

## **PSY522 Statistical Procedures II**

**(3 credit hours)**  
**Course Syllabus**

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### **Course Description**

This course explores and applies practical statistical methods to the relevant work of psychologists as well as social service and mental health professionals, managers, and executives. We will focus on statistical methods to prepare you to be intelligent consumers of reported research, to apply appropriate statistical analysis to various types of research designs, to report agency performance results, and to identify and use various statistical data sources in print and electronic form.

### **Course Learning Outcomes**

By the end of this course, you will be able to:

1. Perform statistical tests to test research hypotheses.
2. Discern the appropriate statistical test to use to analyze data and situations.
3. Conduct computerized statistical analyses using Microsoft Excel and SPSS

### **Required Textbook(s) and Resources**

Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.)

IBM SPSS Software. (latest version) Grad Pack Standard.

Be sure to also review the weekly **Explore** sections for additional library or web resources. For access to databases, research help, and writing tips, visit the [Tiffin University Library](#).

### **Time Commitment**

Effective time management is possibly the single most critical element to your academic success. To do well in this class you should plan your time wisely. With our accelerated, seven-week term, you should reserve roughly **twenty (20) hours per week** to complete readings and assignments. To help plan your time and keep on track toward successful course completion, note the distinctive rhythm of assignment due dates:

1. All times assume Eastern Time (GMT-4).

2. Weeks begin at 12:00 a.m. ET on Monday and end at 11:55 p.m. ET on Sunday.
3. Unless otherwise noted, initial forum discussion posts are due by **11:55 p.m. ET** on **Wednesdays** and response posts are due by **11:55 p.m. ET** on **Saturdays**.
4. Major assignments and reflections are due by **11:55 p.m. ET** on **Sundays**.

## Learning Activities

In this course, you will reflect on your work by sharing your understanding of the topics presented and your thoughts or concerns in a forum post. Your weekly assignments will consist of practice analyses in the textbook and the application of similar scenarios using different datasets. The course will commence with a final exam on the topics presented.

## Grading

The chart below identifies the individual contributions from each type of activity, per week.

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Total
<b>Forum</b> Activity 1.1 (0) Activity 1.2 (30)	<b>Forum</b> Activity 2.1 (30)	<b>Forum</b> Activity 3.1 (30)	<b>Forum</b> Activity 4.1 (30)	<b>Forum</b> Activity 5.1 (30)	<b>Forum</b> Activity 6.1 (30)	<b>Forum</b> Activity 7.1 (30)	<b>210</b>
<b>Assignments</b> Activity 1.3 (40)	<b>Assignments</b> Activity 2.2 (40) Activity 2.3 (60)	<b>Assignments</b> Activity 3.2 (40) Activity 3.3 (60)	<b>Assignments</b> Activity 4.2 (40) Activity 4.3 (60)	<b>Assignments</b> Activity 5.2 (40) Activity 5.3 (60)	<b>Assignments</b> Activity 6.2 (40) Activity 6.3 (60)	<b>Assignments</b> Activity 7.2 (40)	<b>580</b>
n/a	n/a	n/a	n/a	n/a	n/a	Activity 7.3 <b>Final Exam II</b> (210)	<b>210</b>
<b>70</b>	<b>130</b>	<b>130</b>	<b>130</b>	<b>130</b>	<b>130</b>	<b>280</b>	<b>1000</b>

## Grading Scale

A: 90-100% | B: 80-89% | C: 70-79% | F: <69%

## Course Schedule and Weekly Checklist

Topic	Learning Activities (Due by 11:55 p.m. ET on day designated)
Start Here	<input type="checkbox"/> MON: Activity 1.1: Do you still have fears?
Week 1: Assumptions for Comparing Means Running and Interpreting ANOVA Post Hoc Tests and Contrasts in ANOVA	<input type="checkbox"/> WED: Activity 1.1: Do you still have fears? <input type="checkbox"/> SAT: Activity 1.2: Practice Smart Alex's Tasks <input type="checkbox"/> SUN: Activity 1.3: Stats Reflection
Week 2: ANCOVA Basics Analysis and Interpretation Reporting ANCOVA Results	<input type="checkbox"/> WED: Activity 2.1: Topic Application and Reflection <input type="checkbox"/> SAT: Activity 2.2: Practice Smart Alex's Tasks <input type="checkbox"/> SUN: Activity 2.3: Findings Report
Week 3: Types of Factorial Designs in ANOVA Running and Analyzing Factorial Designs Reporting Results of Factorial Designs in ANOVA	<input type="checkbox"/> WED: Activity 3.1: Topic Application and Reflection <input type="checkbox"/> SAT: Activity 3.2: Practice Smart Alex's Tasks <input type="checkbox"/> SUN: Activity 3.3: Findings Report
Week 4: Repeated-Measures ANOVA Basics Sphericity Violations in ANOVA Reporting Repeated Measures Results	<input type="checkbox"/> WED: Activity 4.1: Topic Application and Reflection <input type="checkbox"/> SAT: Activity 4.2: Practice Smart Alex's Tasks <input type="checkbox"/> SUN: Activity 4.3: Findings Report

<p>Week 5:</p> <p>Mixed ANOVA Basics</p> <p>Analyzing Mixed Designs</p> <p>Reporting Mixed ANOVA Results</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> WED: Activity 5.1: Topic Application and Reflection</li> <li><input type="checkbox"/> SAT: Activity 5.2: Practice Smart Alex's Tasks</li> <li><input type="checkbox"/> SUN: Activity 5.3: Findings Report</li> </ul>
<p>Week 6:</p> <p>Introduction to MANOVA: Principles and Applications</p> <p>Running and Interpreting MANOVA Analyses</p> <p>Assessing Multivariate Effects in MANOVA</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> WED: Activity 6.1: Topic Application and Reflection</li> <li><input type="checkbox"/> SAT: Activity 6.2: Practice Smart Alex's Tasks</li> <li><input type="checkbox"/> SUN: Activity 6.3: Findings Report</li> </ul>
<p>Week 7:</p> <p>Introduction to Factor Analysis</p> <p>Exploratory and Confirmatory Factor Analysis</p> <p>Interpreting Factor Analysis Results</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> WED: Activity 7.1: Topic Application and Reflection</li> <li><input type="checkbox"/> SAT: Activity 7.2: Practice Smart Alex's Tasks</li> <li><input type="checkbox"/> SUN: Activity 7.3: Final Exam</li> </ul>

### Tips for Success

Online learning requires self-discipline and self-direction. As seekers of the truth, we should be willing to challenge one another's academic work in a spirit of respectful comradery. Your course is a place for you to grow as you benefit from the expertise, experience, and diverse perspectives of your instructor and peers. Constructive feedback will challenge you to stretch your own thinking, thereby expanding your knowledge and understanding.

To get the most out of your learning experience, you should actively engage (participate) in **ALL** course activities. Course elements are arranged chronologically. To complete a week, simply work your way "down the page" through all of the course materials and activities.

### For More Information:

Be sure to review the [Support, Policies, and Procedures](#) addendum.