



Applied Statistics short courses 2010

From the Statistical Services Centre

Courses and consultancy



MSc International Health students studying an Advanced Epidemiological Methods module at the Institute of Tropical Medicine, Charité University, Berlin and Reading University course presenters, from right to left: Professor Dankmar Böhning (Applied Statistics) and James Gallagher (SSC). July 2009. © SSC.

Introduction

Welcome to the Statistical Services Centre's brochure for 2010. In it you will find information on:

- the annual programme of short courses which will be run at Reading
- commissioned courses that can be run in Reading or at client premises
- our consultancy services.

The timetable for the short course programme is on pages 3–4. Course descriptions, prices, registration forms and our terms and conditions are available from our website, or by contacting us directly. You will also find up-to-date information and any additional courses, including e-learning courses, on the website.

All courses on the advertised programme are available for commission by client organisations. We also tailor courses to meet the specific needs of clients. See page 5 for further information.

The Statistical Services Centre (SSC) offers a range of statistical consultancy services from one-off pieces of work to longer-term involvement in a project. See page 6 for further information.

Added value

Discounts are available to participants attending consecutive short courses. An academic discount is also available. Please check out the website, or contact us, for further information.

Detailed contact information is provided on the back cover, alternatively you can email us as follows:

For training
statistics-courses@lists.reading.ac.uk

For consultancy
statistics@lists.reading.ac.uk

We are happy to discuss your needs.

Short course programme

Courses

Our programme of short courses includes a wide range of topics, from essential materials for the inexperienced user of statistics through to technically advanced materials for experienced statisticians. The courses are from one to three days' duration.

All courses aim to provide practical experience. The more elementary ones place considerable emphasis on understanding of concepts and interpretation of results, and will furnish you with a good level of statistical competence. The more advanced courses provide up-to-date coverage of topics at the standard of current-day MSc level. Courses on offer cover both established and modern methods. They concentrate on techniques and tools that applied statisticians might need in their day-to-day work. **Individual course details are available on the website.**

Teaching and learning style

Courses are presented as a mixture of lectures, demonstrations and hands-on computer practical sessions. This allows course participants to gradually build-up their knowledge, while at the same time put into practice what they have learned. Classes are of a limited size, 18 or fewer, which encourages interaction between participants and presenters. During practical sessions, staff members are available to assist and discuss material with you. A participant-staff ratio of 8 to 1, or better,

during these sessions gives ample opportunity for further discussion. All courses are presented in English.

Software

Many of the more elementary courses offer a choice of software for computer practical work. This allows participants to select a package that is most relevant for their needs, or to use familiar software, so they can concentrate on the statistics. Currently the choice includes GenStat, MINITAB, R, SAS, SPSS and Stata.

A further package, Instat, developed at the University of Reading, may also be chosen on some of these courses. Microsoft® Excel and our Excel add-in SSC-Stat may be used on A Review of Basic Statistics. Both Instat and SSC-Stat are free for individual course participants to take away.

Some of the more advanced courses, as well as using reliable statistical software with advanced capabilities such as SAS, also use more specialist software, e.g. the multilevel modelling package MLwiN and the WinBUGS software for Bayesian methodology.

Facilities

All courses take place in our purpose-built training rooms on the University's Whiteknights campus. All rooms are air-conditioned.

Course timetable 2010

January	28 January	Statistics for University Administrators
February	8–9 February	A Review of Basic Statistics
	10–11 February	Regression Analysis: A Hands-on Approach
	17–18 February	Survival Analysis for Medical and Health Professionals
	24–26 February	Practical Bayesian Data Analysis
March	8–9 March	The Incomplete and Utter Guide to Statistics
	15–16 March	Modelling Binary and Categorical Repeated Measurement Data
	17–18 March	Microsoft® Excel 2007 for Statistics? What you can and cannot do
	19 March	Taking Microsoft® Excel 2007 Further: Macros for Data Management and Statistics
April	13–14 April	Multilevel Modelling
	19–20 April	A Review of Basic Statistics
	21–22 April	Introduction to Analysis of Variance (ANOVA)
	26–27 April	Introduction to Capture-Recapture Techniques
May	18–19 May	Repeated Measurements Analysis
	20–21 May	Analysis of Binary and Categorical Data
	26–27 May	Statistical Modelling and Graphics using R
June	8–10 June	Introduction to Epidemiological Methods

July	14–16 July	Advanced Topics in Survival Analysis
	19–20 July	A Review of Basic Statistics
	21–22 July	Regression Analysis: A Hands-on Approach
August	No courses	
September	22 September	Statistics for University Administrators
	23 September	Validation of Diagnostic Tests
	27–28 September	A Review of Basic Statistics
	29–30 September	Regression Analysis: A Hands-on Approach
October	4–5 October	General Linear Models
	6–8 October	Analysis of Mixed Models
	20–22 October	Introduction to Survival Analysis
November	8–9 November	Analysis of Generalised Linear Mixed Models
	17–19 November	Microsoft® Access 2007 for Data Management: A Hands-on Approach
	25–26 November	Statistical Modelling in Epidemiology
	29–30 November	A Review of Basic Statistics
December	1 December	What Sample Size Do I Need?

Commissioned courses

Where a company or institute has several staff members with a common training requirement, the SSC can provide a commissioned (bespoke) course, or programme of courses, targeted to address specific needs.

Commissioned courses can be run either at our training centre at the University of Reading or at the client's premises. Course content, pace, timing and duration are determined in discussion with the client.

In order to put ideas and methods into a context that is relevant to the client, course materials can include examples based on the client's own data and, if appropriate, practical work can use the client's software package. This approach to training has made our commissioned courses very popular.

We are able to provide training in a wide range of statistical topics, particularly in the areas of application described under our Consultancy services section on page 6. In addition to the courses mentioned in this brochure, we can devise bespoke training in, for example:

- design and analysis of experiments
- generalised linear models
- survey methods
- non-parametric methods
- environmental and climatic statistics
- non-linear modelling
- multivariate analysis
- dealing with data from participatory studies
- computationally intensive methods.



Friends bridge at Whiteknights campus

Consultancy services



Whiteknights House

The Statistical Services Centre has over 25 years' experience in the provision of statistical consultancy services. Our client-base is broad, and covers the public and private sectors as well as non-governmental organisations. Areas of application include:

- research and development in industry
- development projects
- market and social research
- agriculture, forestry and fisheries
- the environment
- animal health
- meteorology/climatology.

What we offer

- one-off or longer-term involvement in projects as advisers on study design, sampling, statistical analysis, data management and reporting
- independent reviews of reports or working practices
- on-site help desks
- call-down contracts
- data analysis services

- training needs assessment
- specialist advice on the use of advanced statistical methodology
- independent advice about use of statistical software
- development of novel statistical approaches to difficult or non-standard problems.

We are also interested to partner organisations in bidding for contracts involving data collection or analysis.

How you might benefit

At the SSC we endeavour to address our customers' needs, whether elementary or sophisticated. We work collaboratively with clients and, whenever possible, support and build on their existing skills and resources. We encourage good statistical practice and help our clients to apply modern statistical methods to their practical problems.

SSC skills and expertise

We offer a broad range of statistical and computing skills, different experiences and up-to-date knowledge on a variety of statistical methods. As well as the expertise that underpins the short course programme advertised here, our other interests include:

- research methods
- survey design and sampling methods
- experimental design
- design and analysis of research that uses participatory approaches.

SSC background




Harry Pitt Building

Founded in 1983 the Statistical Services Centre (SSC) is a not-for-profit self-financing body at the University of Reading, UK. We provide consultancy and training in both statistics and data management to a broad client base in the UK, Europe and developing countries. The short course programme that is advertised here attracts participants from all over the world.

The SSC currently has nine statisticians and two computing professionals who undertake consultancy and training, plus a small administrative team who look after the non-technical aspects of our work. Amongst us we have fluent speakers of French, Italian and Spanish.

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 For more information, please contact:

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