

PSY300 -- Research Methods in Psychology (SWS), Fall 2017

Section 03 – T/Th, 10:00-11:15; 1117 ASH

Section 01 – T/Th, 11:30-12:45; 2320 ASH

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Office Hours: T/Th, 1:15-2:15pm
(or by appointment)

Required Text:

Shaughnessy, J.J., Zechmeister, E.B., & Zechmeister, J.S. (2012). *Research methods in psychology* (9th ed.). Boston, MA: McGraw-Hill.

Course Content:

This course provides an introduction to research methods in psychology from the perspective of a researcher and from the perspective of a consumer of research-related reports. Throughout the semester you will be exposed to a broad range of topics related to each stage of the research process, with a particular emphasis on the logic of research, study design and implementation, and a theory-guided interpretation and presentation of findings. The course requires you to develop a good understanding of methodology, write research reports using APA-style, and interpret results of statistical analyses. Because the course makes demands on a number of levels, most students find it both challenging and time-consuming. Thus, you should be prepared to spend a significant amount of time each week (6-8 hours, in addition to class time) on work related to the course.

An integral step in the scientific method is transforming data into results, a process that generally requires the use of statistical analyses. Thus, it is important to have a good understanding of basic statistics (i.e., if you have not successfully completed STA215 you should not be enrolled in this course). After researchers analyze their data, they typically discuss the results and interpretation in formal scientific reports. To do this successfully they must have strong writing skills and understand formatting and structural issues related to the reports. PSY300 is designed to foster this learning and writing skill acquisition, and as such is designated as an SWS course. You will be required to do a significant amount of writing, in the form of in-class exercises, research-related writing assignments, and essay examinations. As with other SWS courses, completion of WRT150 with a grade of C or better is a prerequisite for PSY300. SWS credit will not be given to a student who completes this course before completing the prerequisite. PSY300 and other SWS courses adhere to certain guidelines, one of which is a requirement for students to turn in a total of at least 3,000 words of writing. In addition, more than one third of the final grade in PSY300 is based on writing assignments. As with other SWS courses, students must complete PSY300 with a grade of C or better to receive SWS credit.

Course Objectives:

Each topic covered in the course and each method of evaluation is designed to help students develop one or more of the following:

- Critical thinking skills, especially as related to reading and developing psychological research reports
- A good understanding of reliability and validity and how to assess them
- A good understanding of the major research strategies used in psychological research, including the logic on which they are based, their strengths and weaknesses, and the types of research questions they are best suited to address
- A good understanding of ethical issues in psychological research and strategies used to address the issues
- The ability to recognize confounding variables and a good understanding of how to prevent them and/or minimize their effects
- A good understanding of the NHST approach to hypothesis testing, its limitations, and hypothesis testing procedures used in addition to (or instead of) the approach
- A good understanding of the importance of replication in psychological research
- A good understanding of effect sizes and statistical power, and their roles in research
- A good understanding of common descriptive statistics & the ability to calculate them
- A good understanding of the purposes and logic of *t*-tests and 1-way ANOVAs, and the ability to interpret relevant test statistics and *p*-values
- A general understanding of the logic of 2-way ANOVAs and a good understanding of simple effects, main effects, and interactions
- A good understanding of the purpose, logic and structure of an APA-style research report
- The ability to conduct a literature search using PsycINFO
- The ability to write a well-developed, readable, persuasive APA-style report

Academic Integrity:

As in other courses at GVSU, you are expected to do your own work in PSY300 and to not plagiarize or cheat in any way. This includes 1) taking or receiving help from others during exams or quizzes; 2) attempting to pass off someone else's work as your own; 3) using ideas, sentences, or phrases from a source without proper citation; 4) copying part or all of another student's answers on assignments; 5) completing part or all of an assignment for another student; and 6) submitting part or all of an assignment that has been previously graded or is being submitted concurrently for another course without authorization from Prof. Shupe. If you are unsure if a specific action constitutes a breach of academic integrity, please discuss it with Prof. Shupe. Cheating and plagiarism are likely to result in a zero on the relevant exam, quiz or assignment, reported to the chair of the psychology department, and documented in your student record.

The Use of Electronic Devices during Class:

The use of electronic devices is not allowed during class meetings. Please place laptops in backpacks, mute the ring tone on all cell phones before coming to class, and refrain from texting or emailing during class. If you need to use an electronic device due to a documented disability, please contact Prof. Shupe to make the appropriate arrangements.

Disability Support Resources & Emergency Preparedness:

If you need academic accommodations due to a learning or physical, you will need to provide Prof. Shupe with a memo from Disability Support Resources (DSR). Contact DSR (<http://www.gvsu.edu/dsr>) at 331-2490 to document your disability, then contact Prof. Shupe to discuss your specific needs.

If there is a fire alarm during class, immediately proceed to the nearest exit. For more information about emergency evacuation procedures, please contact GVSU Campus Security and/or refer to the following website: <http://www.gvsu.edu/emergency/evacuation-6.htm>.

Course Requirements and Grade Determination

Semester grades will be based on 1) 4 examinations; 2) 4 quizzes; 3) an APA-style research proposal; and 4) 4 assignments related to the research proposal.

Exams & Quizzes

You will have four 40-point exams over material covered in the readings and in class. The format of all exams will be multiple choice and free response. Make-up exams will be allowed only in cases of documented emergencies. When at all possible, arrangements for a make-up exam should be made with Prof. Shupe before the day of the scheduled exam. You will also have five 5-point quizzes covering topics discussed in the assigned readings. The lowest of these quiz grades will be dropped. Make-up quizzes will be allowed only in cases of documented emergencies.

Research proposal

Description of requirements: Each student will be required to write an APA-style research paper proposing a randomized experiment or quasi-experiment on a psychological topic. Although you will have some leeway in your choice of topic, the study you propose must be an original experiment with at least one independent variable. Students who propose quasi-experiments must use a strong quasi-experimental design and include a discussion of the rationale for not proposing a randomized experiment, as well as a discussion of the limitations of their design. The study must be developed and based on sound theoretical and empirical rationale, using at least four peer-reviewed articles from professional journals. The proposal must be written in APA-style (6th edition) and consist of the following sections: 1) Title page, 2) Abstract, 3) Introduction, 4) Proposed Method, 5) References, and 6) Appendix (detailing the proposed analyses).

Evaluation: The research proposal will be worth a total of 40 points toward your final semester grade. Evaluation of the proposal will be based on APA format, writing quality (e.g., grammar, clarity, organization, and coherence), and appropriateness and comprehensiveness of content. Although not mandatory, it is a good idea to turn in a draft of the proposal to Prof. Shupe for feedback. Drafts should be submitted at least two full business days before you would like to have them returned. Late proposals will be accepted up to three days after the deadline. Except in the case of a documented emergency, 10% of the total possible points (i.e., 4 points) will be deducted for each day the proposal is late. Any detected plagiarism will likely result in a grade of 0.

Assignments related to the research proposal

Description of requirements: Each student will be required to complete the following four assignments related to the research project: brief proposal, introduction section, proposed method section, and abstract. Detailed instructions and rubrics for the assignments will be posted on Blackboard. Although not mandatory, it is a good idea to turn in drafts of the assignments to Prof. Shupe for feedback. If you decide to turn in a draft, please submit a hard copy at least two business days before you would like to have it returned.

Evaluation: Performance criteria for each assignment will be detailed on a rubric posted on Blackboard. These criteria will generally include writing quality, adherence to current APA style, and appropriateness and comprehensiveness of the content. The brief proposal will be worth 10 points, the introduction will be worth 15 points, the proposed method will be worth 15 points, and the abstract will be worth 5 points, for a total of 45 points. Late assignments will be accepted up to three days after the relevant deadline. Except in the case of a documented emergency, 10% of the total possible points will be deducted for each day an assignment is late. Any detected plagiarism or will likely result in a grade of 0 on the relevant assignment.

Grade Determination

As stated above, final grades will be based on four exams worth a total of 160 points; a research proposal worth 40 points; research-related assignments worth a total of 45 points; and four quizzes worth a total of 20 points. Thus, semester grades will be based on a total of 265 points; they will be determined using the rubric below.

<u>Grade</u>	<u>Percentages</u>	<u>Point range</u>
A	92.5-100%	245-265
A-	90-92%	238-244
B+	87.5-89.5%	232-237
B	82.5-87%	219-231
B-	80-82%	212-218
C+	77.5-79.5%	205-211
C	72.5-77%	192-204
C-	70-72%	185-191
D+	67.5-69.5%	179-184
D	60-67%	159-178
F	0-59.5%	0-158

Tentative Class Schedule

Date	Topics & Readings	Exams, Quizzes, & Deadlines
8/29	Introduction to research methods (Ch. 1)	
8/31	The scientific method (Ch. 2)	
9/5	No class - Labor Day break	
9/7	The scientific method (Ch. 2)	
9/12	Measurement; Reliability (Stangor, pp. 90-101)	Quiz on reliability (Stangor, pp. 90-96)
9/14	Validity (Stangor, pp. 90-101); Ethics (Passer, pp. 72; 76-89)	Quiz on ethics (Passer, pp. 72; 76-89)
9/19		EXAM 1
9/21	Randomized experiments (Ch. 6, pp. 184-201)	
9/27	Randomized experiments (Ch. 6, pp. 184-201); Repeated measures designs (Ch. 7, pp. 225-239)	
9/29	Complex designs (pp. 249-261); Quasi-experimental designs (Ch. 10)	
10/3	Quasi-experimental designs; Writing a research report: APA style writing	
10/5	Writing a research report: Introduction section	Brief proposal due
10/10		EXAM 2
10/12	Self-report measures (Ch. 5)	
10/17	Self-report measures & Survey research (Ch. 5)	Quiz on survey research (pp. 138-148)
10/19	Survey research (Ch. 5); Naturalistic observation/unobtrusive measures (Ch. 4)	

Date	Topics & Readings	Exams, Quizzes, & Deadlines
10/24	Naturalistic observation/unobtrusive measures (Ch. 4); Writing a research report: Method section	Introduction due at 5pm
10/26	No Class – mid-semester break	
10/31	Generalizing & replication (Stangor, pp. 26-272)	Quiz on generalizing & replication (Stangor, pp. 260-272)
11/2	Descriptive statistics and procedures (Ch. 11)	Quiz on descriptive stats/procedures
11/7	Descriptive statistics and procedures (Ch. 11); Writing a research report: Abstract	Method due at 5pm
11/9		EXAM 3
11/14	NHST (Ch. 12, pp. 384-390)	
11/16	NHST: criticisms & alternatives	Abstract due at 5pm
11/21	<i>t</i> -tests (Ch. 12, pp. 390-396); 1-way ANOVAs (Ch. 12, pp. 396-411)	
11/23	No Class – Thanksgiving Break	
11/28	1-way ANOVAs (Ch. 12, pp. 396-411)	
11/30	In-class writing & consultation	
12/5	2-way ANOVAs (Ch. 12, pp. 411-417)	Research proposal due at 5pm
12/7	Review for Exam 4	
Finals Week	Section 03 – W, 12/13, 8-9:50am Section 01 – W, 12/13, 12-1:50pm	EXAM 4

Note: Deadline to drop the course and receive a “W” grade is October 27