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.
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
This course is a more advanced level of statistics including SPSS and will be useful for the student interested in advancing to graduate-level training in psychology. Ultimately, the course will be required as part of a clinical track for psychology.

I. PREREQUISITES
For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II. REQUIRED RESOURCE PURCHASES
Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING
A. Computer with basic audio/video output equipment
B. Internet access (broadband recommended)
C. Microsoft Word
   (Microsoft Office is available at a special discount to Liberty University students.)

IV. MEASURABLE LEARNING OUTCOMES
Upon successful completion of this course, the student will be able to:
A. Develop a further understanding of probability and statistics and their basic concepts and practical applications.
B. Visually display data using graphing procedures.
C. Differentiate between statistical tests in order to perform single-sample, dependent, and independent-means t-tests.
D. Conduct one- and two-way analyses of variance.
E. Calculate a correlation coefficient and equation of a regression line.
F. Conduct chi-square tests of goodness of fit and independence.
G. Perform nonparametric analyses including Mann Whitney U and Spearman correlations.
H. Communicate findings in current APA format.
I. Approach the reporting of statistical findings from a Christian perspective.
J. Differentiate between statistical tests in order to choose the appropriate tests and answer specific research questions.

V. COURSE REQUIREMENTS AND ASSIGNMENTS
A. Textbook readings and lecture presentations
B. Course Requirements Checklist
   After reading the Syllabus and Student Expectations, the student will complete the related checklist found in Module/Week 1.
C. Discussion Board Forums (2)
   The student will create a thread in response to the provided prompt based on the Lab assignment for each forum. Each thread must be at least 350 words and demonstrate course-related knowledge. In addition to the thread, the student will reply to at least 2 other classmates’ threads. Each reply must be at least 150 words. Assertions must be supported by citations as needed.
D. SPSS Homework (8)
   The student will complete 8 SPSS homework exercises. These homework exercises rely on the module/week’s reading from the Green & Salkind textbook.
E. Lab Project (To be completed in multiple phases)
   The student will administer a survey to a minimum of 12 people and will use the resulting data to complete a lab assignment throughout the course. The lab includes data collection via a survey, choosing the correct type of data analysis using SPSS, and reporting and interpreting results in a results section to be written in current APA format. Instructions from the Institutional Review Board regarding how to administer this survey must be followed.
F. SPSS Cumulative Assignment
   The student will complete a cumulative assessment that covers material learned during the course. There will be 1 problem for each of the statistical tests covered, and the student will complete the analyses in SPSS.
G. Exams (4)
   The student will complete 4 exams. Each exam will be open-book/open-notes, covering 2 modules/weeks of material. Each exam will have a time limit of 1 hour and 30 minutes and will contain 40 multiple-choice questions.

VI. COURSE GRADING AND POLICIES
A. Points

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Required Checklist</td>
<td>10</td>
</tr>
<tr>
<td>Discussion Board Forums</td>
<td></td>
</tr>
<tr>
<td>Lab Project Phase 1</td>
<td>40</td>
</tr>
<tr>
<td>Lab Project Phase 5</td>
<td>40</td>
</tr>
<tr>
<td>SPSS Homework (8 at 40 pts ea)</td>
<td>320</td>
</tr>
<tr>
<td>Lab Project</td>
<td></td>
</tr>
<tr>
<td>Phase 2</td>
<td>40</td>
</tr>
<tr>
<td>Phase 3</td>
<td>40</td>
</tr>
<tr>
<td>Phase 4</td>
<td>40</td>
</tr>
<tr>
<td>SPSS Cumulative Assessment</td>
<td>80</td>
</tr>
<tr>
<td>Exam 1 (Modules 1–2)</td>
<td>100</td>
</tr>
<tr>
<td>Exam 2 (Modules 3–4)</td>
<td>100</td>
</tr>
<tr>
<td>Exam 3 (Modules 5–6)</td>
<td>100</td>
</tr>
<tr>
<td>Exam 4 (Modules 7–8)</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1010</strong></td>
</tr>
</tbody>
</table>

B. Scale

- A = 900–1010
- B = 800–899
- C = 700–799
- D = 600–699
- F = 0–599

C. Late Assignment Policy

If the student is unable to complete an assignment on time, then he or she must contact the instructor immediately by email.

Assignments that are submitted after the due date without prior approval from the instructor will receive the following deductions:

1. Late assignments submitted within one week of the due date will receive a 10% deduction.
2. Assignments submitted more than one week late will receive a 20% deduction.
3. Assignments submitted two weeks late or after the final date of the class will not be accepted.
4. Late Discussion Board threads or replies will not be accepted.

Special circumstances (e.g. death in the family, personal health issues) will be reviewed by the instructor on a case-by-case basis.

D. Disability Assistance

Students with a documented disability may contact Liberty University Online’s Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.
### COURSE SCHEDULE

**PSYC 355**


<table>
<thead>
<tr>
<th>MODULE/WEEK</th>
<th>READING &amp; STUDY</th>
<th>ASSIGNMENTS</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| 1           | Green & Salkind: lessons 22–23  
Nolan & Heinzen: ch. 9  
6 presentations | Course Requirements Checklist  
Class Introductions  
SPSS Homework 1 | 10  
0  
40 |
| 2           | Green & Salkind: lesson 24  
Nolan & Heinzen: ch. 10  
2 presentations | SPSS Homework 2  
Exam 1 | 40  
100 |
| 3           | Green & Salkind: lesson 25  
Nolan & Heinzen: ch. 11  
2 presentations  
1 document | DB Forum 1  
SPSS Homework 3 | 40  
40 |
| 4           | Green & Salkind: lesson 26: (All except the section entitled “Conducting Follow-up Analyses to a Significant Interaction”)  
Nolan & Heinzen: ch. 12  
2 presentations | SPSS Homework 4  
Lab Project Phase 2  
Exam 2 | 40  
40  
100 |
| 5           | Green & Salkind: lesson 31  
Nolan & Heinzen: ch. 13  
2 presentations | SPSS Homework 5  
SPSS Cumulative Assessment | 40  
80 |
| 6           | Green & Salkind: lesson 33  
Nolan & Heinzen: ch. 14  
2 presentations | SPSS Homework 6  
Lab Project Phase 3  
Exam 3 | 40  
40  
100 |
| 7           | Green & Salkind: lessons 40–41  
Nolan & Heinzen: ch. 15 (Through and including “Chi Square Test of Independence”)  
3 presentations | SPSS Homework 7  
Lab Project Phase 4 | 40  
40 |
| 8           | Green & Salkind: lesson 42  
Nolan & Heinzen: ch. 15 (Remaining sections)  
3 presentations | DB Forum 2  
SPSS Homework 8  
Exam 4 | 40  
40  
100 |
| **TOTAL**   |                 |             | **1010** |

DB = Discussion Board

**NOTE:** Each course week (except Module/Week 1) begins on Tuesday morning at 12:00 a.m. (ET) and ends on Monday night at 11:59 p.m. (ET). The final week ends at 11:59 p.m. (ET) on Friday.