

Course Code	HP1100
Course Title	Fundamentals of Social Science Research
Pre-requisites	None
No of AUs	3

Course Aims

The aim of this course is to provide an introduction to the research methods and basic statistical techniques commonly used in psychological research.

Intended Learning Outcomes (ILO)

By the end of this course, you (as a student) would be able to:

1. Describe the basic methodologies used in conducting psychological research
2. Evaluate the strengths and limitations of specific research methodologies
3. Design simple studies to test a specific research hypothesis
4. Demonstrate the basic statistical techniques that psychologists use in empirical research
5. Conduct simple data analysis using SPSS
6. Interpret the results from SPSS outputs
7. Report findings according to conventions in psychology

Course Content

This course is an introductory course to the research methods and basic statistical techniques commonly used in psychological research. The course emphasizes the process of scientific inquiry in psychology, in terms of both empirical research methodology and statistical analysis.

The course is divided into lectures and tutorials. The lectures focus on conceptual issues and cover the content materials that need to be understood in order to design any psychological study and work with any data. The tutorials are dedicated to more in-depth discussions of topics covered in the lectures, as well as, practical experience with data analysis using SPSS.

Assessment (includes both continuous and summative assessment)

Component	Course LO Tested	Related Programme LO or Graduate Attributes	Weighting	Team/Individual
1. Final Examination	The final exam aims to test all 7 learning outcomes.	This has the potential to engage the competence and character components of NTU's education framework.	50%	Individual
2. Continuous Assessment (CA): Homework 1, Mid-term	This component primarily addresses outcomes 1 - 6.	This is in line with the competence and character components of NTU's	50% (Homework1 : 15%; Mid-term exam: 20%;	Individual

exam, Homework 2		education framework.	Homework 2: 15%)	
Total			100%	

Formative feedback

You will be provided feedback through the assignments, mid-term assessment, and discussions during the tutorial sessions, which comprise smaller groups of students. You are also encouraged to meet with the instructor and teaching assistants.

Learning and Teaching approach

Approach	How does this approach support students in achieving the learning outcomes?
Lecture	This approach supports the students in achieving the learning outcomes by introducing students to the key concepts in the course.
Tutorial	In smaller groups, the students will have the opportunity to gain practical experience analyzing data using Statistical Package for the Social Sciences (SPSS), a common statistical software that psychologists use for data analysis.

Reading and References

Gravetter, F. J., & Wallnau, L. B. (2013). *Statistics for the behavioral sciences (9th Edition)*. Belmont, CA: Thomson Wadsworth.

White, T. L., & McBurney, D. H. (2017). *Research methods (10th Edition)*. Belmont, CA: Wadsworth.

Course Policies and Student Responsibilities

The students are expected to complete all assigned pre-class readings and activities, attend all classes and tutorials punctually and complete all scheduled assignments and tests by due dates. They are expected to take responsibility to follow up with course notes, homework assignments, and course-related announcements for classes they have missed. Participation is expected in all discussions and activities.

Homework should be turned in on time. No late submission will be accepted.

No make-up exam or extension will be given. A signed letter from a doctor or head of a university-sponsored extra-curricular program documenting illness can be submitted to the undergraduate office of the student’s school in order to obtain MC or ABS status. All exams missed without such documents will have a zero grade.

As Psychology students, the guidelines of the American Psychological Association on referencing and citation are expected to be followed (see APA Publication Manual, 7th Edition).

Academic Integrity

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values.

As a student, it is important that the student recognizes his/her responsibilities in understanding and applying the principles of academic integrity in all the work he/she does at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. The students need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If the students are uncertain of the definitions of any of these terms, he/she should go to the [academic integrity website](#) for more information. The students are encourage to consult the instructor(s) if he/she needs any clarification about the requirements of academic integrity in the course.

Planned Weekly Schedule

Week	Topic	Course LO	Readings/ Activities
1	Introduction, Ethics	Outcome 1	White & McBurney (2017) Chapters 1, 3
2	Reliability and validity, Descriptive methods	Outcomes 1, 2, and 3	White & McBurney (2017) Chapters 5 (p. 119-122, 130-137), 8
3	Survey research	Outcomes 1, 2, and 3	White & McBurney (2017) Chapter 9
4	Validity and control	Outcomes 1, 2, and 3	White & McBurney (2017) Chapters 6, 7
5	Single-factor experiments	Outcomes 1, 2, and 3	White & McBurney (2017) Chapter 10
6	Factorial designs	Outcomes 1, 2, and 3	White & McBurney (2017) Chapter 11
7	Continuous assessment	Outcomes 1 - 6	
8	Descriptive statistics, z-scores	Outcomes 4, 5, 6, and 7	Gravetter & Wallnau (2013) Chapters 3, 4, 5
9	Introduction to the <i>t</i> statistics	Outcomes 4, 5, 6, and 7	Gravetter & Wallnau (2013) Chapter 9
10	<i>t</i> -tests: Independent samples	Outcomes 4, 5, 6, and 7	Gravetter & Wallnau (2013) Chapters 10
11	<i>t</i> -tests: Related samples	Outcomes 4, 5, 6, and 7	Gravetter & Wallnau (2013) Chapter 11
12	Correlation	Outcomes 4, 5, 6, and 7	Gravetter & Wallnau (2013) Chapter 15
13	Linear regression	Outcomes 4, 5, 6, and 7	Gravetter & Wallnau (2013) Chapter 16