Scientific Inquiry Psychology 250

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> Mon, Wed, Fri 1:00 - 1:50 NSC 201

Scientific Inquiry Psychology 250

Course syllabus through UBLearns or at: http://www.acsu.buffalo.edu/~jsawusch/PSY250/250f14.html

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Course Topic

This class covers the basic scientific methods used in the study of behavior. Topics include basic issues in experimental design, survey research including the design of questionaires, observational research, interpretation and presentation of data, some basic statistics, the ethical treatment of subjects, ethics in scientific research, and how to use the scientific literature.

Course Text

The text is Cozby & Bates, Methods in Behavioral Research (11th edition).

Students with Disabilities

If you have a disability which makes it difficult for you to carry out the course work as outlined and/or requires accommodations such as recruiting note takers, readers, or extended time on exams, please contact the Office of Accessibility Resources, 25 Capen Hall, phone 645-2680. Also contact the instructor as soon as possible.

Exams

There will be four examinations and the course grade will be based on the highest three scores. Each of the first three examinations is designed to cover the preceding third of the course. Note that the material is cumulative so that when material from an earlier part of the course is necessary it is covered a second time, and may be retested in a later part of the course. The final (given during exam week) is cumulative. The examinations are fouralternative, multiple choice.

Make up exams are only given for legitimate reasons per University policy.

Extra Credit

There will be four extra credit exercises. They will be posted on UBLearns and are due on the date indicated in the exercise (see syllabus for approximate dates). These exercises are to be submitted via UBLearns. Each is scored on a three point scale (0 to 2). The extra credit total counts for a maximum of 0.5 z-units to your final average (or 8% if a flat scale is used, see below). This is approximately two-thirds of a letter grade.

Extra Credit - 2

The extra credit assignments are like "short essay" questions. Each poses a problem or example study and asks specific questions. Your answer will be limited to the equivalent of two pages, double spaced and should be written in English prose (as opposed to an outline or other format) unless the assignment information explicitly says otherwise. All questions can be answered in one page.

The extra credit questions are designed to give students additional work on key topics.

Grading

The score on each exam will be normalized (a zscore) and the arithmetic mean of the normalized scores will be used to determine the final grade based on a normal curve. Plus and minus grades will be given for scores in the upper and lower thirds of each grade range.

There are four exams and the final grade is based on the three highest scores. The lowest exam score is dropped.

Grading - 2

The exams and the extra credit assignments are available to students once they have been graded. Students may pick them up from the instructor or TA during their office hours or by appointment.

The availability of an exam or assignment will be announced in class. Generally, it will be 3 or 4 days after the exam date or assignment due date.

The scores on exams and assignments will be posted on UBLearns.

Grade Scale

The final curve from a previous section of this course is shown below. The z-score ranges for this semester will be approximately the same.

Grade	z-score range	Percent of Class
А	1.15 & up	15
В	0.49 to 1.14	25
С	-0.40 to 0.48	36
D	-0.90 to -0.41	14
F	-0.91 & below	10

Grading Scale - Part 2

If the final grade for any student would be higher using a fixed scale of 89% to 100% - A; 77% to 88% - B; 65% to 76% - C; 55% to 64% - D and below 55% - F, then this scale will be used. Plus and minus grades are given for averages in the upper and lower thirds (respectively) of each grade range.

Lecture Notes - 1

Lecture notes will be posted on the web. They will be organized by topic and accessible thru the on-line syllabus.

http://www.acsu.buffalo.edu/~jsawusch/PSY250/250f14.html

The notes are accessed via a clickable link from the topic in the Tentative Course Outline section of the syllabus. Each topic is a pdf file.

The syllabus can be accessed directly or through UBLearns.

Lecture Notes - 2

Lecture notes will include sample exam questions and problems that are designed to assist you in learning and applying the course material. Answers to the sample questions and problems will be posted at the end of the subsequent lecture topic notes.

If you have trouble with the sample questions or problems with the course, discuss them with the instructor or the TA.

Why Study the Scientific Method?

In order to understand scientific results, you need to know the basics of the methods. This helps you to know the limitations of this method of understanding the world. In the case of Psychology, where the "object" of study is human and animal behavior, this method is essential for moving the study of behavior beyond conjecture, opinion, and folk lore.

Why - Part 2

More generally, the scientific method is an approach to solving problems and organizing information (knowledge). Understanding the method and using it allows you to be an informed citizen and consumer. This method can be used to evaluate claims made by advertisers, politicians, and others about products, social and educational programs, opinions, etc.

Put another way, the purpose of this class is to cover a basic approach to critical thinking and how it is applied to understanding behavior.