

COURSE CONTENT

Course Code / Title : HP1100 Fundamentals of Social Science Research

Pre-requisites : Nil

No. of AUs. : 3

Contact Hours : 39

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 the course, you should 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.

Course Assessment

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|--------------|-------------------|----------------------|
| CA1 | Homework 1 | : 15% |
| CA2 | Mid-term Test | : 20% |
| CA3 | Homework 2 | : 15% |
| | Final Examination | : 50% |
| Total | | ----- 100% |

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.

Planned Weekly Schedule (subject to changes, if any)

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