

Liverpool John Moores University

Title: Basic Statistics
Status: Definitive
Code: **4505IRICBT** (128516)
Version Start Date: 01-08-2021

Owning School/Faculty: Humanities and Social Science
Teaching School/Faculty: International College of Business and Technology

Team	Leader
Matthew Hill	Y

Academic Level: FHEQ4 **Credit Value:** 15 **Total Delivered Hours:** 45
Total Learning Hours: 150 **Private Study:** 105

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	45

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	3 hour exam	100	

Aims

The module aims to provide students with an understanding of the role of statistical methodologies in business through both the study of the theory of probability and statistics, and hands-on practice using statistical software with a variety of data types and models.

Learning Outcomes

After completing the module the student should be able to:

- 1 Calculate and interpret descriptive statistics to summarize a data set.
- 2 Calculate and interpret inferential statistics to summarize a data set.
- 3 Solve a range of problems using probability theory.
- 4 Demonstrate the ability to utilize a software package (Excel and SPSS) for a range of statistical applications.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

3 hour exam	1	2	3	4
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Outline Syllabus

1. *Introduction to basic concepts of statistics and statistical thinking*
2. *Explain the difference between data sets*
3. *Frequency Measures and Graphical Representation of Data*
4. *Measures of Central Tendency and Dispersion*
5. *Association of two variables*
6. *Probability and elements of probability theory*
7. *Random variables and probability distributions*
8. *Inferential statistics*
9. *Hypothesis testing*
10. *Linear regression*

Learning Activities

Lectures

Notes

Recommended reading:

Nolan, S.A. & Heinzen, T.E., (2007), *Statistics for Behavioural Sciences*, Worth Publishers

Sharma, J.K., (2008), *Business Statistics*, (2nd edition), Person Publication

Mason, R.D. & Lind, D.A. (1999), *Statistical Techniques in Business & Economics*, (10th edition), McGraw Hill