PSYC 250 03 11:30 – 12:20 MWF Bailey 104

**INTRODUCTION TO BEHAVIORAL STATISTICS**

**SPRING, 2016**

 **SYLLABUS**

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**My Office Hours**

**1:00 - 2:30 Mondays and Wednesdays**

Please feel free to stop by **with or without** an appointment between 1:00 and 2:30 Mondays and Wednesdays. I can also see you many other times, simply ask for an appointment.

**Text**

Gravetter, F. J., & Wallnau, L. B. (2012). *Statistics for the behavioral sciences*

 (9th ed.). Belmont, CA: Wadsworth. (required)

**Course Content**

The Department offers a three course sequence in statistics and research methods. PSYC 250 covers introductory statistics. We will study: The measurement of behavior; frequency distributions; graphing; central tendency; variability; binomial and normal distributions; standard scores; hypothesis testing; one-sample t tests; two-sample t tests; correlation; regression; introductory nonparametric tests; one-way analysis of variance; the logic of two-way analysis of variance and interactions. By the end of the course, my goal is that you will demonstrate an understanding of basic principles of statistics including computation, application, and interpretation.

**Prerequisites**: PSYC 100 AND 3 years of high school mathematics or MATH 110

**TENTATIVE Course Outline**

Topic You Study Chapter

about the course ---

introduction to stats 1

frequency distributions 2

graphing 2

central tendency 3

variability 4

**EXAMINATION #1** about Monday, 15 February

z-scores 5

probability 6

sampling distributions 7

hypothesis testing, effect size, power 8

**EXAMINATION #2** about Friday, 11 March

single sample t, effect size, assumptions, use 9

independent t, effect size, assumptions, use 10

related t, effect size, assumptions, use 11

**EXAMINATION #3** about Monday, 4 April

one-way ANOVA, effect size, post-hoc, use 12

two-way ANOVA, logic, interactions, use 14

correlation 15

regression 16

chi-square 17

nonparametric

**EXAMINATION #4** 12:00 Noon, Tuesday, 10 May, Bailey 104

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**Lectures, Examinations, and So Forth**

Most of you are encountering the material in PSYC 250 for the first time, and I understand the material can be difficult. So, I typically use class time to discuss the important concepts you need to know. Obviously, with the limited time we have together in class, we cannot discuss every issue in each chapter in your textbook. Although I hope that the lectures/discussions will prepare you for the exams, please remember that we cannot cover all the material you need to know. You are responsible for the material in your textbook and in class.

One thing you can do to help yourself is to study the chapters thoroughly, using the incredibly helpful devices G & W have provided: Margin comments, definitions, examples, learning checks, in the literature sections, boxes, summaries, key terms, focuses on problem solving, and demonstrations. Especially, **do all of the problems at the end of each chapter to help you learn, practice, and check your understanding**. Try to think about the computations and concepts as you do the problems rather than just working for an answer. Practice truly helps.

The examinations will be a combination of objective questions (mostly multiple-choice) and computation. Many questions will concern terms and their definition/use, basic principles underlying the material, issues that summarize across concepts, computation, interpretation, and use/application of the statistic.

If you fail two or more examinations, you fail the course. No exceptions will be made.

Make-up examinations are not given unless you have a family emergency or serious health problem, or you participate in a College-sponsored activity that requires you to be away from campus. Unexcused absence from an exam results in zero for that exam and may result in failure of the course.

Helpful hint: Get 1-2 study buddies in your class. Work on problems and understanding the material together.

**Grading**

There will be four exams worth 120 points each for a total of 480 points for the semester.

 Points and grades Points and grades

 for each exam for the semester

 111-120 A 444-480 A

 108-110 A- 432-443 A-

 104-107 B+ 416-431 B+

 99-103 B 396-415 B

 96- 98 B- 384-395 B-

 92- 95 C+ 368-383 C+

 87- 91 C 348-367 C

 84- 86 C- 336-347 C-

 72- 83 D 288-335 D

 Below 72 E Below 288 E

Under no circumstances will extra work be accepted in lieu of adequate performance on required work.

If you need help with any aspect of the course anytime during the semester, please see me. I will gladly help you however I can.

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