

PSY522 Statistical Procedures II

(3 credit hours)

Course Syllabus

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

A digital copy of your textbook is included with your DragonACCESS fees for this course. Use the DragonACCESS tool in Moodle to view your book.

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

In addition, you will need to purchase the following software package. Software installed on your computer is not included in your DragonACCESS fees.

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](#). You might consider registering for one of the library's many webinars on library research, source evaluation, copyright, and other topics, at the [Library Events - Upcoming Events](#) web page. For further assistance email a librarian, at: library@tiffin.edu.

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
Forum Activity 1.1 (0) Activity 1.2 (30)	Forum Activity 2.1 (30)	Forum Activity 3.1 (30)	Forum Activity 4.1 (30)	Forum Activity 5.1 (30)	Forum Activity 6.1 (30)	Forum Activity 7.1 (30)	210
Assignments Activity 1.3 (40)	Assignments Activity 2.2 (40) Activity 2.3 (60)	Assignments Activity 3.2 (40) Activity 3.3 (60)	Assignments Activity 4.2 (40) Activity 4.3 (60)	Assignments Activity 5.2 (40) Activity 5.3 (60)	Assignments Activity 6.2 (40) Activity 6.3 (60)	Assignments Activity 7.2 (40)	580
n/a	n/a	n/a	n/a	n/a	n/a	Activity 7.3 Final Exam II (210)	210
70	130	130	130	130	130	280	1000

Grading Scale

Grade	Percentage
A	90-100%
B	80-89%
C	70-79%
F	<70

Please see the [Academic Bulletin](#) for grade appeal information.

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	<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

<p>Running and Analyzing Factorial Designs</p> <p>Reporting Results of Factorial Designs in ANOVA</p>	
<p>Week 4:</p> <p>Repeated-Measures ANOVA Basics</p> <p>Sphericity Violations in ANOVA</p> <p>Reporting Repeated Measures Results</p>	<ul style="list-style-type: none"> <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"> <input type="checkbox"/> WED: Activity 5.1: Topic Application and Reflection <input type="checkbox"/> SAT: Activity 5.2: Practice Smart Alex's Tasks <input type="checkbox"/> SUN: Activity 5.3: Findings Report
<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"> <input type="checkbox"/> WED: Activity 6.1: Topic Application and Reflection <input type="checkbox"/> SAT: Activity 6.2: Practice Smart Alex's Tasks <input type="checkbox"/> SUN: Activity 6.3: Findings Report
<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"> <input type="checkbox"/> WED: Activity 7.1: Topic Application and Reflection <input type="checkbox"/> SAT: Activity 7.2: Practice Smart Alex's Tasks <input type="checkbox"/> SUN: Activity 7.3: Final Exam

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.

Your Instructor Will Expect You to:

- Thoroughly review orientation materials (Start Here) within the first 48 hours of the term.
- Monitor your TU email account **daily** for important updates and announcements.
- Take ownership of your learning experience and act in a proactive, self-directed manner. That means:
 - Fully participate in all learning activities.
 - Complete assignments as described in rubrics or other instructions.
 - Submit all work on time and in the specified format (e.g. APA format for citations).
 - Utilize and incorporate instructor provided feedback to improve your work.
 - Ask questions so you can better understand course material or assignments.
 - Use the highest standards of intellectual honesty and integrity. For details, see the TU Library guide: [Digital Literacy: Netiquette and Internet Safety](#).
 - Treat others respectfully and demonstrate "netiquette" (online politeness and respectfulness) at all times. TU celebrates cultural uniqueness and expects all students to be considerate and thoughtful throughout their learning experiences.

You Should Expect Your Instructors to:

- Post an introductory announcement/email at the beginning of each week to provide updates and help you prepare for the week's activities.
- Maintain an active and engaged presence in all course activities and throughout the course.
- Respond to your emailed questions within 48 hours, if not sooner.
- Clearly communicate any absences or expected non-participation due to extenuating circumstances. For example, "I will be traveling to attend a funeral this week and may not be able to respond to questions or participate in forums for a couple of days."

- When grading your work:
 - clearly indicate their grading approach (what they like to see in submitted work as well as what types of errors they tend to penalize more harshly),
 - thoroughly review and evaluate your submissions in a timely manner (in less than 5 days for most assignments), and
 - provide constructive feedback on the strengths and weaknesses of your work with suggestions on how you can improve your performance on future assignments.
- Advocate for your success as a learner and help guide you toward successful completion of the course activities and most importantly, attainment of the course learning outcomes.

Accommodations (Disability Services)

The Office of Disability Services supports the institutional commitment to diversity by providing educational opportunities for qualified individuals with disabilities through accessible programs and services in compliance with Section 504 of the Rehabilitation Act of 1973 and Title III of the Americans with Disabilities Act (ADA) of 1990. If you need reasonable accommodations due to a documented disability, contact the Office for Equity, Access, & Opportunity via email at disabilityservices@tiffin.edu or by calling 419-448-3021.

Technical Support

For Moodle support, either email moodlesupport@tiffin.edu or call the 24/7 Technical Support Call Center at 855-664-1200 (3430, Option 2, from on-campus). For non-Moodle support, contact the Tiffin University ITS helpdesk at the number above or submit a [support ticket](#).

Veterans

The Veteran and Military Resource Center assists veterans, active Military, and spouses of current service members in utilizing their education benefits. VMRC provides information regarding benefit processes and procedures, as well as support in navigating the transition from military to academic life by facilitating connections with the appropriate support services on campus. More information can be found on the Veteran and Military Resource Center website, at <http://www.tiffin.edu/va>.

Additional Support

If you need to consult an academic advisor refer to TU's [Meet the Team](#) page. For information about TU's peer tutoring program see the Murphy Center's [Tutoring Policies and Procedures](#) page.

Comments or Concerns

TU's online programs are designed to be student *driven*: to empower you with a voice and stake in your learning. Our courses feature multiple and varied ways that you can share feedback, and we invite you to become an active voice and help drive our improvement efforts. In addition to providing in-course feedback, we encourage you to submit questions or comments directly to the online team at online@tiffin.edu.