## Psychology 3120

## Understanding Psychological Research = Spring 2012

Instructor:

Dr. Stephen Christman

**Meeting Times:** 

Monday, Wednesday 11:00 am - 12:15 pm; UH 4410

Office:

UH5018C (phone: 530-4684)

Office Hours:

Tuesday 11:00-3:00 (& by appt.)

Textbooks:

1. Conducting Research in Psychology: Measuring the Weight of Smoke, 3<sup>rd</sup> Ed.,

by B.W. Pelham & H. Blanton, 2007, Wadsworth. [CRIP]

2. Statistics Without Tears: A Primer for Non-mathematicians, by D. Rowntree,

2004, Pearson. [SWT]

<u>Dates</u> : Jan 9 Jan 11	Lecture Topics and Assigned Readings: Introduction to course The Scientific Method (CRIP: Ch. 1)
Jan 16 Jan 18	NO CLASS (MLK Day) Scientific Discovery (CRIP: Ch. 2)
Jan 23 Jan 25	Validity and reliability (CRIP: Ch. 3) NO CLASS
Jan 30 Feb 1	Threats to validity (CRIP: Ch. 5) Psychological measurement (CRIP: Ch. 4)
Feb 6 Feb 8	Non-experimental research designs (CRIP: Ch. 6) Quasi-experimental & experimental research designs (CRIP: Chs. 7 & 8)
Feb 13 Feb 15	Choosing the right research design (CRIP: Ch. 9) <b>EXAM I</b>
Feb 20 Feb 22	An overview of statistics (SWT: Chs. 1 & 2) Measures of central tendency & variability (SWT: Ch. 3)
Feb 27 Feb 29	Frequency distributions: The normal distribution (SWT: Ch. 4) From sample to population (SWT: Ch. 5)
Mar 5 Mar 8	NO CLASS (Spring break) NO CLASS (Spring break)
Mar 12 Mar 14	Inferential statistics (SWT: Ch. 6 & 7) Correlation, causality, and effect size (SWT: Ch. 8; CRIP: Ch. 10)
Mar 19 Mar 21	Nonlinear variability and Chaos Theory <b>EXAM II</b>
Mar 26 Mar 28	NO CLASS Scientific writing (CRIP: Ch. 11)
Apr 2 Apr 4	Methodology at work (CRIP: Ch. 12) NO CLASS
Apr 9 Apr 11	Biases and artifacts in psychological research The Ethics of Doing Research

Apr 16 Graphs

Apr 18 ESP Experiment

Apr 23 ESP Expt: Discussion of results

Apr 25 Review for Exam

Friday, May 4, 10:15 – 12:15 pm EXAM III

## **Course Requirements:**

Attendance is not required, but is *highly* recommended, especially for the final six weeks of the course (March 19 – April 25), since the questions on Exam III will be based in part on lecture-only material. Also, attendance on April 18 and 23 is required, as we will be conducting an in-class experiment.

Grading:

Exam I 25%
Exam II 25%
Exam III 25%
Experimental proposal paper 15%

Participation in ESP Experiment

Data Collection/Discussion 10%

(there will also be an opportunity to earn extra credit worth up to 5% of your final grade on Exam III).

## **COURSE INFORMATION**

Format: The basic format for the course will consist of lectures. However, in-class questions are not only permitted, they are encouraged.

Attendance: Attendance is not mandatory. The instructor's view is that this is no longer high school, and it is now up to college students to manage their time responsibly and effectively. However, regular attendance is HIGHLY recommended. Our textbook covers a very large amount of material, only some of which will end up being covered on the exams. The content of lectures will provide students a strong guideline for distinguishing between the critical material covered in lecture that will constitute the bulk of exam questions and other, secondary material that will not be covered in lecture and will constitute a small percentage of exam questions. Also, the instructor does not simply "lecture out of the book". By attending lectures regularly, students will be able to learn about the material both from the way the book presents it and from the alternate way in which the instructor presents it.

**Grading**: Exams are graded on the basis of a modified curve that will be explained in class. Each of the three exams will be worth one third of the final grade. Exams will consist of (mostly) multiple-choice questions, along with one or two short answer questions. The final exam will *not* be cumulative, and will feature an extra-credit essay question.

**Make-up policy**: In general, make-up exams are NOT allowed. If you have a valid medical or personal excuse AND you inform the instructor of your absence BEFORE the exam, then arrangements for a special *essay* make-up exam can be made.

Academic integrity: During examinations, you must do your own work. Talking or discussion is not permitted during the examinations, nor may you compare papers, copy from others, or collaborate in any way. Any collaborative behavior during the examinations will result in failure of the exam, and may lead to failure of the course and University disciplinary action.

Accommodations for students with disabilities: In compliance with the University of Toledo policy and equal access laws, I am available to discuss appropriate academic accommodations that may be required for student with disabilities. Requests for academic accommodations are to be made during the first two weeks of the semester, except for unusual circumstances, so arrangements can be made. Students are encouraged to register with the Office of Accessibility to verify their eligibility for appropriate accommodations.