



Foundations of Data Analysis for Business

Course Descriptor

Course Title	Foundations of Data Analysis for Business	Faculty	Economics
Course code	NCHBA770	Course Leader	TBC
Credit points	10	Teaching Period	Trinity
FHEQ level	7	Date approved	October 2020
Compulsory/ Optional	Compulsory for the Bridge Programme towards postgraduate study in Business Analytics		
Pre-requisites	None		
Co-requisites	None		

COURSE SUMMARY

What are the essential data analysis concepts underlying business analytics? This course covers basic principles and techniques of descriptive and predictive analytics. An understanding of how statistical tools can support decision making and analytics initiatives in a business context is emphasised with real-world examples and case studies. Software will be used for analysing data sets and creating visualisations.

COURSE AIMS

- To train students in the theory and techniques of data analysis;
- To train students in the use of statistical software.

LEARNING OUTCOMES

On successful completion of the course, students will be able to:

KNOWLEDGE AND UNDERSTANDING

- K1d Critically evaluate how methods of descriptive and inferential statistics can be used to solve business problems

K2d Critically examine the role that statistical-based analysis techniques and information visualisation play in business decision-making processes.

SUBJECT SPECIFIC SKILLS

S1d Correctly interpret, evaluate, and present the results of various types of statistical data analyses

S2d Analyse data sets using statistical methods and software

TRANSFERABLE AND PROFESSIONAL SKILLS

T1d Express complex ideas clearly and accurately in ways accessible to both experts and non-experts

TEACHING AND LEARNING

Teaching and learning strategies for this course will include:

- 18 hours of full-cohort lectures
- 18 hours of seminars
- 1 x 1.5h revision session

Course information and supplementary materials are available on the College's Virtual Learning Environment (VLE).

Students are required to attend and participate in all the formal and timetabled sessions for this course. Students are also expected to manage their directed learning and independent study in support of the course.

EMPLOYABILITY SKILLS

- Students will learn data analysis skills, which are transferable across a wide range of professional positions.
- Students will learn the use of at least one statistical software package.
- Students will learn how to communicate complex issues to both expert and non-expert audiences.

ASSESSMENT

FORMATIVE

Students will be formatively assessed during the course by means of set assignments. These do not count towards the end of year results, but will provide students with developmental feedback, mostly given in classes.

SUMMATIVE

Assessment will take the following forms:

AE:	Assessment Activity	Weighting (%)	Online submission	Duration	Length
1	Set exercises 1	15%	Yes		n/a
2	Written examination (mid-term)	20%	No	1.5h	
3	Set exercises 2	25%	Yes		n/a
4	Written examination (final)	40%	No	1.5h	

The examinations will consist of a number of questions from which the student will have the choice of answering a specified number. Both the examination and the written assignment will be assessed in accordance with the assessment aims set out in the Programme Specification.

FEEDBACK

Students will receive formal feedback in a variety of ways: written (including via email correspondence); oral (within classes or through another form of communication) and indirectly through discussion during group tutorials.

Feedback is provided on written assignments (including essays, briefings and reports) and through generic internal examiners' reports, both of which are posted on the College's VLE.

INDICATIVE READING

Note: Comprehensive and current reading lists for courses are produced annually in the Course Syllabus or other documentation provided to students; the indicative reading list provided below is used as part of the approval/modification process only.

BOOKS

The key textbook for this course is the following:

Business Analytics: Communicating with Numbers, 1st edition. Jaggia, Kelly, Lertwachara, & Chen, 2020. Ebook recommended. McGraw-Hill.

INDICATIVE TOPICS

Students will study the following topics:

- Data Management and Visualisation
- Probability and Statistical Inference
- Regression Analysis
- Forecasting
- Linear Programming

Title:					
Approved by: Academic Board					
Version number	Date approved	Date published	Owner	Location	Proposed next review date
1.0	October 2020	October 2020	Dr Marianna Koli	TBD	October 2025
Modifications (As per AQF4)					
Version number	Date approved	Date published	Modification (including category number)		