

**School of Business Module Descriptor
Summer School 2019**

1. Module Title	Business Data Analysis
2. Module Code	SGBU41501
3. Credit Volume	<p>15 UK/QAA/Gibraltar credits 7.5 ECTS credits 3 SCH/US credits</p> <p>Each module (unit) is validated at 15 University of Gibraltar credits and 7.5 ECTS and typically transfers as 3 credits in North America.</p> <p>The normal workload of a student at the University of Gibraltar is four modules per semester.</p>
4. Level	<p>In accordance with the UK Quality Assurance Agency (QAA) Framework for Higher Education Qualifications (FHEQ) Level Descriptors this module reflects a Year 1 (Level 4) module.</p> <p>Please note that liberal studies course-work is not usually part of degree programmes in the UK and Europe and most undergraduate degree programmes are completed in 3 years. This means that a 1st year (level 4) class in the UK is usually equal to a typical liberal arts 200-level class, a 2nd year (level 5) class in the UK is usually equal to a typical liberal arts 300-level class, and a 3rd year (level 6) class in the UK is usually equal to a typical liberal arts 400-level class.</p>
5. Assumed background/ Pre-Requisites	No prior knowledge of statistics is required, however basic EXCEL skills are assumed.
6. Module Rationale	
<p>To make good business decisions, the decision-maker must carefully analyse all alternatives in the light of all available information. The primary role of statistics is to provide decision-makers with principles and methods concerned with extracting useful information from a data set.</p> <p>This module is designed as a first formal course in basic statistical methods. It aims to provide recognition of situations where statistical analysis may be of benefit and the range of methods that may apply to a given situation. In this module, students will learn to use statistical methods to extract useful information from a set of data, and to utilise the information gathered appropriately in the business decision making process.</p> <p>By undertaking this module, students will enhance their knowledge and understanding of business data analysis, be provided with opportunities for intellectual debate and the opportunity to link theory to practice. Upon successful completion of the module, students should be able to critically analyse the subject matter.</p> <p>The module also contributes to the development of the generic skills such as critical thinking, futures thinking, self-reflection, communication skills and global citizenship.</p>	
7. Outline of Module Content:	
<p>This module aims to provide recognition of situations where statistical analysis may be of benefit in extracting useful information from a data set and introduces the range of methods that may apply to a given situation using real world examples.</p> <p>The module aims to provide the skills to:</p> <ul style="list-style-type: none"> • Recognise situations where statistical analysis would be of benefit; • Organise, summarise and present data in relevant useful forms; and • Apply a range of methods that are useful in solving statistical problems including the use of MS Excel for statistical data analysis. 	

8. Learning Outcomes

After successfully completing this course students should be able to:

- 1) recognise situations where statistical analysis would be of benefit;
- 2) organise, summarise and present data in relevant useful forms;
- 3) make use of data and a range of methods that are useful in making inferences about business problems,
- 4) use the statistical tools in the Excel spreadsheet package to perform basic statistical data analysis and interpret the output.
- 5) utilise generic problem solving and critical thinking skills.

9. Course Content/Topics

- Topic 1: Introduction to Data Analysis and Sampling
- Topic 2: Descriptive Statistics: Graphical Methods
- Topic 3: Descriptive Statistics: Numerical Methods
- Topic 4: Probability and Probability Distributions
- Topic 5: Sampling Distributions and Interval Estimators
- Topic 6: Hypothesis Testing
- Topic 7: Correlation Analysis and Regression Analysis

10. Module Delivery

The Summer School Business Data Analysis module is delivered face to face over a six-week period, comprising 1.5 hours per day (Monday to Friday) combined lecture and tutorial; a total of 42 hours class time. The final week includes revision, reflection and the final exam. Classes sizes are small and learning is student focussed.

11. Module Assessment

	Description	Weighting (%age of overall assessment)
Quizzes x 2	The quizzes are designed to provide feedback on student progress in the preliminary topics of the course.	20%
Computer applications assignment	The computer assignment is used to assess the ability to apply the appropriate statistical techniques to solve practical problems using a computer spreadsheet package.	30%
Final Exam	The final exam is used to assess ability to recognise the appropriate statistical techniques and to apply them correctly in various business scenarios.	50%

12. Reading List

Key Texts:

- Selvanathan, S. A, Selvanathan, S., Keller, G. (2016). *Business statistics Abridged* (7th ed.), Melbourne: Cengage Learning Australia
- Selvanathan, S. (2013). *Learning statistics and EXCEL in tandem with EXCEL 2010*, (4th ed.) South Melbourne, Victoria, Australia: Cengage Learning Australia

Recommended Texts:

- Berenson, M., Levine, D., Krehbiel, T. (2017). *Basic Business Statistics – Concepts and Applications*, 14th Ed., Pearson.