

Psyc 330 Research Methods in the Behavioral Sciences

University of Scranton

Syllabus

Spring 2018

3 cr, Sect 1

CRN 30883

Tu, Th 8:30-9:45 AM

AMH 204

Instructor: Dr. Tom Hogan, Professor of Psychology

Office: AMH 223, Tel: 570-941-4268,

e-mail: Thomas.Hogan@Scranton.edu

Office hours: M & W 10-11 Tu 1:15-2:15

Other times by arrangement

Teaching Assistants: Angela McGovern and Syed "Yusuf" Qadri

REQUIRED MATERIALS:

Cozby, P. C., & Bates, S. C. (2015). *Methods in behavioral research*. (12th ed.). New York: McGraw Hill Education.

EVALUATION PROCEDURES AND ASSIGNMENTS:

We have 11 quizzes, each consisting of 12 multiple-choice items based on the topic just completed, with emphasis on material covered in class. The attached schedule gives the dates for the quizzes. Make-up quizzes will be given only in documented emergency cases; the nature of the make-up quiz is at the discretion of the instructor. You may drop one quiz; this includes quizzes missed due to absence. An optional final, cumulative exam consisting of both multiple-choice and essay questions will be given on the day designated for the final exam; score on the final exam may be used to improve the overall grade, with a weight of two quizzes and used only if it improves the overall quiz average.

There are 11 brief assignments due according to the attached schedule. These assignments will reinforce material covered in class. See the separate handout for description of these assignments. Graded 1-10. "On time" submission means at beginning of class when it is due. No e-mail submissions. Penalty for late submission of papers: 10% reduction in grade for each day late, except for documented emergencies with explicit approval for late submission. Copying an assignment from another student is considered academic dishonesty for both parties.

Grading will be determined as follows:

Sum of Quizzes (10 of 11) = 75% (adjusted for final if appropriate)

Assignments (11) = 25%

Grades are posted on D2L within a reasonable time after they are presented in class.

For conversion of percents to letter grades, see Grading Standards on D2L.

REFERENCES FOR UNIVERSITY POLICIES

Academic Honesty Go here:

<http://www.scranton.edu/academics/wml/acad-integ/index.shtml>

A student found cheating or engaging in another form of academic dishonesty will receive an F for the assignment; and the Dean's office will be notified.

Students with Disabilities Go here: <http://www.scranton.edu/disabilities>

Writing Center Services Go here: <http://www.scranton.edu/academics/ctle/writing/index.shtml>

Sexual Harassment and Sexual Misconduct Policy Go here: www.scranton.edu/diversity. Reporting options and resources are available at www.scranton.edu/CARE.

Other University Policies Go here:

<http://www.scranton.edu/studentlife/studentaffairs/student-conduct/university-policies.shtml>

and here: http://www.scranton.edu/academics/provost/academic_policies.shtml

REVISIONS AND ANNOUNCEMENTS:

The syllabus is subject to revision. Any revisions will be announced in class.

Class Attendance, Procedures, and Suggestions for Success

1. Class attendance is expected and is normally essential for learning the material.
 2. You are responsible for knowing all announcements made in class, including those related to any changes in the attached schedule or course procedures.
 3. Classes will begin and end promptly. Suitable attire and civil behavior are expected in class. Turn off cell phones and other electronic communications devices. No flash photography in class.
 4. Leave electronic gizmos and computers in room off, except when in use for a class project. Leave your well phone out of sight.
 5. Please use the rest room before coming to class. It's disruptive to all when people leave in the middle of class.
 6. No eating in class (except for birthday cakes and smarties). Beverages are OK.
 7. Research Methods is not a statistics course but it assumes you have had a statistics course (and that you remember basic concepts and procedures from that course). Statistical concepts and methods are woven into the text and lecture throughout Research Methods. If you need to refresh your knowledge of statistical concepts and procedures, do so immediately, using your statistics textbook and Appendix C in our textbook.
 8. Concepts in Research Methods are generally not difficult but there are a lot of them to cover and important distinctions among them. Of course, there are also a few conceptually difficult topics. One of the keys to learning the material is immersion. That takes time on your part.
 9. Quizzes will cover material in the chapters plus material covered in class.
 10. See the separate page on assignments.
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Student Learning Outcomes

According to the catalog, Psych. 330 is "A survey of scientific method and research design in the behavioral sciences. Topics include single subject, survey, correlational and experimental research. Lecture and lab involve computerized data analysis. Lab also includes supervised research and scientific writing. The laboratory is writing intensive." Following is a more detailed list of the principal learning objectives for the course.

(NB: This section of the course does not have a lab component.)

1. Describe elements of scientific method and contrast that method with other ways of knowing.
2. Describe ethical principles applicable to the research enterprise, including federal and University regulations governing use of human and animal subjects.
3. Become familiar with journals in the field of psychology and behavioral sciences, with special emphasis on their structure, treatment of methods, and methods for accessing, including the most recently available electronic sources.
4. For each of the following research methods, recognize
 - (a) major characteristics and appropriate applicability,
 - (b) standard terminology employed with, and
 - (c) strengths and weaknesses of the methods:
 - observation, including use of content analysis
 - surveys, including sampling methods
 - correlational methods, including simple linear regression, factor analysis, multiple correlation
 - experimental methods, including: one-way randomized, repeated measures, and two-way (with interaction) randomized designs
 - quasi-experimental designs and program evaluation
 - small N, behavior analysis, and single-subject case studies

(See handout on "Summary of Methods" for a convenient overview of this objective.)

5. Demonstrate understanding of meta-analysis and its use in evidence-based websites.

Satisfactory completion of quizzes and written assignments, as well as a self-reported assessment, serve as documentation of student learning.

RM Spring '18 Schedule

[1-2-2018]

Date Sp18	Day	Ch	Q	Topic	Assignment (due next class)
30Jan	Tu	1		Syllabus, Intro, Sci Meth	1. 3 topics, 3 journals
1Feb	Th	2		Sci. structure, articles, citations	2. 3 articles, outline structure, cite
6	Tu	3	1, 2	Ethics	
8	Th	3		Ethics	3. Complete CITI certification
13	Tu	4,5	3	Issues, Concepts	
15	Th	4,5		Issues, Concepts	
20	Tu	4,5		Issues, Concepts	4. 2 articles and op def
22	Th	13	4,5	Inference Issues	
27	Tu	13		Inference Issues	
1Mar	Th	6	13	Observational methods	
6	Tu	6		“, incl content analysis	5. Do observation study
8	Th	7	6	Survey methods	6. Design survey form
13	Tu			Spring Break	
15	Th			Spring Break	
20	Tu	8,9	7	Experimental Method	
22	Th	8,9		“	7. Design simple experiment
27	Tu	10	8,9	Factorial design	
29	Th			Holy Thursday/Easter break	
3Apr	Tu	10		Factorial design	8. Design factorial study
5	Th	11	10	Quasi-experiments, small N	
10	Tu	11		Program Evaluation	
12	Th	12	11	Correlation methods	
17	Tu	12		“	9. Design correlation study
19	Th	12		Multivariate methods	
24	Tu			“	
26	Th	14	12	Meta-analysis, EBPs	
1May	Tu			Data Analysis - 1	10. Data analysis project
3	Th			Data Analysis - 2	11. Article critique
8	Tu	Ap A		Reporting	
10	Th		14,Data,Rep	Wrap up/evaluation	
14	Tu			Finals Start	

RM Assignments Spring '18

Each assignment should be one page, typed unless otherwise noted in class instructions.

Put your R number (not name), date, and the assignment number in the upper right hand corner of the paper as above.

1. List 3 research topics in behavioral science of interest to you. (You'll use these for later assignments, so devote a little thought to your interests.) Give a one or two sentence description of each topic.

And, list 3 journals in behavioral science of interest to you. Journals – not articles within journals. See “PsycArticles” handout. You'll use these for the next two assignments, so choose carefully.

2. Get 3 journal articles (empirical studies). Review them and:
(a) outline their structure; (b) cite them in proper APA format.

3. Complete the CITI certification. Go to: <https://www.citiprogram.org/> and follow the steps. Use Group 1: Social and Behavioral Science. Submit evidence of completion.

4. For each of 2 articles (a) identify operational definitions of the variables and (b) give a brief summary of the adequacy of description of the participants.

5. Complete a simple observation study according to directions given in class. Write up results.

6. For a topic of interest to you, design the form that will be used in a survey.

7. Design a correlational study. Clearly identify what variables you are correlating, their operational definitions, and how you will analyze the data. See separate handout.

8. Design a “true experiment” for one of your research topics. (a) Include your hypothesis and (b) briefly describe how you will analyze the data. (c) Clearly identify the independent and dependent variables.

9. Design a factorial study. Include the elements listed above for assignment 8.

10. For a given set of raw data, prepare it in data files as directed.

11. Pick an article, based on an empirical study, from one of your journals. Critique the “Method” section, with details as given in class.

Additional detail on each assignment will be given in class.