Course Outline (Higher Education)

School: Federation Business School

Course Title: BUSINESS STATISTICS

Course ID: BUGEN1502

Credit Points: 15.00

Prerequisite(s): (Nil)

Co-requisite(s): Nil

Exclusion(s): Nil

ASCED: 010103

Description of the Course:

This course enables students to develop an understanding of the role of statistics in business and research and develop foundational knowledge and skills in the appropriate use of a range of statistical techniques. The course introduces spreadsheeting with an emphasis on the use of Excel as a statistical tool. Students develop core knowledge and applied skills in the following areas: descriptive statistics, elementary probability, discrete and continuous probability distributions, statistical inference, simple linear regression and correlation, forecasting and time series and index numbers.

Grade Scheme: Graded (HD, D, C, P, MF, F, XF)

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a final mark of 45 per cent or above and submitted all major assessment tasks.

Program Level:

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Introductory			✔			
Intermediate						
Advanced						

Learning Outcomes:

Knowledge:

K1. Describe a set of data using appropriate statistical measures and identify commonly used techniques for data collection and analysis.
K2. Describe the role of statistical analysis and probability for decision making.
K3. Recognise the role of hypothesis tests in statistics.
K4. Describe relationships between two variables using linear and time series regression equations.
K5. Define index numbers and time value of money.

Skills:

S1. Use Excel to perform routine data management tasks and statistical analyses.
S2. Present data in a clear and informative way in both tabular and graphical form.
S3. Perform hypothesis tests & construct confidence intervals for single means.
S4. Model the relationship between two variables using linear regression equations and time series techniques.
S5. Interpret and communicate the results from statistical analysis using appropriate statistical language and conventions.

Application of knowledge and skills:

A1. Interpret computer output in terms that relate to the particular problem situation.
A2. Select and perform appropriate statistical tests for given data sets and problem situations.

Course Content:

Topics may include:

- Data classification and terminology.
- Descriptive statistics.
- Computer analysis of data.
- Probability and probability distributions.
- Estimation and hypothesis testing.
- Linear regression and correlation.
- Index numbers and time series.

Values:

V1. Appreciate the role of statistics in the business discipline.

V2. Appreciate the need for appropriate analysis and interpretation of data.

V3. Appreciate the role of the central limit theorem and normal distributions in statistical inference.

Graduate Attributes

The Federation University Federation graduate attributes (GA) are entrenched in the Higher Education Graduate Attributes Policy (LT1228). FedUni graduates develop these graduate attributes through their engagement in explicit learning and teaching and assessment tasks that are embedded in all FedUni programs. Graduate attribute attainment typically follows an incremental development process mapped through program progression. **One or more graduate attributes must be evident in the specified learning outcomes and assessment for each FedUni course, and all attributes must be directly assessed in each program**

Graduate attribute and descriptor		Development and acquisition of GAs in the course	
		Learning Outcomes (KSA)	Assessment task (AT#)
GA 1 Thinkers	Our graduates are curious, reflective and critical. Able to analyse the world in a way that generates valued insights, they are change makers seeking and creating new solutions.	K1, K2, K4, K5, S1, S2, S3, S4, S5	AT2
GA 2 Innovators	Our graduates have ideas and are able to realise their dreams. They think and act creatively to achieve and inspire positive change.	K2, K3, A1, A2, K2	AT1, AT2
GA 3 Citizens	Our graduates engage in socially and culturally appropriate ways to advance individual, community and global well-being. They are socially and environmentally aware, acting ethically, equitably and compassionately.	K5, S2, A2	AT2, AT3
GA 4 Communicators	Our graduates create, exchange, impart and convey information, ideas, and concepts effectively. They are respectful, inclusive and empathetic towards their audience, and express thoughts, feelings and information in ways that help others to understand.	K1, K4, K5, S2, S5	AT1, AT2, AT3
GA 5 Leaders	Our graduates display and promote positive behaviours, and aspire to make a difference. They act with integrity, are receptive to alternatives and foster sustainable and resilient practices.	Not applicable	Not applicable

Learning Task and Assessment:

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1, K2, K4, S1, S2, S4, S5, A1, A2	Apply appropriate statistical analysis and produce professional presentation and interpretation of qualitative and quantitative data based on a relevant business context.	Assignment	20-30%
K1, K2, K3, S1, S3, A1, A2	Students demonstrate conceptual basis of a statistical technique, perform appropriate calculations or apply an appropriate statistical technique using computer software and interpret the results obtained in context.	Quizzes	20-30%
K1, K2, K5, S1, S5, A1, A2	Final test/assessment	Final summative assessment	40-50%

Adopted Reference Style:

APA

Refer to the library website for more information

Fed Cite - referencing tool