

# IB149-15 Introduction to Statistics

**24/25**

**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

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## 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.

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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.

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## Study

### Study time

Type	Required
Lectures	10 sessions of 1 hour (13%)
Seminars	9 sessions of 1 hour (12%)
Online learning (independent)	10 sessions of 1 hour (13%)
Private study	48 hours (62%)
Total	77 hours

### Private study description

Private Study.

### Costs

No further costs have been identified for this module.

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## Assessment

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

### Assessment group D1

	Weighting	Study time
Class Test 1 (15 CATS)	5%	4 hours
Class Test 2	5%	4 hours
Participation	10%	7 hours
Examination	80%	58 hours

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## Weighting

## Study time

- Graph paper
- Students may use a calculator
- Answerbook Pink (12 page)

### Assessment group R1

#### Weighting

#### Study time

Online Examination  
~Platforms - AEP

100%

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- 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](#)

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### Availability

There is currently no information about the courses for which this module is core or optional.