

# 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.

Institution: University of Leicester

Overview: All medical students are taught basic statistical concepts, epidemiology and research methodology as part of the Population and Social Science (PaSS) module that runs across years 1 and 2 of the undergraduate medical degree. This has a focus on understanding the evidence and on critical appraisal rather than being focused on developing skills required to undertake a research project.

Type of undergraduate students:

Medical                       Dental                       Biology

Mathematics                       Other  (please state:                      )

Estimated total number of students: 280, per group when separated : 35

Academic years where medical statistics is taught: 1 and 2

No. estimated hours per academic year: 28

**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.**

| Subject           | Concept                  | Calculations/equations*  | Descriptions/comments |
|-------------------|--------------------------|--------------------------|-----------------------|
| Types of variable | <input type="checkbox"/> | <input type="checkbox"/> |                       |
| Distributions     | <input type="checkbox"/> | <input type="checkbox"/> |                       |

|                                   |                                     |                                     |
|-----------------------------------|-------------------------------------|-------------------------------------|
| Summary Statistics                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Concepts of population and sample | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Confidence intervals              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Hypothesis testing, p-values      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Comparing two means               | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Comparing two proportions         | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Linear regression                 | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Logistic regression               | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Graphs                            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Survival analysis                 | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Multivariate analysis             | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Critical appraisal                | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Other (please state)              | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Other (please state)              | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Other (please state)              | <input type="checkbox"/>            | <input type="checkbox"/>            |

\*If applicable.

Assessment details: Single Best Answer and Short Answer Questions, with formula for calculating 95% CI for a Poisson distribution provided at the appropriate question.

Computer package used:

Stata  SPSS  StatsDirect  S-plus  R

NCSS  Matlab  Other , please state which : None. A calculator with a natural logarithm function is all that is required.

Recommended literature : AFMC Primer on Population Health - A virtual textbook on Public Health concepts for clinicians. <https://afmc.ca/medical-education/public-health>

*Contact - administration*

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*Contact - tutors*

| Name | Department | Email | Address | Telephone Number |
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Other comments:

Information last up to date: 22/08/2019

Please return to Margaret MacDougall at [Margaret.MacDougall@ed.ac.uk](mailto:Margaret.MacDougall@ed.ac.uk)