

SS3707: DESIGN AND ANALYSIS FOR PSYCHOLOGICAL RESEARCH I

Effective Term

Semester A 2022/23

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	choose appropriate research designs and statistical methods and apply them in the investigations of human behaviour;	25	x	x	
3	execute basic computations on behavioural data by hand and to analyse them with the help of 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.

Teaching and Learning Activities (TLAs)

	TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures	Lectures: Focused on explaining pertinent concepts and practices in research methodology and statistical analysis.	1, 2, 3	
2	Labs	Computer Labs - practical hands-on training in data manipulation and data analysis using SPSS. Students will be given opportunities to generate their own dataset and work on it during the Labs.	2, 3	

3	Workshops	Workshops - group project preparation and consultation. Students are being 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 UNDERSTAND 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

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

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	http://www.socialresearchmethods.net/
5	http://davidmlane.com/hyperstat/index.html
6	http://www.wadsworth.com/psychology_d/templates/student_resources/workshops/workshops.html
7	http://www.statsoft.com/textbook/stathome.html
8	http://www.apastyle.org/
9	http://www.apastyle.org/elecref.html