

# PSY391 Applied Research Methods and Statistics

**Level:** 3

**Credit Units:** 5 Credit Units

**Language:** ENGLISH

**Presentation Pattern:** EVERY JULY

## Synopsis:

This course aims to give students practical insights to research methods and statistics in action. Instead of traditionally teaching statistics and research methods by topic, a problem-based learning approach will be used in this module, where students will systematically critique research and will be challenged to use their existing knowledge in research methods and statistics foundation to solve a range of issues from every day dilemmas to work-based problems. As an applied course, students are expected to have a foundation in both research methods and statistics. Hence, prerequisites for this course are HBC211 Social Science Research Methods and HBC203 Statistics and Data Analysis for the Social and Behavioural Sciences. Additionally, to help ensure all students have a foundation and are ready to apply their learning, a graded adaptive learning component will be integrated within this course for the first 4 weeks.

## Topics:

- Descriptive statistics in action
- Inferential statistics in action
- Hypotheses and logical consistency
- Research design
- Validity and reliability
- Samples, sample sizes, and data collection
- Data analysis
- Quantitative research design: Correlational and quasi-experimental
- Qualitative research design: Case study and naturalistic observation
- Assumption testing and confounds
- Ethical considerations in research
- Introduction to statistical software

## Learning Outcome:

- Examine the core concepts in research methods and statistics pertinent to psychological research.
- Apply knowledge in research methods and statistics to solve problems.
- Judge the importance of research and statistics in psychology.
- Analyse data using different software.
- Interpret statistical results.
- Report findings in APA format.

## Assessment Strategies - Regular Semester (Daytime Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	2.5

Overall Continuous Assessment	PRE-CLASS QUIZ 2	2.5
	PRE-CLASS QUIZ 3	2.5
	PRE-CLASS QUIZ 4	2.5
	TUTOR-MARKED ASSIGNMENT 1	20
	GROUP BASED ASSIGNMENT 1	20
Overall Examinable Components	ECA	50
<b>Total</b>		<b>100</b>

\*The information listed is subject to review and change.