

Statistics teaching within UK degree programmes in Medicine and allied health sciences, including through undergraduate and postgraduate entry schemes and intercalation

Note. This particular form is not for inclusion of details of statistical teaching in Masters and PhD programmes.

Please return form to Margaret MacDougall at Margaret.MacDougall@ed.ac.uk

Institution: University of Exeter Medical School, University of Exeter

Overview:

Medical students

Statistics is taught to 1st and 2nd year medical students on the Bachelor of Medicine, Bachelor of Surgery (BMBS) programme. The students are taught statistics within the framework of Making Sense of Evidence (Evidence Based Medicine) which aims to help them to develop the knowledge and skills to use research evidence to support their clinical decision making. The students are presented with a clinical problem, and then critically appraise a relevant paper for that problem. This requires the students to get to grips with basic statistical concepts. At the beginning of Year 1 the students attend a plenary 2-hour lecture in which an overview of statistics (description and inference) is presented. The Year 1 students attend two 1.5 hour small group sessions in which they critically appraise a research paper (one a randomised controlled trial and the other a systematic review). The Year 2 students attend two 1.5 hour small group sessions in which they critically appraise a research paper (one a diagnostic test accuracy study and the other an observational study).

Type of undergraduate students:

Medical Dental Biology
Mathematics Other (please state:)

Estimated total number of students: 130, per group when separated : 8

Academic years where medical statistics is taught: 1st year and 2nd year.

No. estimated hours per academic year: 5 hours in Year 1 and 3 hours in Year 2.

[Type here]

Please add fields to the table below, where necessary, to reflect missing subjects. This can easily be achieved by right-clicking in the last row and choosing the option 'insert' to insert individual rows. You can in turn copy-paste the content from an existing row and edit the subject name to suit your purposes.

Medical students – subjects taught

Subject	Concept	Calculations/equations*	Descriptions/comments
Types of variable	✓	<input type="checkbox"/>	
Distributions	<input type="checkbox"/>	<input type="checkbox"/>	
Summary Statistics	✓	<input type="checkbox"/>	
Concepts of population and sample	✓	<input type="checkbox"/>	
Confidence intervals	✓	<input type="checkbox"/>	
Hypothesis testing, p-values	✓	<input type="checkbox"/>	
Comparing two means	✓	<input type="checkbox"/>	
Comparing two proportions	✓	<input type="checkbox"/>	
Linear regression	<input type="checkbox"/>	<input type="checkbox"/>	
Logistic regression	<input type="checkbox"/>	<input type="checkbox"/>	
Graphs	✓	<input type="checkbox"/>	
Survival analysis	✓	<input type="checkbox"/>	
Multivariate analysis	<input type="checkbox"/>	<input type="checkbox"/>	
Critical appraisal	✓	<input type="checkbox"/>	
Other (Randomised Trials)	✓	<input type="checkbox"/>	Critical appraisal of
Other (Meta-analysis)	✓	<input type="checkbox"/>	Critical appraisal of
Other (Diagnostic test accuracy)	✓	✓	Critical appraisal of
Other (Observational studies)	✓	<input type="checkbox"/>	Critical appraisal of

*If applicable.

[Type here]

Assessment details: There is no formal assessment although some statistics multiple choice questions are included as part of the Advanced Medical Knowledge (AMK) Progress Tests that the students take throughout the BMBS programme.

Computer package used:

Stata SPSS StatsDirect S-plus R
NCSS Matlab Other , please state which :

Recommended literature :

Harris and Taylor (2013) *Catch up Maths and Stats for the Life and Social Sciences*. Scion Publishing Limited

Kirkwood and Sterne (2003) *Essential Medical Statistics*. Wiley -Blackwell

Contact - administration

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Contact - tutors

Name	Department	Email	Address	Telephone Number

Other comments:

Information last up to date: 09/08/2019

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