2013 Application Form Research and Statistics Summer School

Offered by:

Offered by the Bamford Centre for Mental Health and Wellbeing in association with the MRC All Ireland Hub for Trials Methodology Research and the Psychology Research Institute. Organised by the Lifelong Learning at the University of Ulster.

Please indicate the sessions you wish to attend

Monday 26 - Wedn	esuay 26 August:
	Randomised Trial Course
Thursday 29 August	
(Please tick one)	
	SPSS for Beginners
	An introduction to Economic Evaluation in Healthcare
Friday 30 August	
	Linear and logistic regression using SPSS
Monday 2 Septem	ber
(Please tick one)	
	Regression models for multinomial, Poisson and survival data using SPSS
	Qualitative Research Methodology
Tuesday 3 Septem	ber
Tuesday 3 Septem (Please tick one)	ber
	Introduction to Structural Equation Modelling and Moderated-Mediation in Mplus
	Introduction to Structural Equation Modelling and Moderated-Mediation in
	Introduction to Structural Equation Modelling and Moderated-Mediation in Mplus Introduction to NVIVO (Qualitative Research Methodology)
(Please tick one)	Introduction to Structural Equation Modelling and Moderated-Mediation in Mplus Introduction to NVIVO (Qualitative Research Methodology)
(Please tick one)	Introduction to Structural Equation Modelling and Moderated-Mediation in Mplus Introduction to NVIVO (Qualitative Research Methodology) tember Measurement theory and factor models using SPSS, AMOS and Mplus
(Please tick one) Wednesday 4 Sept	Introduction to Structural Equation Modelling and Moderated-Mediation in Mplus Introduction to NVIVO (Qualitative Research Methodology) tember Measurement theory and factor models using SPSS, AMOS and Mplus
(Please tick one) Wednesday 4 Sept	Introduction to Structural Equation Modelling and Moderated-Mediation in Mplus Introduction to NVIVO (Qualitative Research Methodology) tember Measurement theory and factor models using SPSS, AMOS and Mplus mber Latent class analysis

Fee enclosed: £









For bookings and queries:

Contact:

If you have any queries regarding the Summer School please contact Dr Gillian Shorter email: gw.shorter@ulster.ac.uk

If you have any queries regarding registration and other administrative matters contact Lifelong Learning Business Support Unit on 0044 28 90 366680 or email lifelonglearning@ulster.ac.uk

Lifelong Learning University of Ulster Jordanstown campus **Shore Road** Newtownabbey **BT37 0QB**

Tel: +44 (0)28 9036 6680 Fax: +44 (0)28 9036 6060

Email: lifelonglearning@ulster.ac.uk





22nd Annual **Research and Statistics Summer School 2013**

> 26 August - 6 September 2013 University of Ulster, Magee Campus

A two-week school on randomised trials, methods, measurement and statistical analysis for the Behavioural and Social Sciences

Research and Statistics

Summer School 2013

Monday 26 - Wednesday 28 August

Randomised trial course

This is a three day course delivered by the MRC All Ireland Hub for Trials Methodology Research. The course is highly interactive between faculty and participants in a blend of theoretical and practical experience delivered by lectures and problem-based small group work. As randomised trials are the principal means by which interventions, actions and strategies are evaluated, this course will help you to design and identify high quality trials in your research area. The course will improve your knowledge and skills in trial planning, design, conduct, analysis and management. It draws upon extensive experience from the Hub who have expertise in running RCTs in a wide range of settings, and who have attracted research funding from, among others, Diabetes UK, Medical Research Council, National Institute of Health Research and Cancer Research UK.

Day 1 will introduce randomised trials, and cover the formulation of research questions, participant eligibility and randomisation, ethics and data storage, and the preparation of a trial protocol.

Day 2 will consider recruitment issues, building a trial team, costing your trial, and choosing and analysing trial outcomes.

Day 3 will be dedicated to health economic evaluation, the use of social networks in trial design, dissemination strategies, and a wrap up of the

Thursday 29 August

SPSS for Beginners

This session is designed for those who have little or no experience with SPSS, or those who require a refresher course. The course covers the design and analysis of questionnaire type research with a particular emphasis on the manipulation and preparation of data for statistical analysis. The course aims to provide participants with the ability to compute, recode and group variables in preparation for analysis; to carry out basic descriptive statistical analyses, produce graphs, charts and tables and to carry out chi-square and T-tests on data.

OR

An Introduction to Economic Evaluation in Healthcare

Economic evaluation plays a vital role in the healthcare decision-making process. This session will be of interest to individuals wishing to gain an understanding of health economic concepts and methods, and the different types of health economic evaluation and their application. Through a combination of presentations and practical exercises, the course will examine the basic concepts and components of economic evaluation as well as steps to cost and outcome measurement relevant to cost-of-illness studies, cost-effectiveness/utility analysis and cost-benefit analysis. The course aims to provide participants with an understanding of the importance of health economic evaluation in informing allocation of healthcare resources and the ability to identify an appropriate type of economic evaluation that may be applied to epidemiological or intervention

Friday 30 August

Linear and logistic regression using SPSS

Linear regression is a common statistical method used to study relationships between a continuous outcome and one or more predictor variables. If the outcome is a binary or categorical response, logistic regression is appropriate for use. The course aims to provide participants with the ability to fit and interpret simple linear regression models using SPSS and to introduce binary logistic regression. Model building strategies will be discussed

Monday 2 September

Regression models for multinomial, Poisson and survival data using SPSS

Regression modelling can be used to analyse outcome variables of a wide variety of formats, such as categorical data (multinomial models), count data (Poisson models), and time-to-event data (Survival data). The course aims to provide participants with the ability to fit and interpret multinomial and Poisson models using SPSS and to help participants appreciate the distinct nature of survival data.

Qualitative Research Methodology

Provides an introduction to different types of qualitative research methods, and how and why they might be used. This workshop will be useful for those wishing to gain knowledge of qualitative research methodology, and could act as a useful revision tool before undertaking a study using qualitative methods

Tuesday 3 September

Introduction to Structural **Equation Modelling and Moderated-Mediation in Mplus**

This course introduces structural equation modelling, and provides practical experience in conducting a moderated-mediation model using Mplus. Topics covered include basic components of structural equation modelling, path analysis, direct and indirect effects, interaction effects, and combining moderation and mediation. Conditional indirect effects (moderated mediation) and the mediation of moderated effects (mediated moderation) will both be examined.

The course is delivered by a combination of lectures and interactive sessions including theoretical concepts and practical examples. Towards the end of the course there will be opportunities to ask questions in relation to analysing your own data.

An Introduction to NVIVO

Provides an introduction to NVIVO software, a computer analysis programme for qualitative researchers. The workshop is for those who would like the opportunity to use the NVIVO programme. Participants will have the opportunity to undertake some practical qualitative research using this software using the IPA/Grounded Theory method, and is aimed at those with little or no experience of NVIVO.

Wednesday 4 September

Measurement theory and factor models using SPSS, AMOS and Mplus

Reliability and validity are vital in research. This course examines theories relating to the application of reliability and validity within quantitative research, and how the information obtained can be used to correct for measurement error in statistical analysis. The course will provide participants with the tools to run factor measurement models in Mplus, SPSS and Amos and interpret the output. It will also demonstrate how to integrate good measurement into standard statistical procedures like Regression or ANOVA.

Thursday 5 September

Latent Class Analysis using Mplus

Latent class analysis (LCA) is an important approach for understanding diverse behaviours in data by helping to characterise the nature of complex groups. This course will teach respondents how to conduct LCA in categorical data, and explore the nature of these groups using correlated variables. In addition to LCA, other related techniques will be discussed, such as Latent Profile Analysis, longitudinal methods and latent class factor analysis. The course aims to provide the participants with skills to perform a LCA with regression, and understand the wide utility of this technique.

Friday 6 September

The Analysis of change (AMOS and Mplus)

A range of longitudinal models will be examined including latent growth, repeated measures ANOVA and time varying and time invariant models, mixture models, fixed and random effects models and the examination of measurement models within the analysis of change. These models will be examined in the context of measures taken on a number of occasions and within a randomised trial context. The course aims to provide participants with the ability to choose the appropriate statistical model for their research design and participants will have the opportunity to apply their knowledge and run a latent growth model on clinical trial data.

For more details see

www.science.ulster.ac.uk/bamfordcentre/ summer-school

Course faculty include:

Prof. Brendan Bunting Allison Gillen. Prof. Mike Clarke **Prof. Vivien Coates** Louise Dunlop **Dr Finola Ferry**

Dr Lisa Maguire **Dr Liam Mahedy** Dr Helen McAneney

Dr Danny McCauley

Ron McDowell Dr Christel McMullan Prof Siobhan O'Neill Dr Gillian Shorter

Information:

Sessions run from 9.30am until 5pm (5.30pm for Day 1 and Day 2 of Randomised trial course)

Fees are £120 per day including lunch and refreshments. There will be a reduction for the unwaged/students to £60 per day upon evidence of status. A 20% discount will be given where the booking is for a period of five or more days.

Cancellation policy

All fees must be paid PRIOR to attendance at Summer School. The last date for payment of fees is Monday 19th August 2013. If you wish to withdraw from the course you must give 7 days' notice otherwise full fees are payable.

The University reserves the right to decline registrations where numbers exceed capacity. The University reserves the right to cancel the course due to insufficient numbers.

2013 Application Form **Research and Statistics**

Dates: 26 August- 6 September 2013

Where did you hear about the summer school?
(Please print name in capitals) Full Name & Title: (Prof / Dr / Mr / Mrs / Miss / Ms)
Home Address:
Postcode:
Tel No. (Home):
Tel No. (Work):
Fax or Email:
Name and address of organisation:
Postcode:
Position held:
Signed:
Date:
Pay by Credit Card (if you wish to pay by credit card please complete)
Charge my credit card: VISA MASTERCARD
Credit card number:
Expiry date:
Name on card:
Billing address:
·

