# **IB149-15 Introduction to Statistics**

## 21/22

Department Warwick Business School Level Undergraduate Level 1 Module leader Wenjuan Zhang Credit value 15 Module duration 10 weeks Assessment Multiple Study location University of Warwick main campus, Coventry

## Description

## Introductory description

This is a core module for WBS Students.

The module provides a foundation for the term 2 module Business Analytics (IB122) and for both second and third year studies that utilise, develop and expand on this disciplinary area. The ability to use and make sense of quantitative information is an essential skill for any student taking a business or management degree. Business statistics provides the student with a basic knowledge of probability and statistical concepts, including the ability to be able to carry out analysis of data as well as be critical of reported quantitative information.

These skills are essential for other modules and careers in business.

There is an emphasis on solving real-world problems, using case material where appropriate, and mastering basic statistical tools. Students are encouraged to analyse data in a spreadsheet environment where possible.

Module web page

#### Module aims

The module provides a foundation for the term 2 module Business Analytics (IB122) and for both second and third year studies that utilise, develop and expand on this disciplinary area. The ability to use and make sense of quantitative information is an essential skill for any student

taking a business or management degree. Business statistics provides the student with a basic knowledge of probability and statistical concepts, including the ability to be able to carry out analysis of data as well as be critical of reported quantitative information.

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# **Outline syllabus**

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

**Business Statistics:** 

Introduction to statistical analysis and modelling, data presentation, descriptive statistics, basic probability concepts, introduction to probability distributions, sampling methods, confidence intervals, hypothesis testing, introduction to regression.

# Learning outcomes

By the end of the module, students should be able to:

- Have an understanding of the need for probability and statistical methods, and be aware of the strengths and limitations of these methods.
- Be familiar with basic statistical concepts and specific techniques.
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- Have problem solving skills.
- Have critical and logical thinking.

# Indicative reading list

Siegel, A (2016), Practical business statistics, 7th edition, Academic Press. ISBN 9780128042502 Oakshot, L (2016), Essential Quantitative Methods: for Business, Management and Finance, 6th edition, Macmillan Education UK. ISBN 9781137518552

Buglear, J (2012). Quantitative Methods for Business and Management, Pearson. ISBN: 978-2-273-73628-8

Morris, C and Thanassoulis, E (2007). Essential Maths: For Business and Management, Palgrave Macmillan. ISBN: 978-1403916105.

Rugg, G (2007). Using Statistics: A Gentle Introduction, Open University Press. ISBN: 978-0335222186.

Salkin, N J (2017), Statistics for people who (think they) hate statistics, 6th edition, SAGE. ISBN 9781506361161

Goldacre, B (2009). Bad Science, Harper-Perennial. ISBN: 978-0007284870

Levitt, S and Dubner, S (2009). Freakonomics: A Rogue Economist Explores the Hidden Side of Everything, Harper Perennial. ISBN: 978-0060731335

# Subject specific skills

Application of basic quantitative tools, awareness of limitations, basic Excel skills.

#### Transferable skills

Use basic (non-graphical) scientific calculators to solve a range of statistical problems. Use Excel for descriptive, graphical and summary statistical purposes. Demonstrate numeracy ability.

#### Study

### Study time

Туре	Required
Lectures	10 sessions of 2 hours (13%)
Seminars	9 sessions of 1 hour (6%)
Private study	48 hours (32%)
Assessment	73 hours (49%)
Total	150 hours

#### Private study description

Private Study.

#### Costs

No further costs have been identified for this module.

#### Assessment

You do not need to pass all assessment components to pass the module.

#### Assessment group D

	Weighting	Study time	Eligible for self-certification
Class Test 1 (15 CATS)	5%	4 hours	No
Class Test 2	5%	4 hours	No
Participation	10%	7 hours	No
Online Examination	80%	58 hours	No
~Platforms - AEP			

• Online examination: No Answerbook required

#### Assessment group R

	Weighting	Study time	Eligible for self-certification
Online Examination - Resit	100%		No
~Platforms - AEP			

• Online examination: No Answerbook required

#### Feedback on assessment

15 CATS assessment - markers comments uploaded to each student. Solutions to exam and markers comments put up on my.wbs.

Past exam papers for IB149

#### **Availability**

#### Courses

This module is Core for:

- Year 1 of UIBA-N400 Undergraduate Accounting and Finance
- Year 2 of UIBA-N403 Undergraduate Accounting and Finance (with Foundation Year)