Note:
Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should not be used to purchase course materials.

LIBERTY UNIVERSITY Online

COURSE SYLLABUS

PSYC 355
STATISTICS IN PSYCHOLOGY

COURSE DESCRIPTION

Introduction to statistical methodology in the social sciences, particularly as related to psychological measurement and development of scientific research studies involving quantitative investigation.

RATIONALE

The purpose of this course is to acquaint the undergraduate psychology major with basic descriptive and inferential statistical analysis. The course will draw heavily upon decision-making regarding the selection of appropriate analytic techniques and interpretation of statistical results. Because today's work environment demands computer literacy, this course requires familiarization with computerized data analysis and file transfer.

I. PREREQUISITES

PSYC 255 and Math 201

II. REQUIRED RESOURCE PURCHASES

Click the following link to view the required resources for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING

A. Computer with Internet access (broadband recommended)

B. Statistical calculator: Inexpensive Texas Instruments or Casio brands recommended. The $\sum x$, $\sum x^2$, and $\sum +$ or *M*+ keys will save considerable time in performing the required calculations. (TI 30Xa is recommended model and is available at WalMart for under $15.00). If a calculator from a recent Math 201 course has already been purchased, that will be fine; however, students need to make sure they know how to use it to produce these same functions.

C. Microsoft Word
(Microsoft Office is available at a special discount to LU students.)

D. DVD player and viewer

IV. MEASURABLE LEARNING OUTCOMES

Upon successful completion of this course, the student will be able to:

A. Evaluate qualitative as well as quantitative methods leading to a disciplined curiosity about human behavior and experience (PDLO 2). Assessment methods: Scores on homework & exams assessing students' ability to select, calculate and interpret basic statistical tests used in psychology.

B. Evaluate the language of the discipline found in textbooks and scientific journal articles, and present written arguments in the terminology of the discipline using elements of style and the presentation of scientific information described in the most recent Publication Manual of the American Psychological Association (PDLO 4). Assessment methods: Scores on homework and exams assessing student's ability to document the results of statistical analyses in APA format.

C. Demonstrate the skills of gathering information from a library including computerized information sources, bibliographic systems, computerized literacy skills in word processing a APA format, conducting internet/electronic searches, and utilization of various statistical packages, as well as other sources from which one can present a persuasive argument (PDLO 5). Assessment methods: Scores on homework and exams assess students' ability to use SPSS to analyze statistical data using a variety of statistical tests.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. DVD lectures and Worktext content. Supplement with textbook content. **Note**: The student is responsible for material covered in the worktext and DVDs, and not responsible for everything in the textbook.

B. Discussion Board participation

Relevant posts to the student's Team DB are required for each Unit (more often is better for comprehension). Practice problems are posted within the Team DB link in Blackboard. The student is required to post relevant questions about specific problems or respond to an item posted with questions and/or corrections. Other course related questions are also welcomed. While the practice problems are NOT part of a graded assignment, the student's participation in the Team DB is expected and is worth 150 points of the student's final grade. DB points for each unit will be posted on Monday following the deadline for exam over that unit.

C. Homework Assignments

Students will be required to integrate material covered in the DVDs and worktext, and utilize a calculator and SPSS to analyze problems. To receive full credit for problems, all work must be shown. Students must not share homework information in any form. Unit homework assignments must be submitted through Blackboard **before** taking an exam (see Course Chart for specific deadlines for each exam). A final grade for the course will not be posted without the submission of all homework assignments. NOTE**:** Most of the assignments are to be completed in SPSS.

D. Exams (4)

Students will complete four open-book, multiple-choice exams throughout the duration of this course. Each exam is cumulative and must be completed in 90 minutes. (There is a one point deduction for each minute over the allotted time limit.) It is suggested that you make a 3x5 card with basic formulas from Unit 1 for quick reference during the exam, but you must know the material prior to attempting the exam in order to have adequate time to finish.

E. Course Chart

Refer to the Course Chart for specific due dates. In general, for each Unit of content, there will be readings, practice problems, a graded homework assignment, practice quiz and an exam. The homework must be submitted by Saturday no later than 11:59 p.m. (ET), and exams must be completed by Sunday no later than 11:59 p.m. (ET) for the respective units. For example, the work in Unit 1 is allocated two weeks; homework is due by the second Saturday night, and the exam for that unit is due before midnight the second Sunday night of the sub-term. **Work not completed by these dates will be recorded as a zero.**

VI. COURSE GRADING AND POLICIES

A. Points

Homework Assignments			250
Team DB participation			150
Exam 1	Unit 1		150
Exam 2	Unit 2		150
Exam 3	Unit 3		150
Exam 4	Unit 4		150
		Total	**1000**

B. Scale

A = 900–1000 B = 800–899 C = 700-799 D = 600-699 F = 0–599

C. Disability Assistance

Students with a documented disability may contact LU Online's Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. It is the students' responsibility to notify the professor of requested accommodations *prior to* the exams.

LIBERTY UNIVERSITY Online

COURSE CHART

PSYC 355

Textbooks: Thorne, B. M., & Geisen, J. M., *Statistics for the Behavioral Sciences* (2003).
Anderson, N., *Worktext for Statistics for Psychology Majors with SPSS 12.0* (2003).

WEEK/ MODULE	UNIT	READING & STUDY	LEARNING ACTIVITIES	POINTS
1	**1**	Anderson, Worktext 1.1–1.2 DVD Lessons 1 & 2 Thorne, Chs. 1–5 (skim 3 & 4)	Course Requirements Checklist Class Introductions SPSS Graphing Tutorial Part 1 Ch. 2 Practice Problems Team DB posts	0 0 0 0 **
2		DVD Lessons 2 & 3 First part of DVD Lesson 4 Thorne, Chs. 6–8	Chs. 6 & 8 Practice Problems Team DB posts Unit 1 Homework Unit 1 Practice Exam Exam 1	0 ** * 0 150
3	**2**	Anderson, Worktext 2.1–2.3 DVD Lessons 4–9 Thorne, Chs. 9–10	SPSS Graphing Tutorial for Unit 2 Chs. 9 & 10 Practice Problems Team DB posts	0 0 **
4		DVD Lessons 10-12 Thorne, Ch. 11	Ch. 11 Practice Problems Team DB posts	0 **
5		DVD Lessons 10–12 Thorne, Chs. 11–12	Ch. 12 Practice Problems Team DB posts Unit 2 Homework Unit 2 Practice Exam Exam 2	0 ** * 0 150
6	**3**	Anderson, Worktext 3.1 DVD Lesson 13 Thorne, Ch. 14	SPSS Graphing Tutorial for Unit 3 Ch. 14 Practice Problems Team DB posts	0 0 **
7		DVD Lessons 14–15 Thorne, Ch. 15	Ch. 15 Practice Problems Team DB posts Unit 3 Homework Unit 3 Practice Exam Exam 3	0 ** * 0 150
8	**4**	Anderson, Worktext 4.1 DVD Lessons 16–18 Thorne, Ch. 13	SPSS Graphing Tutorial for Unit 4 Ch. 13 Practice Problems Team DB posts Unit 4 Homework Unit 4 Practice Exam Exam 4	 ** * 0 150
			TOTAL	**1000**

*Average of homework scores = 250 points of final grade **Participation in DB in each Unit = 150 points of final grade

NOTE: Each course week begins on Monday morning at 12:00 a.m. (ET) and ends on Sunday night at 11:59 p.m. (ET). The final week ends at 11:59 p.m. (ET) on Friday.