IB004-15 Statistics

23/24

Department
> Warwick Business School

Level
> Foundation

Module leader
> Salimeh Pour Mohammad

Credit value
> 15

Module duration
> 10 weeks

Assessment
> 20% coursework, 80% exam

Study location
> University of Warwick main campus, Coventry

Description

Introductory description

This module is core for Foundation Year students only.

[Module web page](#)

Module aims

To equip students with the statistical knowledge and skills necessary for successful subsequent degree-level study in Accounting and Finance or Management.
To develop in students a critical awareness of the power of statistical tools for modelling the key characteristics of 'real world' business situations, and an appreciation of both their scope and limitations.
To equip students with the skills to interpret, report and critically appraise statistical information.
To encourage students to take responsibility for their own learning, and to evaluate their own development.

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.

Fundamental statistical concepts with the emphasis on critical appraisal of real-world statistics:

- Introduction to statistics and data visualisation.
- Descriptive statistics.
- Rules of probability.
- Correlation.
- Normal distribution.
- Binomial distribution.
- Introduction to Hypothesis Testing.
- Summarising information and statistical report writing. Statistical analysis for lay audiences, pulling together and summarising statistical information from diverse sources and good practice in reporting statistics (what to do and what not to do).
- Using software (e.g. SPSS / Excel) for statistical analysis.
- Poisson Distribution.

Learning outcomes

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

- Apply their repertoire of statistical tools and techniques to a variety of business problems.
- Construct rigorous arguments by framing precise statements that lend themselves to statistical inference.
- Undertake basic statistical analyses of data using appropriate statistical software.
- Interpret the results of statistical analyses, and use them to inform decision-making.
- Critically appraise reported statistical results, carefully considering the validity of the underlying assumptions.
- Produce well-written statistical reports.
- Critically appraise statistical data and to assess the accuracy, validity and reliability of reported results.
- Have the awareness to take responsibility for their own learning, and to evaluate their own development.

Indicative reading list

Bland M (2002) An Introduction to Medical Statistics (3rd ed., OUP).
Goldacre B (2009) Bad Science (Harper).
Siegel A (2012) Practical Business Statistics (6th ed., Elsevier).
A. Croft and R. Davison (2016) Foundation Maths, (6th Edition., Pearson).
D. Willoughby (2015) An Essential Guide to Business Statistics (1st ed., Wiley).

Subject specific skills

By the end of the module students should:

1. Have gained statistical knowledge and skills necessary for successful subsequent degree-level study in Accounting and Finance or Management.
2. Have developed a critical awareness of the power of statistical tools for modelling the key characteristics of 'real world' business situations, and an appreciation of both their scope and

limitations.
3. To be able to interpret, report and critically appraise statistical information.
4. To have developed the fundamental skills of statistical report writing.

Transferable skills

By the end of the module students should :

1. Be able to critically appraise statistical data and to assess the accuracy, validity and reliability of reported results.
2. Have the awareness to take responsibility for their own learning, and to evaluate their own development.
3. Have gained the fundamental skills of statistical report writing.

Study

Study time

Type	Required
Lectures	10 sessions of 4 hours (48%)
Private study	44 hours (52%)
Total	84 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
Individual Assignment (15 CATS)	20%	13 hours
Locally Timetabled Examination Exam (15 CATS)	80%	53 hours

~Platforms - AEP

Feedback on assessment

Feedback methods will be: full feedback on formal assessment: assignment and exam. Feedback will be provided within classes on in class work. Full solutions to any set exercises will be given. Formative homework will also be set and feedback given at set points in the term.

[Past exam papers for IB004](#)

Availability

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