
| 03/17-03/21 | Using SPSS and data management | |
| 03/24-03/28 | Using SPSS and data management, Writing Introductions (SPSS worksheets due 03/28) | |

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| 03/31-04/04 | Writing methods and results, Design Challenge | Williams & Bargh (2008) |
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| 04/07-04/11 | Critically assessing methods in Psychology, Critiques of Psychology (Methods and results due 04/11) | Stanovich Chapter 7 Cialdini (2009) Replication Project (I will post this and explain) |
| 04/14-04/18 | Group presentations | |
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| 04/23 (Wed) Section 01: 10:00am- 11:50am Section 08: 12:00pm- 1:50pm | Exam 2 (Final research paper due) | |
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