School of Education

EDST5101 Advanced Quantitative Research (formerly

STUDENT LEARNING OUTCOMES

| Outcome | | Assessment/s |
|---------|---|--------------|
| 1 | Demonstrate an understanding of how to design a research study. | 1, 2 |
| 2 | Demonstrate an understanding of basic statistical techniques for the analysis of data. | 1, 2 |
| 3 | Demonstrate the ability to apply basic statistical techniques and interpret research results. | 1, 2 |
| 4 | Demonstrate the ability to report the method and results of an experiment. | 2 |

GRADUATE ATTRIBUTES

| Standard | | Assessment/s |
|----------|--|--------------|
| | Advanced disciplinary knowledge and practices | |
| | Demonstrate an advanced understanding of the field of education as it | |
| 1 | relates to their specialist area of study, and the ability to synthesize and | 1, 2 |
| | apply disciplinary principles and practices to new or complex | |
| | environments. | |

6. COURSE CONTENT AND STRUCTURE

| Module | Lecture Topic | Field (2018) Textbook |
|--------------------|---|--------------------------|
| Day 1 | Introduction: Fundamentals of statistics | |
| July 15 (Monday) | Research design and statistical testing using: t-test | Chapters 1 & 10 |
| Day 2 | | |
| July 16 (Tuesday) | Research design and statistical testing using: Analysis of Variance | Chapter 12 |
| Day 3 | | |
| July 18 (Thursday) | Research design and statistical testing using: Correlation and Regression | Chapters 8 & 9 |
| Day 4 | | |
| July 19 (Friday) | Research design and statistical testing using: Exploratory Factor Analysis | Chapter 18 |

7. RESOURCES

Readings

Main Textbook

Field, A. (2018). Discovering statistics using SPSS. London; Sage.

Supplementary Textbook

Heiman, G. (2011). Basic statistics for the behavioural sciences. Belmont, CA: Wadsworth, Cengage Learning

Morgan, G., Leech, N., Gloeckner, G., & Barrett, K. (2011). *IBM SPSS for introductory statistics: Use and interpretation*. New York: Routledge.

Pallant, (2010). SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS. Allen & Unwin.

Further Readings

Copies of articles and book chapters will be provided during the lectures.

