Course Outline (Higher Education)

School: Federation Business School

Course Title: ANALYTICAL DECISION MAKING

Course ID: BUMGT5981

Credit Points: 15.00

Prerequisite(s): Nil

Co-requisite(s): Nil

Exclusion(s): (BUMGT5980)

ASCED: 080399

Description of the Course :

The course enhances student understanding of analytical decision making supported by numerical data and statistical procedures. Topics include practice-based learning contextualised across business and management. Coursework and research-based assessment may include interactive group work, case studies and situational exercises where students apply quantitative methods relevant for understanding and/or solving organisational challenges and problems. An applied focus introduces concepts fundamental to understanding and interpreting numeric data and statistical analysis. Designated numerical techniques are relevant to fields including human resource management, marketing and management.

Grade Scheme: Graded (HD, D, C, etc.)

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					✔	

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

Learning Outcomes:

On successful completion of the course the students are expected to be able to:

Knowledge:

K1. Define contexts suitable for numeric-based analysis supporting good decisions
K2. Identify pertinent sources of numeric data and/or suitable methods for generating these data
K3. Recognise appropriate statistical techniques for data analysis including strengths and limitations
K4. Infer results from data analysis applicable to business and management challenges or problems

Skills:

S1. Perform fundamental numerical and statistical analysis including data input and hypothesis testing
S2. Apply numerical tools and methods to analyse business and management challenges or problems
S3. Interpret results and finding from numerical analysis including implications
S4. Develop suitable decision support systems supporting good business practices

Application of knowledge and skills:

A1. Identify and evaluate workplace contexts relevant for numerical analysis
A2. Develop methods to effectively communicate numerical results to stakeholders
A3. Illustrate workplace examples where numerical analysis support good decision-making
A4. Explain processes for developing decision-support systems for relevant work-place scenarios

Course Content:

Topics may include:

- Introducing analytical decisions
- Numeracy, probability, risk and modelling
- Data analytics and big data
- Generating and assessing valid data
- Fundamental statistical techniques
- Capacity and demand
- Service quality
- Supply chain analysis
- Forecasting
- Selecting a project portfolio
- Staff selection, KPIs, attrition and satisfaction
- Advanced data models and decision support systems

Values:

V1. The importance of numerical analysis to support good decision making
V2. The significance of statistical techniques to answer business and management questions
V3. The relevance of numerical methods used across fields of business and management
V4. The benefits of numeric-based decision support systems in the workplace

Graduate Attributes

The Federation University FedUni 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)	**Code** A. Direct B. Indirect N/A Not addressed	**Assessment task (AT#)**	**Code** A. Certain B. Likely C. Possible N/A Not likely
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,K3,S2,S3,S4,A2,A3,A4	A	AT1,AT2,AT3,AT4	B
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,S2,S4,A1,A2,A3	A	AT2,AT4	A
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.	K4,S2,S4,A3,A4	A	AT3,AT4	A
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.	K4,S3,S4,A2,A3,A4	A	AT2	A
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.	K1,S4,A2,A4	B	AT2	C

Learning Task and Assessment:

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1;K2;K3;K4.	Individual self-managed formative assessment – 60 questions (12 topics, 5 questions per topic).	Online quiz	10%-20%
K1;K2;K3;K4; S1;S2;S3;S4; A1;A2;A3;A4.	Online group presentation for specified numerical case study incorporating peer review.	Group or individual research work	20%-30%
K1;K2; S1;S2; A1;A2.	Individual summative task – addressing scenarios	Quantitative assignment	20-30%
K1;K2;K3;K4; S1;S2;S3;S4; A1;A2;A3;A4.	Individual summative task testing objectives	Final examination	40-50%

Adopted Reference Style:

APA