

# SS3707: DESIGN AND ANALYSIS FOR PSYCHOLOGICAL RESEARCH I

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## Effective Term

Semester A 2024/25

## Part I Course Overview

### Course Title

Design and Analysis for Psychological Research I

### Subject Code

SS - Social and Behavioural Sciences

### Course Number

3707

### Academic Unit

Social and Behavioural Sciences (SS)

### College/School

College of Liberal Arts and Social Sciences (CH)

### Course Duration

One Semester

### Credit Units

3

### Level

B1, B2, B3, B4 - Bachelor's Degree

### Medium of Instruction

English

### Medium of Assessment

English

### Prerequisites

SS1101 Basic Psychology or SS2023 Basic Psychology I; and SS2028 Basic Psychology II; and SS2033 Research Methods for Behavioural Sciences or SS2027 Social Statistics and Research Methods

### Precursors

Nil

### Equivalent Courses

Nil

### Exclusive Courses

SS3421 Applied Data Analysis and Interpretation for the Social Sciences or SS2032 Applied Data Analysis and Interpretation

## Part II Course Details

### Abstract

This course aims to provide essential training in research designs and quantitative methods commonly employed in psychology. Upon completion of the course students should be able to plan a psychological research study which is feasible and relevant for operation and to conduct simple quantitative analysis.

### Course Intended Learning Outcomes (CILOs)

	CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1	Explain major theories and principles of research methodology in psychology;	25		x	
2	Justify and apply appropriate research designs and statistical methods in the investigations of human behaviour;	25	x	x	
3	Demonstrate basic computations on behavioural data by hand and analyse them with the help of a computer; and	25		x	
4	Organize, synthesize, and differentiate the research literature for the planning of an investigation in an area of psychology.	25			x

#### A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

#### A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

#### A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

### Learning and Teaching Activities (LTAs)

	LTAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures	Students will engage in lecture activities about pertinent concepts and practices in research methodology and statistical analysis.	1, 2, 3	

2	Labs	Students will participate in computer labs to gain practical hands-on training in data manipulation and data analysis using SPSS. Students will generate their own dataset and work on it during the Labs.	2, 3	
3	Workshops	Students will prepare their group project and participate in project consultation. Students will be inspired to generate creative ideas in proposing a psychological research project.	2, 4	

**Assessment Tasks / Activities (ATs)**

ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Quiz	1, 2, 3	50
2	Project Writing	2, 4	40
3	Laboratory / Project Participation	4	10

**Continuous Assessment (%)**

100

**Examination (%)**

0

**Assessment Rubrics (AR)****Assessment Task**

1. Quiz

**Criterion**

ABILITY to explain and EXECUTE statistical analyses

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not reaching basic levels

**Assessment Task**

2. Project writing

**Criterion**

ABILITY to CONSTRUCT a systematic literature review and to DEVELOP a research proposal

**Excellent (A+, A, A-)**

High

**Good (B+, B, B-)**

Significant

**Fair (C+, C, C-)**

Moderate

**Marginal (D)**

Basic

**Failure (F)**

Not reaching basic levels

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**Assessment Task**

3. Lab / project participation

**Criterion**

Positive ATTITUDE in engaging in inquiry and in collaborating with project members

**Excellent (A+, A, A-)**

Highly positive and fully engaged

**Good (B+, B, B-)**

Positive and engaged

**Fair (C+, C, C-)**

Moderately positive and engaged

**Marginal (D)**

Rather detached but showed some efforts to engage

**Failure (F)**

Detached and no efforts to engage

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## Part III Other Information

**Keyword Syllabus**

experimental and non-experimental designs, basic statistics, inferential statistics, samples and population, estimation of population means, significance tests of difference between means, correlation and regression, non-parametric tests of categorical data, power and effect size, SPSS.

**Reading List****Compulsory Readings**

Title	
1	Nil

**Additional Readings**

Title	
1	Coolican, H. (2009). Research methods and statistics in psychology. London: Hodder & Stoughton.
2	Gravetter, F., & Wallnau, L. (2013). Statistics for the behavioral sciences. NY: Thompson.
3	Norusis, M. J. (2012). IBM SPSS statistics 19 guide to data analysis. NJ: Prentice Hall.
4	<a href="http://www.socialresearchmethods.net/">http://www.socialresearchmethods.net/</a>
5	<a href="http://davidmlane.com/hyperstat/index.html">http://davidmlane.com/hyperstat/index.html</a>
6	<a href="http://www.wadsworth.com/psychology_d/templates/student_resources/workshops/workshops.html">http://www.wadsworth.com/psychology_d/templates/student_resources/workshops/workshops.html</a>
7	<a href="http://www.statsoft.com/textbook/stathome.html">http://www.statsoft.com/textbook/stathome.html</a>
8	<a href="http://www.apastyle.org/">http://www.apastyle.org/</a>
9	<a href="http://www.apastyle.org/elecref.html">http://www.apastyle.org/elecref.html</a>