

**Social Statistics, School of Social Sciences
University of Manchester**

**MSc Degree and Postgraduate Diploma in
Social Research Methods and Statistics (SRMS)**

<http://www.socialsciences.manchester.ac.uk/subjects/social-statistics/>

**Programme Handbook
2020-2021**

CONTENTS

<u>INTRODUCTION</u>	<u>3</u>
<u>TEACHING STAFF & CONTACTS</u>	<u>4</u>
<u>INFORMATION POINTS & COMMUNICATION</u>	<u>14</u>
<u>GETTING STARTED</u>	<u>17</u>
<u>SRMS TIMETABLE</u>	<u>19</u>
<u>DROP-IN SESSIONS AND WORKSHOPS</u>	<u>21</u>
<u>SRMS PROGRAMME</u>	<u>22</u>
<u>DISSERTATION</u>	<u>25</u>
<u>SRMS AWARDS</u>	<u>28</u>
<u>TIER 4 VISA HOLDERS</u>	<u>29</u>
<u>COURSE MODULE OUTLINES</u>	<u>31</u>

INTRODUCTION

A Warm Welcome to all SRMS students From Professor Tarani Chandola Head of the Department of Social Statistics

We are very happy to welcome you here to the Department of Social Statistics. Our teaching is research-led and we work closely with other Research Centres and Institutes in the School of Social Sciences and across the University of Manchester.

You have joined in a Masters Degree/Diploma, which can include independent research in the MSc Dissertation. Those on the Diploma may wish to extend and continue their studies into MSc.

We have numerous part-time students, who are very welcome.

Students come from all over the world from right here in Manchester to Chile. Last year, we found that the student who came from the furthest point away from Manchester was from Vietnam.

We also have students from Criminology, Data Science, and the SOC-B Doctoral Training Partnership (bio-social topics). Some PhD students may also join your classes from time to time.

If you need help we can advise you on some English learning resources. These are at the English Language Centre.

If you have a disability, please could you disclose this to our Disability Office (DASS) so that we can best support your needs.

In the first weeks of your course you will be allocated a personal tutor who will support your learning and meet with you (virtually) twice in the 1st semester.

As you know teaching in Term 1 will be on-line and tools and learning materials have been developed to support you.

If face to face teaching in the same room is allowed and you would like such contact, we will also have regular sessions where you can learn more about Social Statistics and chat to lecturers and your fellow students.

We will support your search of a job towards the end of your course.

If you have any further queries after reading this handbook, please contact Dr Kingsley Purdam, Tina Hannemann Programme Directors or the SRMS Postgraduate Administrator.

Learning Links:

My Manchester

<https://my.manchester.ac.uk/uPortal>

My Learning Essentials

<https://www.library.manchester.ac.uk/using-the-library/students/training-and-skills-support/my-learning-essentials/>

Handbooks

<http://www.socialsciences.manchester.ac.uk/student-intranet/postgraduate/postgraduate-taught/handbooks/>

<http://www.socialsciences.manchester.ac.uk/student-intranet/postgraduate/postgraduate-taught/>

TEACHING STAFF & CONTACTS

Personal Tutors

Social Statistics allocate a personal tutor for all SRMS students. Your tutor should be the first port of call for any problems you have that are not specific to a particular module. The tutor will also assist you with module selection and with personal development planning and any additional training you would like to take. Please contact your personal tutor to set up your first meeting.

For module specific support, students are also encouraged to make use of the 'office hours' provision offered by all teaching staff on the SRMS programme. Please contact the lecturer by email to arrange an on-line meeting.

The SRMS programme director is also available for academic guidance or to discuss issues of a personal nature that may have an impact on your ability to study and/or meet course requirements. The programme director is available to meet students during dedicated office hours or at other times by appointment.

General queries regarding the course should be directed to the SRMS Postgraduate Administrator – Amanda Bridgeman.

Programme Directors

Dr Kingsley Purdam

Email: kingsley.purdam@manchester.ac.uk

Dr Tina Hannemann

Email: tina.hannemann@manchester.ac.uk

SRMS Postgraduate Programme Administrator

Amanda Bridgeman

Email: Amanda.Bridgeman@manchester.ac.uk

Location: Postgraduate Office, Room 2.003, Arthur Lewis Building

MSc Criminology students belong to the School of Law and should follow their regulations.

Programme Administrator

Nuria Hortiguuela Loeches

Email: nuria.hortiguuela@manchester.ac.uk

All teaching staff in Social Statistics and CMI keep regular office hours for student consultation (although they can often be contacted at other times). Students contact their lecturers by e-mail to make an appointment.

Dr. Mark Brown

Reader

Location: Room G24, Humanities Bridgeford Street

Email: mark.brown@manchester.ac.uk

Mark joined CMI in 1996. A research background in demography (fertility transition and aspects of the demography of UK ethnic minority populations), his research interests now increasingly lie in curriculum innovation in quantitative methods teaching. This is an area in which he has held a number of research grants including co-founding the Manchester Q Step Centre, a major inter-disciplinary programme to embed and expand the use of quantitative data and methods in undergraduate Social Science programmes at Manchester.

Selected Publications

- Brown M (2017) Making students part of the dataset: a model for statistical enquiry in social issues Teaching Statistics Journal Vol 39 (3) <https://doi.org/10.1111/test.12131>
- Carter J, Brown M and Simpson K (2017) From the classroom to the workplace: how social science students are learning to do data analysis for real, Statistics Education Research Journal 16 (1). pp. 80-101. ISSN 1570-1824

Professor Jackie Carter**Professor of Statistical Literacy**

Location: Room G28, Humanities Bridgeford Street

Email: Jackie.carter@manchester.ac.uk

Jackie joined the University of Manchester in 1996. In 2020 she was awarded a national Teaching Excellence Award, by Advance HE, for her work on opening up the workplace to social science students through a paid internship programme she developed. She has a background in teaching and researching data and statistical literacy and a track record in developing links with the public, private and voluntary sectors in applied social research. She has undertaken a secondment with the ONS's Data Science Campus team and is a member of ESRC's Strategic Advisory Network and a member of the Urban Big Data Centre's advisory board. Jackie is Co-Director of the Manchester Q Step Centre, where she leads on the paid internship programme placing students in organisations to practise their statistical and data analysis skills. She is also working with partners in Latin America (Brazil, Colombia and Mexico) to explore a data fellows programme in support of delivering the Sustainable Development Goals.

Selected Publication

- Carter J (forthcoming) Work placements, internships and applied research (Sage).
- Carter J, Brown M and Simpson K (2017) From the classroom to the workplace: how social science students are learning to do data analysis for real, *Statistics Education Research Journal* 16 (1). pp. 80-101. ISSN 1570-1824
- Carter, J. & Nicholson, J. R. (2016). *Teaching statistical literacy by getting students to use real world data: 40 years worth of experience in 40 minutes*. In J. Engel (Ed.) *Proceedings, IASE 2016 Roundtable Berlin*.
- Carter, J., Brown, M. & Morgan Brett B. (2014) Creative Teaching in Health and Social Care using the UK Data Service. In *Health and Social Care Education* (Higher Education Academy)
- Buckley J, Brown M, Thomson S, Olsen W & Carter J (2015) 'Embedding quantitative skills into the social science curriculum: case studies from Manchester' *International Journal of Social Research Methodology*

Dr Alexandru Cernat**Lecturer in Social Statistics**

Location: Room G15, Humanities Bridgeford Street

Email: alexandru.cernat@manchester.ac.uk

Alexandru Cernat is a senior lecturer in the Social Statistics Department at the University of Manchester. He has a PhD in survey methodology from the University of Essex and was a post-doc at the National Centre for Research Methods and the Cathie Marsh Institute. His research and teaching focus on: survey methodology, longitudinal data, measurement error, latent variable modelling, new forms of data and missing data. You can find out more about him and his research at:

www.alexcernat.com

Selected publications:

- Cernat, A., & Sakshaug, J. (2020). The Impact of Nurse Continuity on Biosocial Survey Participation. *Survey Methods: Insights from the Field (SMIF)*. <https://doi.org/10.13094/SMIF-2020-00010>
- Cernat, A., & Revilla, M. (2020). Moving from Face-to-Face to a Web Panel: Impacts on Measurement Quality. *Journal of Survey Statistics and Methodology*. <https://doi.org/10.1093/jssam/smaa007>
- Cernat, A., & Sakshaug, J. (2020). Nurse effects on measurement error in household biosocial surveys. *BMC Medical Research Methodology*, 20(1), 45. <https://doi.org/10.1186/s12874-020-00922-2>
- Cernat, A., & Sakshaug, J. (2020). The Impact of Mixed Modes on Multiple Types of Measurement Error. *Survey Research Methods*, 14(1), 79–91. <https://doi.org/10.18148/srm/2020.v14i1.7450>
- Cernat, A., Sakshaug, J., & Castillo, J. (2019). The Impact of Interviewer Effects on Skin Color Assessment in a Cross-National Context. *International Journal of Public Opinion Research*. <https://doi.org/10.1093/ijpor/edy030>

- Antoun, C., & Cernat, A. (2019). Factors Affecting Completion Times: A Comparative Analysis of Smartphone and PC Web Surveys: Social Science Computer Review. <https://doi.org/10.1177/0894439318823703>
- Sakshaug, J. W., Cernat, A., & Raghunathan, T. E. (2019). Do Sequential Mixed-Mode Surveys Decrease Nonresponse Bias, Measurement Error Bias, and Total Bias? An Experimental Study. *Journal of Survey Statistics and Methodology*, 1–27. <https://doi.org/10.1093/jssam/smy024>

Professor Tarani Chandola

Professor of Medical Sociology

Location: Room G25, Humanities Bridgeford Street

Email: tarani.chandola@manchester.ac.uk

Tarani is a Professor of Medical Sociology and a co-director of the ESRC National Centre for Research Methods (NCRM). Tarani's research is primarily on the social determinants of health, focusing on health inequalities and psychosocial factors, and the analysis of longitudinal cohort studies. Much of his research is on stress at work and its effects on health and well-being. His current funded research projects include the International Centre for Lifecourse Studies in Society and Health (ICLS, ESRC funded) and the DIPLOMA Research Programme on evaluating the NHS Diabetes Prevention Programme (NIHR funded).

Selected Recent Publications

- T Chandola, N Zhang (2017) Re-employment, job quality, health and allostatic load biomarkers: Prospective evidence from the UK Household Longitudinal Study. *International Journal of Epidemiology*.
- JF Trani, P Kumar, E Ballard, T Chandola (2017) Assessment of progress towards universal health coverage for people with disabilities in Afghanistan: a multilevel analysis of repeated cross-sectional surveys. *The Lancet Global Health*
- T Chandola, P Rouxel, MG Marmot, M Kumari (2017) Retirement and Socioeconomic Differences in Diurnal Cortisol: Longitudinal Evidence From a Cohort of British Civil Servants. *The Journals of Gerontology: Series B*.

Dr Clelia Cascella

Lecturer in Social Statistics and Social Research

Location: Room 2.13X, Humanities Bridgeford Street

Email: clelia.cascella@manchester.ac.uk

After a Ph.D. in Research Methodology and a Ph.D. in Economics, Clelia was Research Fellow at the Manchester Institute of Education before being appointed as Lecturer in Social Statistics at the University of Manchester. Her main research interest is in (mathematics) education focusing on gender differences in learning mathematics, learners' attitudes and dispositions and their relationship with teaching practices. Her recent Marie Curie project (183K €) aims to explore the effect of environmental social, cultural, economic and historical factors affecting gender differences in mathematics, in a comparative perspective across all European countries, and within each of them at different levels of regionality. Most of her research activity is based on secondary data from national and international surveys and spread across various areas of social research methodology and advanced quantitative methods, including measurement and assessment with focus on the use of the Rasch model and other Item Response Theory Models, Longitudinal and Multilevel modelling.

Selected publications

- Cascella C., Pampaka M. (2020) Rasch-based validation of attitudes towards gendered roles in family. *Journal of Applied Measurement*, Vol. 21, n. 2.
- Cascella C., Giberti G., Bolondi G., (2020). A differential item functioning analysis to explore gender gap in math tasks. *Studies in Educational Evaluation* Vol. 62 (May)
- Cascella C., (2019). Intersectional effects of Socioeconomic status, phase and gender on Mathematics achievement. *Educational Studies*, Vol. 46, n. 4, 1–21.

- Cascella, C., Pampaka, M., & Williams, J. (2018). "Regional differences count: An intra-national exploration of gender (in) equality in mathematics education". In Curtis, F. (Ed.) Proceedings of the British Society for Research into Learning Mathematics 38 (3) November 2018.
- Cascella, C., Williams, J., Pampaka, M. (2018). Latent heterogeneity in large-scale assessment as possible source of unfair decisions: an empirical example. Pacific-Rim Objective Measurement Symposium (PROMS 2018, Shanghai, China).
- Bolondi, G., Cascella, C., & Giberti, C. (2018). "How much item formulations affect the probability of a correct answer? An experimental study". In Curtis, F. (Ed.) Mathematics in the Classroom. Proceedings of the British Society of Research in Learning Mathematics, 38(2).
- Cascella, C. (2017). "Exploring the relationship between social roles in daily life and achievement gap between boys and girls in maths: Empirical evidences from Italian primary school". In 11th annual International Technology, Education and Development Conference Proceedings.

Dr Eduardo Fe

Senior Lecturer in Social Statistics

Location: Room G12 Humanities Bridgeford Street

Email: Eduardo.FE@manchester.ac.uk

Eduardo is a statistician/econometrician who uses secondary data as well as experiments to understand the development human traits (particularly health and cognition), from childhood to the old age. His econometric and statistical skills are wide ranging, but the focus of his recent publications has been on causal inference and nonparametric methods (with Regression Discontinuity and Partial Identification occupying a significant amount of his recent work).

Recent work and publications:

- Fé, E. and Hofler, R. (2020) sfcount: Stata command for count data stochastic frontiers and underreported and overreported counts, The Stata Journal
- Fé, E. (2020) Partial Identification of the Causal Effect of Retirement on Cognition. Available at SSRN: <https://ssrn.com/abstract=2993152>. R&R Journal of the Royal Statistical Society, Series A.
- Fé, E., Gill, D. and Prowse, V. (2020) [Cognitive skills, strategic sophistication, and life outcomes](#), IZA Discussion Paper 11326, <http://ftp.iza.org/dp11326.pdf>. R&R Journal of Political Economy

Dr Tina Hannemann

Lecturer in Social Statistics

Email: tina.hannemann@manchester.ac.uk

Location: Room G17, Humanities Bridgeford Street

Tina joined the Social Statistics department in 2016 as a researcher for CoDE. Later she moved to a research project with the National Centre for Research Methods (NCRM) investigating the impact on missing data and compensation methods in bio-marker research. She is a trained demographer with interest in several demographic topics, including family formation among ethnic groups, mortality and health differences across socio-economic strata and the impact of ethnic background on social inequalities.

Furthermore, she has an interest in demographic methodology such as survival analysis, longitudinal data analysis, quality evaluation of large-scale surveys and census data and cross-country comparative research.

- [Shankley, W.](#), [Hannemann, T.](#) & [Simpson, L.](#), (2020) The demography of ethnic minorities in Britain. In Ethnicity, Race and Inequality in the UK: State of the Nation. Byrne, B., Alexander, C., Khan, O., Nazroo, J. & Shankley, W. (eds.). Bristol: [Bristol University Press](#)
- Kulu, H., Milewski, N., Hannemann, T. & Mikolaj, J. (2019) A Decade of Life-course Research on Fertility of Immigrants and Their Descendants in Europe. Demographic Research, 40 (46), 1345–1374. <https://www.demographic-research.org/volumes/vol40/46/40-46.pdf>
- Hannemann T, Kulu H., et al. (2018). Co-ethnic marriage versus intermarriage among immigrants and their descendants: A comparison across seven European countries using event-history analysis.

Demographic Research, 39(17), 487-524. <https://www.demographic-research.org/volumes/vol39/17/39-17.pdf>

- Kreyenfeld, M., Geisler, E., Castro-Martin, T., Hannemann, T. et al. (2017). Social policies, separation, and second birth spacing in Western Europe. Demographic Research, 37(37), 1245–1274. <https://www.demographic-research.org/volumes/vol37/37/37-37.pdf>
- Kulu, H., Hannemann, T. et al. (2017). Fertility by birth order among the descendants of immigrants in selected European countries. Population and Development Review, 43(1), 31-60. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/padr.12037>
- González-Ferrer, A., Hannemann, T. & Castro Martin, T. (2016). Partnership formation and dissolution among immigrants in the Spanish context. Demographic Research, 35(1), 1-30. <https://www.demographic-research.org/volumes/vol35/1/35-1.pdf>
- Kulu, H., & Hannemann, T. (2016). Why does fertility remain high among certain UK-born ethnic minority women? Demographic Research, 35 (49), 1441-1488. <https://www.demographic-research.org/volumes/vol35/49/35-49.pdf>
- Hannemann, T. (2012): It Breaks a Man's Heart. Socioeconomic differences in the Onset of Cardiovascular Diseases in Contemporary Sweden. Lund University, Lund Studies in Economic History, 58. [https://portal.research.lu.se/portal/en/publications/it-breaks-a-mans-heart--socioeconomic-differences-in-the-onset-of-cardiovascular-disease-in-contemporary-sweden\(9ac1b33b-7a58-44dc-9b26-7d8f95f3391c\).html](https://portal.research.lu.se/portal/en/publications/it-breaks-a-mans-heart--socioeconomic-differences-in-the-onset-of-cardiovascular-disease-in-contemporary-sweden(9ac1b33b-7a58-44dc-9b26-7d8f95f3391c).html)

Professor Wendy Olsen

Professor of Socio-Economics

Location: Room 2.13Y, Humanities Bridgeford Street

Email: Wendy.Olsen@manchester.ac.uk

Telephone: skype wendyolseninmanchester

Wendy Olsen researches the social aspects of economic life. She has a consultancy background in development policy, as well as doing research and lecturing in development economics and social statistics. She received her PhD in Economics at Oxford University, and for many years she taught development studies. Her teaching also includes research methods, regression, factor analysis, questionnaire design, qualitative analysis, comparative research, and panel data analysis.

Wendy's research focuses on labour relations, wages, and employment in different country contexts. She writes about labour markets including the formal and informal sectors, child labour, women's rural labour supply and norms based on gender. She also studies the UK labour market and its gender pay gap, the allocation of paid work time, overtime, mothers' return-to-work transitions, self-employment and employment policy. Recently she has worked on Bangladesh and Indian social norms using mixed quantitative and qualitative methods.

Wendy has also carried out research on COVID19 transmission in India and the severity of the disease in both the UK and India, with funding from the Global Challenges Research Fund.

Selected Recent Publications

- Kim, Jihye, Olsen, W.K. and Arkadiusz Wisniowski (2020), A Bayesian Estimation of Child Labour in India, Child Indicators Research, DOI <https://doi.org/10.1007/s12187-020-09740-w>.
- Olsen, W. (2019), Bridging to Action Requires Mixed Methods Not Only Randomised Control Trials, European Journal of Development Research, 31:2, pp 139–162.
- Olsen, W.K. (2019) "Social Statistics Using Strategic Structuralism and Pluralism", in Frontiers of Social Science: A Philosophical Reflection. Nagatsu, M. & Ruzzene, A. (eds.). London: Bloomsbury Publishing.
- Musa, S., and W. Olsen (2018), Bonded Child Labour in South Asia: Building the Evidence Base for DFID Programming and Policy Engagement, Dep't for Int'l Development, URL <https://www.gov.uk/dfid-research-outputs/bonded-child-labour-in-south-asia-building-the-evidence-base-for-dfid-programming-and-policy-engagement>. University of Manchester, 80 pages.
- Olsen, W., V. Gash, S. Kim, M. Zhang (2018), The Gender Pay Gap in the UK: Evidence from the UKHLS, Research Report, Government Equalities Office, Dep't for Education, UK Gov't. URL

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/706030/Gender_pay_gap_in_the_UK_evidence_from_the_UK HLS.pdf

- Dubey, A., W. Olsen and K. Sen (2017), The Decline in the Labour Force Participation of Rural Women in India: Taking a Long-Run View, *Indian Journal of Labour Economics*, online edition, forthcoming in print 2018, DOI 10.1007/s41027-017-0085-0.
- Morgan, J., and W. Olsen (2015), "The Absence of Decent Work: The Continued Development of Forced and Unfree Labour in India", *Global Labour Journal*.
- Olsen, W.K. (2012) Data Collection: Key Trends and Methods in Social Research, London: Sage, in
- Olsen, W.K., and J. Morgan (2011) Informal Sector Institutional Change in Rural and Urban Development Contexts, *International Review of Sociology*, 20:3, 535-555.
- Morgan, J., and W. K. Olsen. "Conceptual Issues in Institutional Economics: Clarifying the Fluidity of Rules." *Journal of Institutional Economics* 7, no. 3 (2011) 425-454. eScholarID:82511 | doi:10.1017/S1744137410000299

Dr. Maria Pampaka

Senior Lecturer

Location: Room G17, Humanities Bridgeford Street

Email: maria.pampaka@manchester.ac.uk

Also based in Ellen Wilkinson Building

Maria Pampaka joined the Social Statistics disciplinary area in 2010, as a part time lecturer, while she has also been a researcher and then lecturer in Manchester Institute of Education, since 2005. During this time she has been working and leading various projects on the area of (mathematics) education, mainly focused on students' dispositions to continue with the study of mathematically demanding subjects. She has recently completed a meta-analysis and literature review on Maths Anxiety and a study funded by HEFCE to investigate Learning Gain at University. She is currently completing an Evaluation of a Randomised Control Trial of an intervention in Secondary schools. Methodologically, her interests fall into the broad areas of measurement and assessment with focus on the use of the Rasch models to construct measures from survey instruments. She is also applying statistical modelling with emphasis on complex longitudinal survey designs and analysis, data imputation and dealing with missing data problems. She is also interested in the application of tools from the complexity theory perspective (e.g. Agent based simulations, dynamic nonlinear modelling, etc).

Selected Recent Publications

- Prevett, P., [Pampaka, M.](#), Farnsworth, V., Kalambouka, A., & Shi, X. (In press). [A Situated Learning Approach to Measuring Financial Literacy Self-Efficacy of Youth](#). *Journal of Financial Counseling and Planning*.
- Buehler, E. D., & Pampaka, M. (2019). Validating a Measure of Numeracy Skill Use in the Workplace for Incarcerated and Household Adults. *Journal of Applied Measurement*, 20(3), p. 272-292.
- Pampaka, M., Swain, D., Jones, S., Williams, J., Edwards, M., & Wo, L. (2018). Validating constructs of learners' academic self-efficacy for measuring learning gain. *Higher Education Pedagogies*, 3(1), 118-144.
- Pampaka, M., Williams, J., & Homer, M. (2016). Is the educational 'what works' agenda working? Critical methodological developments. *International Journal of Research & Method in Education*, 39(3), 231-236. doi:10.1080/1743727X.2016.1170476
- Pampaka, M., & Williams, J. (2016). Mathematics teachers' and students' perceptions of transmissionist teaching and its association with students' dispositions. *Teaching Mathematics and its Applications*. doi:10.1093/teamat/hrw007
- Pampaka, M., Hutcheson, G., & Williams, J. (2016). Handling missing data: analysis of a challenging data set using multiple imputation. *International Journal of Research & Method in Education*, 39(1), 19-37. doi:10.1080/1743727X.2014.979146
- Troncoso, P., Pampaka, M., & Olsen, W. (2015). Beyond traditional school value-added models: a multilevel analysis of complex school effects in Chile. *School Effectiveness and School Improvement*, 1-22. doi:10.1080/09243453.2015.1084010

Dr Kingsley Purdam**Reader in Social Statistics and Social Research**

Location: Room G27, Humanities Bridgeford Street

Email: Kingsley.Purdam@manchester.ac.uk

Dr. K. Purdam is a lecturer in Social Statistics and Social Research at the University of Manchester. As applicant/co-applicant Dr. K. Purdam has secured and delivered £1.5 million of research funding across more than 50 challenging research projects. He has managed and supported the career development of a number of research assistants and supervised ten PhD students through to completion. He has held a number of senior roles and is the former director of Short Course Training for Professional Development in Research Methods and Academic Director of Staff Training. He teaches social research and social statistics and utilises task-based learning in his approach to teaching. Dr. K. Purdam has successfully delivered research and consultancy for: the Home Office, the Department for Work and Pensions, the Department for Communities and Local Government and the Electoral Commission. Dr. K. Purdam has conducted challenging research on homelessness and street begging including on behalf of the International Labour Organisation, Crisis and the Big Issue. He has published research in a number of leading academic journals and the national media.

Selected Recent Publications

- Contractor, S., Purdam, K., and Weller, P. (forthcoming) Understanding Non-Religion. *Journal of Contemporary Religion*.
- Purdam, K., and Prattley, J. (2020). Financial debt amongst older women in the United Kingdom – shame, abuse and resilience. *Ageing and Society*, 1-23.
- Purdam, K. and Silver, D. (2020) Social policy and embedded evaluation: Assessing the impact of a food insecurity project in the United Kingdom. *Social Policy and Administration*, 1– 18.
- Purdam, K. and Taylor, H. (2019) Life Expectancy in the UK. *Environment and Planning A*. July.
- Purdam, K., Garratt, E. and Esmail, A. (2018) Food Insecurity Amongst Older People in the UK. *British Food Journal*. 121, 3, 658-674.
- Elliot, M., O'Hara, K., Raab, C., O'Keefe, C., Mackey, E., Dibben, C., Gowans, H., Purdam, K. and McCullagh, K. (2018) Functional anonymisation <https://doi.org/10.1016/j.clsr.2018.02.001>
- Zhu, Y. and Purdam, K. Science Communication and Academic Super Users (2017) First Monday, November. <http://firstmonday.org/ojs/index.php/fm/article/view/7866>
- Purdam, K., Weller, P., Contractor, S. and Ghanea, N. (2017) The Impact of Human Rights and Equality Laws. *Politics, Ideology and Religion*, 18, 1 73-88.
- Purdam, K. (2017) The Devolution of Health Funding in Greater Manchester in the UK: A Travel Map of Life Expectancy. *Environment and Planning A*, 49, 7, 1453-145.
- Southern, R. and Purdam, K. (2016) The Changing Representation Interface: Democracy and Direct Contact with Politicians. *Journal of Civil Society*, 12, 1 101-120.
- Purdam, K. (2015) Task-based learning approaches for supporting the development of social science researchers' critical data skills. *International Journal of Social Research Methodology*. 19, 2, 257-267.
- Purdam, K., Garratt, E. and Esmail, A. Hungry in the UK? (2015) Understanding Food Insecurity. *Sociology*, 50, 6, 1072–1088.
- Richardson, L., Purdam, K., Cotterill, S., Rees, J., Squires, G. and Askew, R. (2014) Responsible Citizens and Accountable Service Providers? Renegotiating The Contract Between Citizen and State. *Environment and Planning A*. 46, 7, 1716 – 1731.
- Purdam, K. (2014) Citizen Social Science. *Current Sociology*, 2, 374-392.
- Weller, P., Purdam, K. Contractor, S. and Ghanea, N. (2013) Religion or Belief and Equality. Britain in Global Contexts. London, Bloomsbury.
- Norman, K. and Purdam, K. (2013) Unpaid Caring Within and Outside the Carer's Home in England and Wales. *Population, Space and Place*. 19, 1.

Dr Termeh Shafie**Lecturer in Social Statistics**

Location: Room G14, Humanities Bridgeford Street

Email: termeh.shafie@manchester.ac.uk

Termeh Shafie joined the department of Statistics July 2018. Previously she worked at Stockholm University, University of Konstanz and ETH Zürich. Her primary research interest is statistical analysis and modelling of multivariate networks. Her other research interests lie in the area of statistical information theory and network sampling. She has also previously been a member of an ERC synergy project, working hand-in-hand with archaeologists and anthropologists on methods for analysing and modelling networks that are reconstructed from fragmented and spurious data.

Selected Recent Publications

- Amati, V., Mol, A., Shafie, T., Hofman, C., & Brandes, U. (Accepted/In press). A framework for reconstructing archaeological networks using exponential random graph models. *Journal of Archaeological Method and Theory*.
- Frank, O., & Shafie, T. (2018). Random multigraphs and aggregated triads with fixed degrees. *Network Science*, 6(2), 232-250. doi:10.1017/nws.2017.31
- Amati, V., Shafie, T., & Brandes, U. (2018). Reconstructing Archaeological Networks with Structural Holes. *Journal of archaeological method and theory*, 25(1), 226-253.
- Shafie, T., Schoch, D., Mans, J., Hofman, C., & Brandes, U. (2017). Hypergraph Representations: a Study of Carib Attacks on Colonial Forces, 1509-1700. *Journal of Historical Network Research*, 1(1), 52-70.
- Laffoon, J. E., Sonnemann, T. F., Shafie, T., Hofman, C. L., Brandes, U., & Davies, G. R. (2017). Investigating human geographic origins using dual-isotope ($^{87}\text{Sr}/^{86}\text{Sr}$, $\delta^{18}\text{O}$) assignment approaches. *PloS one*, 12(2), e0172562.
- Shafie, T. (2016). Analyzing local and global properties of multigraphs. *The Journal of Mathematical Sociology*, 40(4), 239-264.
- Frank, O., & Shafie, T. (2016). Multivariate entropy analysis of network data. *Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique*, 129(1), 45-63.
- Shafie, T. (2015). A Multigraph Approach to Social Network Analysis. *Journal of Social Structure*, 16.

Professor Natalie Shlomo**Professor of Social Statistics**

Location: Room G17A Humanities Bridgeford Street

Email: Natalie.Shlomo@manchester.ac.uk

Natalie Shlomo is Professor of Social Statistics in the Social Statistics Department, School of Social Sciences. Her areas of interest are in survey statistics and includes small area estimation, adaptive survey designs, confidentiality and privacy, statistical data editing and imputation and data integration. She is the UK Principle Investigator for the H2020 European Union funded grant Integrating Expertise in Inclusive Growth 2 (InGrid2) focusing on methodological advancements for social science research (to 2021) and was the Principle Investigator on an ESRC funded grant to examine Theoretical Sampling Design Options for a New Birth Cohort Study in the UK (till 2019). She is an elected member of the International Statistical Institute and served as the Vice-President (to 2019) and is now an elected council member (to 2021). She is a member of the International Association of Survey Statisticians and a fellow of the Royal Statistical Society. She is Associate Editor of several journals and a member of national and international Advisory Boards at National Statistical Institutes. She has over 50 publications in academic journals and refereed book chapters and has given over 30 invited lectures.

Selected Recent Publications

- Saunders, C. and Shlomo, N. (2020) A New Approach to Assess the Normalization of Differential Rates of Protest Participation. *Quality and Quantity*. <https://doi.org/10.1007/s11135-020-00995-7>
- Shlomo, N., Krenzke, T. and Li, J. (2019) Confidentiality Protection Approaches for Survey Weighted Frequency Tables. *Transactions on Data Privacy*, Vol 12, No. 3, 145 – 168.

- Goldstein, H. and Shlomo, N. (2020) A Probabilistic Procedure for Anonymisation and Analysis of Perturbed Datasets. *Journal of Official Statistics*, Vol. 36, No. 1, 89–115.
- Moretti A., Shlomo, N and Sakshaug, J. (2020) Multivariate Small Area Estimation of Multidimensional Latent Economic Wellbeing Indicators. *International Statistical Review*, Vol. 88, No. 1, 1-28.
- Bianchi, A., Shlomo, N. Schouten, B., Da Silva, D. and Skinner, C. (2019) Estimation of Response Propensities and Indicators of Representative Response Using Population-Level Information. *Survey Methodology*, Vol. 45, No. 2, 217-247.
- Shlomo, N. (2018) Statistical Disclosure Limitation: New Directions and Challenges. *Journal of Privacy and Confidentiality*, Vol. 8, Issue 1.

Dr. Nick Shryane

Lecturer in Social Statistics

Location: Room G26, Humanities Bridgeford Street Building

Email: nick.shryane@manchester.ac.uk

Nick is interested in the statistical modelling of complex psychosocial systems using latent variables. He uses generalized linear and latent variable modelling techniques, including factor- and item response theory models, latent growth curve models and mixed multinomial logit models. He has applied these techniques to address issues of wellbeing and social enfranchisement across a wide variety of topic areas, in particular mental health.

Recent Publications

- Shryane, N., Drake, R., Morrison, A. P., & Palmier-Claus, J. (2020). Is Cognitive Behavioural Therapy effective for individuals experiencing thought disorder? *Psychiatry Research*, 285, 112806. <https://doi.org/10.1016/j.psychres.2020.112806>
- Wilson, R.S., Shryane, N., Yung, A.R. & Morrison, A.P. (2020). Distress related to psychotic symptoms in individuals at high risk of psychosis. *Schizophrenia Research*, 215, 66-73. DOI: 10.1016/j.schres.2019.11.027
- Doran, P., Burden, S., & Shryane, N. (2018). Older People Living Well Beyond Cancer: The Relationship Between Emotional Support and Quality of Life. *Journal of Aging and Health*, 31(10), 1850–1871. <https://doi.org/10.1177/0898264318799252>
- Zhao, Y., Li, Y., Heath, A., & Shryane, N. (2017). Inter- and intra-generational social mobility effects on subjective well-being – Evidence from mainland China. *Research in Social Stratification and Mobility*, 48, 54–66. <http://doi.org/10.1016/j.rssm.2017.02.002>

Dr András Vörös

Lecturer in Social Statistics

Location: HBS G20

Email: andras.voros@manchester.ac.uk

András joined the Social Statistics Department in October 2019. He is also a member of the Mitchell Centre for Social Network Analysis and the Cathie Marsh Institute. Before coming to Manchester, he was a postdoctoral researcher at the Social Networks Lab at ETH Zürich between 2016 and 2019. He got his Sociology DPhil from Oxford in 2016. His research focuses on understanding the role of social networks in education. For example, one of his recent papers shows that social relations, in particular friendships and studying ties, among university students partly explain their academic outcomes even after individual background factors are taken into account. He is currently applying his expertise in network data collection and methodology to the study of academic achievement and social inequalities in the UK education system.

Selected Recent Publications

Boda, Zs., Elmer, T., **Vörös, A.**, Stadtfeld, C. (2020): Short-term and long-term effects of a social network intervention on friendships among university students. *Scientific Reports*, 10(1), 1-12.

Stadtfeld, C., Takács, K., **Vörös, A.** (2020): The emergence and stability of groups in social networks. *Social Networks*, 60, 129-145.

Vörös, A., Block, P., Boda, Zs. (2019): Limits to inferring status from friendship relations. *Social Networks*, 59, 77-97.

- Stadtfeld, C., **Vörös, A.**, Elmer, T., Boda, Zs., Raabe, I. J. (2019): Integration in emerging social networks explains academic failure and success. *Proceedings of the National Academy of Sciences of the U.S. (PNAS)*, 116(3), 792-797.
- Vörös, A.**, Snijders, T. A. B. (2017): Cluster analysis of multiplex networks: Defining composite network measures. *Social Networks*, 49, 93-112.

Dr. Arkadiusz Wiśniowski

Lecturer in Social Statistics

Location: Room G16 Humanities Bridgeford Street

Email: a.wisniowski@manchester.ac.uk

<http://personalpages.manchester.ac.uk/staff/a.wisniowski/>

Arkadiusz joined the Social Statistics Department in August 2015. He is also a member of the Cathie Marsh Institute and co-leading Statistical Modelling Research Group therein. Prior to this, he was a Research Fellow at the ESRC Centre for Population Change and the Southampton Statistical Sciences Research Institute, University of Southampton. His research interests include developing statistical methods for modelling and forecasting complex social processes, with a particular focus on migration and mobility, and integrating traditional and new forms of data. He has also a general interest in time series analysis and forecasting, survival models and models for count data, Bayesian inference and computational methods, opinion polls and ageing.

Selected Recent Publications

- Wiśniowski, A., Bijak, J., Forster, J. J., and Smith, P. W. F. (2019) Hierarchical model for forecasting the outcomes of binary referenda. *Computational Statistics & Data Analysis* 133 (May 2019): 90-103. doi: 10.1016/j.csda.2018.09.007
- Wiśniowski, A. (2017) Combining Labour Force Survey data to estimate migration flows: the case of migration from Poland to the UK. *Journal of the Royal Statistical Society, Series A*. 180(1), 185-202.
- Wiśniowski, A., Forster, J. J., Smith, P. W. F., Bijak, J., and Raymer, J. (2016) Integrated modelling of age and sex patterns of European migration. *Journal of the Royal Statistical Society, Series A*. 179(4), 1007-1024.
- Wiśniowski, A., Smith, P. W. F., Bijak, J., Raymer, J., Forster, J. J. (2015) Bayesian population forecasting: extending the Lee-Carter method. *Demography* 52(3), 1035–1059.
- Wiśniowski, A., Bijak, J., Christiansen, S., Forster, J. J., Keilman, N., Raymer, J., Smith, P. W. F. (2013) *Utilising expert opinion to improve the measurement of international migration in Europe*. *Journal of Official Statistics*, 29(4), 583-607.
- Raymer, J., Wiśniowski, A., Forster, J. J., Smith, P. W. F., Bijak, J. (2013) *Integrated Modelling of European Migration*. *Journal of the American Statistical Association*, 108(503), 801-819.

INFORMATION POINTS & COMMUNICATION

My Manchester

[My Manchester](#) is your main point of entry for all information. Access your email, library account, examination information, and the Student System to register, find your timetable and grades.

E-mail

All essential information is delivered to your *University of Manchester* e-mail address. **It is your responsibility to ensure that you regularly check your e-mail accounts.** If you believe that you are not receiving all relevant e-mails, you must inform your Programme Administrator *immediately*.

Contact Details

Please keep your contact details up-to-date on the on-line Student System (also called Campus Solutions). If you change address during the course of the academic year, you must update this system accordingly.

School of Social Sciences Intranet

The main reference point for information about your programme, the discipline and the School is the School's Student Intranet <http://www.socialsciences.manchester.ac.uk/student-intranet/postgraduate/postgraduate-taught/>

The individual discipline pages will also hold details of student representatives for each programme, once they have been nominated. <http://www.socialsciences.manchester.ac.uk/student-intranet/postgraduate/postgraduate-taught/student-reps//>

Arranging meetings with academic staff - SOHOL

All staff members have consultation and feedback hours. To arrange a meeting, students should use the SOHOL System: <https://mats.humanities.manchester.ac.uk/mats/sohol/StudentLogin.asp>; email or telephone. If staff are not available to meet at a time arranged students should inform the Receptionist in that area and their PG Administrator:

<http://www.socialsciences.manchester.ac.uk/student-intranet/postgraduate/contact-us/>

Campus Solutions is the student system. From here you will be able to check your timetable, keep track of your course choices, grades, financial situation, and registration, along with many other functions. It is accessible via MyManchester: <https://my.manchester.ac.uk/uPortal/f/u2011s14/normal/render.uP>

IT Services within the Faculty of Humanities

Students at the University of Manchester enjoy access to a wide range of high quality IT services provided across campus. Within The Faculty of Humanities, there are many computers located within Faculty buildings available for student use, complementing the computers provided by the University in public clusters – including at Owens Park halls of residence, the libraries and the Alan Gilbert Learning Commons.

These include printing, scanning and copying, and access to a wide range of general use and course specific software on the Windows operating system.

The clusters provide access to services offered by schools, faculties and central service providers such as IT Services and the University Library. PC clusters in the Faculty may also provide additional software not available in the central PC clusters.

- [PC clusters on campus](#)

Keeping you safe

To allow for effective social distancing measures that the UK government has introduced, the University's PC clusters will be operating at a reduced capacity until a time when social distancing measures are no longer needed. Details of PC clusters across campus and their capacities will be updated on the PC cluster webpages above.

There will be clear signage at entrances, computer equipment such as keyboards, mice, PCs and printers will be cleaned and sanitised regularly throughout the day, and there will be hand sanitisation stations available that you are encouraged to use.

Remote access is enabled for some students on many of the PC clusters. This allows students to log into a University computer from wherever they are. Details of remote access to University PC clusters can be found here.

- [Remote access to PC clusters](#)

Wi-Fi is installed across campus enabling students to access IT services on campus from their laptops or mobile devices. The eduroam network is the recommended service.

- [eduroam](#)

Software

Students can download the Microsoft Office software suite (including Word, PowerPoint, Excel and more) for free, to use on their own computers and mobile devices.

- [Microsoft Office 365](#)

There are also hundreds of software packages in use around the University. Find out which ones are available to you:

- [Applications](#)

Help and advice is available from our Support Centre which can be contacted by phone or via the Support Portal.

- [IT help and support](#)

The return of face-to-face IT support at walk-up support desks on campus is under discussion on how to do that safely, and more information will be posted on IT Services' walk-up support page when this is available:

- [Walk-up IT support](#)

Blackboard: Course units and enrolments



Blackboard

Blackboard (Bb) is the web-based platform that we use across the institution to deliver our teaching, learning and assessment online. All of your course units and programme-wide spaces (where relevant) are delivered via Bb.

Access Bb via My Manchester <http://my.manchester.ac.uk/>. In Blackboard you will find:

- a list of all the course units you are registered to take, under the 'Course List',
- a list for Programme spaces or other 'Organisations', in the 'My Communities' list.

Your Bb course units will contain different elements, depending on how your tutor(s) have set them up. They may be used for hosting teaching materials, lecture handouts; for assessment including coursework submission, quizzes; for communication such as class announcements; for collaboration with your fellow students e.g. discussion boards or blogs; or other. If you have any queries about the content in your Bb spaces, please check with your tutor first.

You can find guidance on the various Bb tools as well as other eLearning tools we use at Manchester e.g. Turnitin, accessing the Manchester video portal or other in this page:

<https://sites.manchester.ac.uk/humteachlearn/student-support>

If you like you can access Bb on your smartphone using the Bb Mobile Learn app. For guidance, see:

https://help.blackboard.com/Mobile_Learn

When can I access the Blackboard sites for the units I am studying?

Courses become available to students one week before the start of teaching. For *most* courses in 2020/21 this is:

- Semester 1 and all-year courses: 21st September 2020
- Semester 2 courses: 1st February 2021

To ensure that you have access to all of your courses within Blackboard, you must be enrolled on them through the Student Records system. Once enrolled, your courses should appear on Blackboard from the dates mentioned above.

What can I do if I cannot find in Bb a course(s) I am enrolled on?

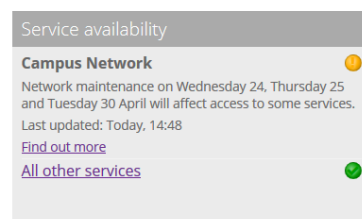
If you cannot see a course you expect to see, it may be because your tutor has not 'activated' your Blackboard site for the course, or it may be that your enrolment is not completed:

- contact your School Administrator to check that you are fully enrolled;
- check with your tutor that the Bb site has been activated (made available to students);

Note: If you decide to change your course enrolments (from one unit to another) there will also be a delay of up to 24 hours in acquiring your new courses and removing those you are no longer taking. If after enrolment or changing your enrolments your courses are not correctly listed in Bb after 24 hours, please contact the eLearning Team via the Support Portal

<https://www.itservices.manchester.ac.uk/help/elearning/>

More broadly, if during the duration of your studies you experience interruptions in IT or eLearning services such as Blackboard, Turnitin, Video Portal or other please check the Service Availability information on IT services homepage: <http://www.itservices.manchester.ac.uk/> The Service Availability portlet will display whether there is any known disruption and flag issues with a red or an orange circle (see image). If you experience an issue that is not notified in the [Service Availability portal](#) please contact your eLearning team via the Support Portal <https://www.itservices.manchester.ac.uk/help/elearning/>



GETTING STARTED

Length of the prescribed course

Master's degree

The registration period for the full-time MA lasts for one year from September 2020 until September 2021. For part-time students the length of the course is 24 months from September 2020 until September 2022.

Postgraduate Diploma

A 9 month full-time or 18 month's part-time programme. The period of registration runs from September 2020 until June 2021 for full-time students and to June 2022 for part-time students.

THE ACADEMIC YEAR

2020/21

**Due to the coronavirus pandemic, we are staggering our first semester for students.*

Postgraduate taught students (new and returning)

University welcome and induction programme	5 and 12 October 2020
School and programme induction activities	19 October 2020
Semester 1 teaching starts	26 October 2020
Christmas break starts	21 December 2020
Christmas break ends	4 January 2021
Semester 1 teaching continues	4–22 January 2021
Semester 1 exams	25 January–5 February 2021
Semester 1 ends	5 February 2021
Semester 2 starts	8 February 2021
Easter break starts	29 March 2021
Easter break ends	12 April 2021
Semester 2 exams	19 May–9 June 2021
Semester 2 ends	11 June 2021

Choosing your MSc Course Units

The MSc degree and the Postgraduate Diploma comprise a number of course units which add up to 120 credits. To this the MSc adds a dissertation worth 60 credits.

Preparation for the dissertation begins early in the academic year, though the bulk of it is normally written over the summer. Our Postgraduate courses *normally* comprise eight 15-credit course units divided equally between two semesters, though some courses do have slightly different credit ratings. A full listing of SRMS postgraduate course units can be found later in this guide. You will have an opportunity during registration/induction week to discuss your module options with your programme director.

Changing your MSc Course Units

If you decide to change any of your course unit options, you can make the alteration yourself online (see 'Guide to Using Self-Service Course Unit Selection' included in your registration pack). However, before you process any changes, you will need to complete a *Course unit Change Form* (available from the School Postgraduate Office, room 2.003, Arthur Lewis Building or downloadable from the Intranet) so that we have a record of any alterations to your choice of course units. Changes to your choice of course units must be made no later than the dates specified.

In Semester II you must make any course unit changes by Friday 12th February

Attendance Requirements

Attendance at courses is compulsory. If you know in advance of circumstances beyond your control preventing you from attending a course you should contact the course unit lecturer and the Social Statistics Postgraduate Administrator as soon as possible to explain your absence. Unexcused absences will result in poor participation marks.

2020 SRMS TIMETABLE

FOR LOCATIONS PLEASE CHECK MYMANCHESTER.

Semester 1

	Tuesday	Wednesday	Thursday	Friday
9am				QRM Courses as scheduled*
10am	SOST70521 Methodology & Research Design (LEC) ONLINE		SOST70151 Statistical Foundations (LEC) ONLINE	
11am		Optional drop in session		
12pm	Optional university seminars.			
1pm		Optional drop in session		
2pm	SOST60421 Survey Research Methods ONLINE		SOST70011 Introduction to Statistical Methods ONLINE	
3pm		Data and Statistics – Online drop-in		
4pm	Optional - university seminars.		SOST70151 Statistical Foundations (tutorials)	

Semester Two

	Monday	Tuesday	Wednesday	Thursday	Friday
9am			SOST70032 Complex Survey Designs and Analysis ONLINE	SOST70032 Complex Survey Designs and Analysis	QRM Courses as scheduled*
10am					
11am					
12pm	SOST70172	Optional - university seminars.			
1pm	SOST70172				
2pm					
3pm	SOST70172 workshop				
4pm		Optional - university seminars.			

*Qualitative Research Methods (QRM)

All students have to take the QRM Introductory Sessions SOCY60230. The Social Research Methods and Statistics (SRMS) students must then take the 10 credit QRM course: Foundational and Advanced Perspectives on Qualitative Research SOCY60231 which is taught over five sessions. The students can then choose **one** optional 5 credit module to complete the full 15 QRM credits from a range of modules provided in the School of Social Sciences 'Qualitative and Quantitative Research Methods Training Handbook' <http://www.socialsciences.manchester.ac.uk/student-intranet/postgraduate/postgraduate-taught/handbooks/>

Social Network Analysis SOST71032

See module outline for details of the course. Semester 2, six-day course from 10.00am - 4.00pm.

Longitudinal Data Analysis SOST70022

See module outline for details of the course. Semester 2, five-day course, 10am – 4pm.

Demographic Forecasting SOST70102

See module outline for details of the course. Semester 2, four-day course from 10am to 4pm:

Monthly Schedule

FEBRUARY				
MON	TUE	WED	THUR	FRI
8	9 SOST70102	10 SOST70032	11 SOST70032	12
15	16 SOST70102	17 SOST70032	18 SOST70032	19 SOST65000
22	23 SOST70102	24 SOST70032	25 SOST70032	26

MARCH				
MON	TUE	WED	THUR	FRI
1	2 SOST70102	3 SOST70032	4 SOST70032	5
8	9 SOST71032	10 SOST70022	11 SOST71032	12
15	16 SOST71032	17 SOST70022	18 SOST71032	19 SOST65000
22	23 SOST71032	24 SOST70022	25 SOST71032	26

APRIL				
MON	TUE	WED	THUR	FRI
12	13	14 SOST70022	15 SOST70032	16
19	20	21 SOST70022	22 SOST70032	23
26	27 SOST70102	28	29	30

OFFICE HOURS, DROP-IN SESSIONS AND WORKSHOPS

Lecturer Office Hours

Lecturers hold weekly office hours where you can meet with them on-line. Please contact the lecturer directly.

Personal Tutor Meetings

Please make an appointment to meet your tutor once the allocations have been sent out.

Wednesday Online Face to Face Learning Drop in Sessions – Term 1

These are optional sessions to meet face to face where possible or on-line to discuss issues related to the course and your learning. Details will be sent out once term starts.

Social Statistics Drop-ins/Help Desk

Weekly optional drop-in sessions. Details will be sent out.

Dissertation Training Workshops - Spring 2021

Work session 1. Locating Research Data and Data Access - 19th Feb 10am-12pm

This session will introduce the UK Data Service and other data resources for undertaking secondary data analysis. You will explore the data available and consider how to assess what constitutes good quality data for your own research project.

Work session 2. Dissertation Research Design, Ethics And Getting The Best Out Of Supervision - 19th March 10am-12pm.

This session will provide an overview of the dissertation requirements, the project management skills that are required and the role of the supervisor. It will also cover the research ethics process and link to the issues covered in the other modules.

Job and Careers Session - Term 2

Date will be sent out.

SRMS PROGRAMME

Overview

The Social Research Methods and Statistics (SRMS) MSc programme provides a firm grounding in advanced quantitative methods, taught within an applied social science framework. The programme is designed to be accessible to non-statisticians yet more focussed than most of the existing Master's courses in social research methods. The programme will therefore require an existing baseline level of knowledge and will build on this to give a set of statistical and analytical skills. Such skills are in demand within the social sciences and the social research and policy making sector.

Programme Aims

To produce social scientists who have:

- a thorough grounding in research design and related issues;
- the tools for collecting statistical data using a range of sampling designs;
- skills in methods of data analysis, including advanced statistical methods for complex data;
- the skills needed to present their research effectively, in both written and oral form.

And, for students proceeding to the dissertation:

- to provide instruction and practice in planning, conducting and writing up an independent piece of research.

Programme Objectives

Students will be able:

- to design and execute methods of data collection appropriate to a given research question;
- to apply advanced methods of statistical analysis to complex data;
- to communicate research results effectively and clearly.

And, for students proceeding to the dissertation:

- to plan, conduct and report on a piece of independent research, employing the skills learned in the taught elements of the programme.

Programme Structure

The SRMS programme structure is outlined in the next section. It incorporates a number of compulsory modules that all SRMS students must take. The various options will be fully explained as part of the Programme Induction meeting in September.

The SRMS programme is an ESRC recognised training for students wanting to go on to study for a research degree (PhD). Enrolment on to a PhD programme in the UK now generally requires students to have done such a recognised Research Training Masters. It is required by the ESRC, the major providers of PhD studentships in the Social Sciences for UK students.

Software Training

Data analysis software is a key component of the MSc and we aim to give you training in a number of the most advanced and widely used software packages. This will prepare you for different types of data and analytical techniques and for working in different contexts. Core software training which is included in the modules includes: MLwiN, Mplus, SPSS, STATA and R. There are also opportunities to learn and practice your skills on other training courses across the University and beyond including the CMIS short course programme. See www.cmi.manchester.ac.uk. See also Methods@manchester, which includes taster sessions of research methods and software www.methods.manchester.ac.uk

Part-Time Students

Part-time students take the SRMS programme over two years (normally two modules per semester over the two years). Students should be aware of the selection and order of courses that need to be taken to ensure that pre-requisites are met for the more advanced courses. Pre-requisites are taken in the first year. All the selected compulsory and optional modules need to be completed within two years. Module selections should be discussed with the course director and lecturers at the Induction meeting.

Induction Course and Induction Meeting

In order to prepare all students coming into the SRMS MSc programme, there will be a compulsory course during the induction week to ensure that students are familiar with research methods and quantitative analysis of social science data at the undergraduate degree level. The course is not assessed but it will give you the opportunity to refresh your skills and to carry out independent learning for those topics needing more attention. The induction meeting will be held on **Wednesday 21 October at 11 am via Zoom** and will include a description of the course, academic integrity and plagiarism.

The pre-session course will be held online:

10am -12pm – 12th October. Live lecture/recorded overview and introductions.

13 & 14 October – Self study work packages.

10am -12pm – 15th October. Live feedback and discussion session.

Topics that will be covered: Data and datasets (structure and types); Variables (types and distinctions); Measurement levels; Basic Statistics {Basic algebra (and other maths) needed, Basic notation, Normal distribution/curve, Samples and population, Hypothesis testing}; Descriptive analysis {Measures of central tendency; Measures of dispersion}; Comparing groups {t-test, ANOVA}; Associations {correlation, cross-tabulations}; Presenting descriptive statistics in figures and tables.

In addition, during the academic year there are short courses that are delivered within the Cathie Marsh Institute (CMI). Please see: <https://www.cmi.manchester.ac.uk> for a list of courses. If you would like to benefit from this additional training then book on-line at the website above.

SRMS MODULE CHOICES AND OPTIONS

All SRMS students (MSc and Postgraduate Diploma) must take taught course units totalling 120 credits (8x15 credits).

Compulsory Course Units

- Survey Research Methods (SRM) SOST60421
- Introduction to Statistical Modelling (ISM) SOST70011
- Statistical Foundations (SF) SOST70151
- Methodology and Research Design (MARD) SOST70521
- Complex Survey Designs and Analysis (CSDA) SOST70032
- Qualitative Research Methods (QRM) (1x 10 credit and 1 x 5 credit selection)
- Health and Safety (0 credits)
- Academic Malpractice Awareness (0 credits)

Optional Course Units

Plus two options from the following:

- Longitudinal Data Analysis (LDA) SOST70022
- Demographic Forecasting (DF) SOST70102
- Qualitative Evaluation of Policies, Interventions and Experiments (QEPIE) SOST70172
- Social Network Analysis (SNA) SOST71032

OR any other suitable module (only one) from the School of Social Sciences (SOSS) (second semester only), to be agreed with the Programme Director. Students should consult the SoSS on-line postgraduate module database for details about the different courses available.

Semesterisation

Semester One	Semester Two
SOST70521 (MARD) SOST70151 (SF) SOST70011 (ISM) SOST60421 (SRM) SOCY60230 QRM introductory session SOCY60231 QRM Foundational and Advanced Perspectives (10 credits) SOCS61230 (H & S)	SOST70022 (LDA) SOST70032 (CSDA) SOST70102 (DF) SOST70172 (QEPIE) SOST71032 (SNA) QRM (5 credits) Dissertation training module: two work sessions

Part Time options

Year One

Semester One	Semester Two
SOST70011 (ISM) SOST70151 (SF) SOCS61230 (H & S)	SOST70032 (CSDA) Plus one optional module

Year Two

Semester One	Semester Two
SOST70521 (MARD) SOST60421 (SRM) SOCY60230 (QRM Intro) SOCY60231 (FAP) 10 credits	One optional module QRM (5 credits)

Releasing Marks

The marks for January examinations, as issued to graduate students by the Postgraduate Office, are **provisional** marks and are provided for information only. **Provisional** marks for assessed essays submitted in Semester 2 may be given to students. **Confirmed** marks for examination papers will not be made available to students until after the June meeting of the School Postgraduate Committee. Students are advised that:

- once marks have been agreed by the internal examiners and issued to students, they can only be changed via the external examiners.
- questions of compensation will be dealt with in the June Examinations Board, when the full range of results is available.
- marks are never confirmed until the meetings of the School Postgraduate Taught Programmes Examinations Board.
- the University does not allow student appeals against the academic judgements of Examiners.

The pass mark on all our taught Masters programmes is 50%. The pass mark on the Postgraduate Diploma is 40%.

Please note, if you have a hold or a restriction on your account, this means you have an outstanding debt to the University. If this is the case, you must contact the Student Credit Office, based in the John Owens Building room G10 (tel: 0161 275 8130/email: self.funding@manchester.ac.uk) to sort this matter out. In the meantime, you will be able to view your results by accessing Self Service>Enrolment>View My Assignments>Assignment Categories.

THE DISSERTATION

Notice to submit your Dissertation

Subject to you being Passed Subject To Dissertation at the Examinations Board in June you will be sent a “[Notice of Submission Form](#)”, together with information about the presentation of your dissertation i.e. Guidance for the Presentation of Taught Masters Dissertations:

<http://documents.manchester.ac.uk/display.aspx?DocID=2863> · Please submit a completed, signed, paper copy of your Notice of Submission along with your dissertation.

Please note that according to our regulations you must complete the taught component (course units) of your degree before you can proceed to dissertation. A student who works on their dissertation before being formally passed subject to dissertation by our Examinations Board do so at their own risk.

Supervision and Support

During the MSc course you will be given training in research design. You will also undertake training through workshops and linked lectures specifically in relation to the preparation of your dissertation. You will be asked to present your research plan to Social Statistics staff and students in the spring term as a way of seeking further feedback on your ideas.

You will be allocated a supervisor in accordance with your research area and research interests. Please note that a student does not have the right to be supervised by a particular preferred member of staff.

Attendance of Supervision Meetings and Draft Material Feedback

You can expect to have up to five meetings with your supervisor before the end of June. A student should meet regularly with her/his supervisor in order to obtain guidance. At these meetings, a student is able to consult with the supervisor about the chosen topic, about refining the topic to a researchable question or problem, and about relevant primary and secondary sources of data. Also, the student can discuss with the supervisor literature relevant to the student’s topic and also any problems that the student has encountered.

Given the differences between a dissertation and a course assignment and given the aims and objectives of the dissertation, a student writing a dissertation should not expect her/his supervisor to provide a topic and/or reading list. However, the supervisor is available to help a student define a researchable question or problem and to provide advice about relevant sources. Hence, meeting with the supervisor should help ensure that the research remains focused on the student’s chosen topic. In addition, the supervisor can help a student with the structure of the dissertation and with thinking through the narrative and line of argument.

Furthermore, the supervisor can read and comment upon a dissertation plan and draft material. A student can only expect her/his supervisor to read and comment upon material if s/he submits the material **no later than the end of July**. However, different arrangements can be made between the supervisor and the student. While a supervisor might read and comment upon material submitted after that date, a supervisor has no obligation to do so.

Suggested supervision schedule:

Meeting 1 - Discussion of ideas and methods

Meeting 2 - Feedback on draft plan

Meeting 3 - Discussion of methodology and literature

Meeting 4 - Feedback and discussion of key chapters

Meeting 5 - Feedback on draft dissertation

You are also advised to create self-study groups, and to participate in them. If these are on campus the course director can book a room for you subject to regulations.

Dissertation Word Limit

All pieces of assessed work including the dissertation have prescribed word limits which are 12,000 to 15,000 words (no leeway). Dissertations exceeding the maximum word limits on any assessed work may be penalised. All word limits are inclusive of notes, but exclusive of bibliography and appendices. The word count also includes quoted material. This applies to both essays and dissertations.

Dissertation Presentation and Guidance

Guidelines on the presentation of your dissertation including binding requirements are available on the intranet at the following: <http://www.socialsciences.manchester.ac.uk/student-intranet/postgraduate/postgraduate-taught/dissertation-workshop/> (See Section 4: Preparing Your Dissertation).

As well as electronic submission, you are required to submit two identical paper copies* of your dissertation to your Programme Administrator by the deadline.

It should be printed on paper of international standard size A4 (210 x 297mm). No other paper size is acceptable for the main text of a dissertation. Paper of a larger size may be used for maps, plans, diagrams or other illustrations forming part of the dissertation if the supervisor agrees that this is required. Where such large sheets are used, or non-paper materials are submitted as part of a dissertation, they must be placed in a pocket inside the back cover of the dissertation. Your dissertation does not need to be hard or soft bound but all pages must be secured together in a manner which is easily read.

Further information will be provided in the SRMS Dissertation Training work sessions (see the course specification below).

Dissertation Submission Date: Monday 6 September 2021 for all students

For those students who fail to satisfy the taught element of their PGT programme and have to do referrals in the August Exam period before being permitted to proceed to dissertation, the deadline for you to submit your dissertation will be **Monday 6 December 2021**. Students who do not satisfy the examiners after referrals will be considered against the criteria for award of a PG Diploma or Certificate.

Dissertation Marking Criteria

Criteria	80% A+	70 – 80% A	60 – 69 % B	50 – 59% C	FAIL D
Intellectual content and originality (25%)	High intellectual content, novel ideas and integrated excellently with the existing literature. Likely to be publishable.	Very good intellectual content, some novel ideas, integrated well with the literature. Possibly publishable	Good intellectual content, developed with reference to the literature.	Moderate intellectual content, with some integration with the literature.	Some evidence of intellectual input, limited integration with the literature.
Coherence of overall report (10%)	Excellent. Clear and logical progression through and between sections. All aims and outcomes of the project are very clear.	Very good. Logical progression through and between sections. All aims and outcomes clear.	Good. Mostly logical progression through and between sections. Main aims and outcomes of the project are clear.	Moderate. Progression through and between sections uneven or unclear at times. Main aims and outcomes of the project moderately clear.	Poor. Little logical progression through and between each section. Some sections not appropriate to the project as carried out. The main aims and outcomes of the project lack clarity.
Project design and methods (25%)	Excellent. Design and method totally in alignment with objectives.	Very good. Design and method aligned well with objectives.	Good. Any faults are minor and do not detract from the overall quality of the project.	Moderate. Minor faults which detract from the overall quality of the research, but most of the methods used are sound.	Poor. Some major faults which detract from the overall quality of the project. Methods used are partially appropriate or correct.

Results and analysis (25%)	Excellent presented. Results analysed & interpreted at a level suitable for publication.	Presented to a high standard, with no major flaws. With minor changes results and analysis suitable for publication.	Well presented, with occasional flaws and minor errors only. Analysis & interpretation mostly sound.	Moderately presented, but with some major flaws or several minor errors. Analysis & interpretation moderate.	Poorly presented, several major flaws and/or many minor errors. Analysis & interpretation contain significant deficiencies
Overall presentation (10%)	Excellent throughout. All figures and tables clear with suitable legends/captions	Very good throughout, with only minor shortcomings	Good throughout, with no major flaws but occasional minor errors. Some figures/tables unclear.	A few major flaws and/ or several minor errors. Several figures or tables of poor quality	Some major flaws and/or frequent minor errors. Many poor quality figures/tables.
Use of literature and references (5%)	Complete: fully and correctly cited, up to date and appropriate. Extensive literature resources used to provide balance and an informed view. Interpretation of literature provides basis for project objectives.	Complete and correctly cited, up to date and appropriate. Literature clearly links to project objectives.	Mostly complete and correctly cited, with minor omissions or errors only. Some link between literature and project objectives.	Moderately complete and cited, with occasional major flaws or some minor omissions or errors. Little interpretation of literature and link to project objectives	Incomplete or incorrectly cited, with some major omissions or errors. Some failures to cite sources. Difficulty in interpreting literature and using it as basis for project objectives.

SRMS AWARDS

The Cathie Marsh Prize will be awarded for the best overall SRMS PG Diploma or MSc coursework average over 120 credits excluding the dissertation. This decision will rest upon a June 30th - cut-off date for all marks. In the event of a tie, the decision will be made by a consensus of the external examiner, the SRMS MSc exams officer, and the SRMS program director. The prize in 2020/21 is £100.

The Angela Dale Social Responsibility Prize will be awarded for a Dissertation in SRMS which applies social statistics to study, understand, or address disadvantage, inequality, exclusion, or any other of the University's priorities for Social Responsibility. The SRMS marking rubric can be used to identify the features of outstanding dissertations. The decision will be a consensus of the external examiner, the SRMS MSc exams officer, and the SRMS program director. All dissertations over a mark of 65 can be considered. The prize in 2020/21 is £100

The Lee Kuczer Prize will be awarded for the SRMS Dissertation which shows originality and innovation within the scope of the current dissertation marking rubric. Nominations must be made with a one paragraph supporting statement by the first dissertation supervisor. The decision on this award will be a consensus of the external examiner, the SRMS MSc exams officer, and the SRMS program director. The prize in 2020/21 is £100.

For all three prizes, each year's prize takes into account students whose marks are ready during that particular year, ending in the month noted.

The prize award criteria, eligibility and amount can be reassessed by the SRMS Programme board.

TIER 4 VISA HOLDERS

As your Tier 4 sponsor, the University of Manchester must monitor your attendance and be assured that you are fully engaged with your course of study or research.

To do this:

- We need to ensure that we have up-to-date contact details for you.
- If you leave Manchester for any reason during your studies you need to let your Postgraduate Administrator know this.
- You must attend the census points in addition to complying with the attendance requirement of your programme of study.
- Note: **Attendance at lectures and seminars is mandatory** and this is recorded on campus solutions.

Your responsibilities as a tier 4 student are available here:

<http://www.studentsupport.manchester.ac.uk/immigration-and-visas/tier-4-responsibilities/>

When are the census points?

The Census Dates for 2020/21 for all Tier 4 students are as follows.

Census Point	Dates	Where
October 2020	26 October – 6 November 2020	All active Tier 4 students
January 2021	18-29 January 2021	All active Tier 4 students – Via Exam attendance
May 2021	19 May – 9 June 2021	All active Tier 4 students – Via Exam attendance
July 2021	12 – 23 July 2021	All PG Tier 4 students

Please note:

- Please enter these dates in your diary. You must report to the postgraduate office during each census period. **If you are attending an exam this will be taken in lieu of you attending on the above dates (January).**
- You must check your University e-mail account regularly as we use this to contact you during your studies. You will receive a reminder e-mail from the School about each census point and we advise that you complete the census if possible once it opens.
- Failure to check your e-mail account is not a valid reason to be absent from a census point
- You must make sure that your home country address, your Manchester address, your mobile telephone number and email details are always accurate. You should also update the UKVI with your new contact details
- If you are going to be away from Manchester during any period of your registration you must let your Programme Administrator know this (by email or in person).
 - If you are unable to attend the census you should let your Postgraduate Administrator know along with the reasons and report in person to the School as soon as possible after you return to campus (If you cannot attend the census due to illness you must provide a copy of a medical certificate to your Programme Administrator)
- Students who are recorded as interrupting their studies are not expected to attend during their period of interruption

What happens if I cannot attend a census point?

The School must be able to confirm your presence to the UKVI by the end of each census point in the academic year. If you do not attend a census point when required and you do not provide a valid explanation for your absence you will be deemed to be “not in attendance”.

Those students identified as “not in attendance” will be reported to the UKVI and the University will cease to sponsor the student’s Tier 4 visa. The Tier 4 visa will then be curtailed and the student will be required to leave the UK within 60 days

Further information

For more information on Tier 4 visas:

www.ukba.homeoffice.gov.uk/visas-immigration/studying/adult-students/

If you have any concerns about the attendance monitoring census points, or your Tier 4 visa status, please contact visa@manchester.ac.uk

For more information on Tier 4 visas: www.ukba.homeoffice.gov.uk/visas-immigration/studying/adult-students/

Semester 1

Survey Research Methods - SOST60421

Tina Hannemann

Compulsory for SRMS

Course Content:

The social survey is a research tool of fundamental importance across a range of disciplines and is widely used in applied research and as evidence to inform policy making. This course considers the process of conducting a survey, with an emphasis on practical aspects of survey design and implementation, as well as factors that influence the quality of survey data. The course will also cover key statistical concepts and procedures in sample design and estimation.

Aims:

- Introduce students to the basic principles of survey design that are used in large-scale surveys;
- Provide an introduction to key elements of conducting a survey, including sampling techniques, alternative modes of data collection, the role of the survey interviewer, questionnaire design, measurement error, and estimation in surveys;
- Become familiar with the factors and behaviours that affect the quality of survey data

Learning Outcomes: By the end of the course students will:

- be able to apply the key terminology used in large-scale survey design.
- understand factors that influence data quality, including coverage, sampling, and nonresponse.
- be able to evaluate different survey methods and sampling techniques.
- be able to identify methods for assessing the quality of survey data.
- have a clear understanding of the steps involved in designing and planning a survey.

Teaching and learning methods:

The course is taught over 11 weeks and is structured around the following topics:

- Introduction to the Total Survey Error framework
- Alternative modes of data collection
- Survey sampling
- Questionnaire design
- Pretesting and fieldwork
- Post-survey processing and estimation

Assessment:

The assessment for this module is based on an essay of not more than 3,000 words. Your task is to outline and discuss how you would set about conducting a hypothetical survey to answer a specific research question of interest to you. You should include a short example question module designed to collect appropriate information that addresses a specified research which would form part of a larger questionnaire

Preliminary readings:

- Groves, R.M., Fowler, F.J. Jr., Couper, M.P., Lepkowski, J.M., Singer, E., & Tourangeau, R. (2009). *Survey Methodology, 2nd Edition*. New York: Wiley.
- Kalton, G. (1983). *An Introduction to Survey Sampling*. Beverly Hills: Sage Publications.
- Converse, J., & Presser, S. (1986). *Survey Questions: Handcrafting the Standardized Questionnaire*. Newbury Park: Sage Publications
- Fowler, F., & Mangione, T. (1990). *Standardized Survey Interviewing*. Newbury Park: Sage Publications.

Aims

Broadly, to enable students to be able to use common statistical models to address substantive social research questions. Specifically:

- 1) Enable students to model data from large social surveys using linear and binary logistic regression modelling, and factor analysis.
- 2) Enable students to use such models to carry out hypothesis testing and to make valid inferences from the survey sample to the population of interest.
- 3) Enable students to interpret and critically evaluate the results of such modelling and inferential analyses.
- 4) Provide students with the skills to use SPSS to carry out the above analyses.

Outcomes

Category of outcome	<i>Students will be able to:</i>
Knowledge and understanding	- To understand the principles of several regression modelling, data reduction and classification (DRC) techniques. - To understand the practical application of the statistical concept of variance.
Intellectual skills	
Practical skills	- To produce and interpret regression models and DRC analyses and the necessary supporting exploratory analyses in SPSS. - To decide on a plan of action for hypothesis testing of a research question, given large-scale social survey data. To write coherent reports about a piece of quantitative data analysis.

Lectures 1 and 2: Linear Regression

Summary: The technique of linear regression is perhaps the most basic statistical modelling method. Here we are trying to predict the behaviour of an interval response variable by using a set of explanatory variables which may be either interval or binary. We discuss how to interpret linear models, how to read SPSS output and to explicitly test the assumptions that linear Regression rests upon.

Lectures 3 and 4: Binary Logistic Regression

Summary: Binary logistic regression attempts to model the probability of events happening or not. We are trying to predict the behaviour of a binary response variable by using a set of explanatory variables which may be either interval or binary. We discuss the underlying concept of “odds” and how these are calculated and their relationship with probabilities, how to interpret binary logistic models, how to read SPSS output and to explicitly test the assumptions that logistic Regression rests upon.

Lecture 5 and 6: Data Reduction

Summary: Data reduction techniques allow us reduce a large set of variable to a smaller set of factors which might be latent or summarial. We will be focussing on the most commonly used data reduction technique “Principal Components analysis”.

Lecture 7: Data Classification

Summary: Whereas data reduction techniques enable the grouping of collinear variables, Data Classification techniques (such as cluster analysis which will be examining here) allow the grouping of similar **cases** into clusters. We will look at Hierarchical and k-means clustering techniques.

Lectures 8-9: Structural Equation Models

Structural equation modelling is a technique which combines measurement models (such as factor analysis) and structural models (such as regression). In these classes we will use the SPSS based software AMOS to build some simple SEMs.

Lecture 10: Introduction to Advanced Regression Techniques

Summary: in this class we will be looking at two advanced modelling techniques Multi level modelling and multinomial logits.

Multi Level Modelling is a technique that allows one to simultaneously model several levels of analysis. There is a second semester option which will teach you this method. Here we just introduce the concepts and some of the theory (this may help you to decide if you want to take the option!).

Summary: Summary: Multinomial logistic regression attempts to model the behaviour of a multi-valued categorical response variable by using a set of explanatory variables which may be either interval or binary. We discuss the underlying concepts theory and how to interpret multinomial logistic models.

Lecture 11: Reporting Presenting and Critically Evaluating

In this final session we will be considering the issues of presenting the results of quantitative analyses. We will critically evaluate two pieces of published work (which will be given to you in week 10.) In this session you will be given your assessed work assignment which we will go through in detail to ensure that you understand what is required of you.

Teaching and Learning

The course will be delivered in eleven 2-hour classes consisting either of a lecture or a Q&A session followed a hands-on practical exercise. In the exercise the students will be required to carry out formative tasks designed to strengthen their understanding. Weekly back-up support will also be provided in the form of office hours. The students will be required to complete three pieces of formative homework and they will receive feedback on that work. The homework will either be in the form of structured short-answer questions requiring students to run and interpret simple analyses, or in the form of short reports on existing analyses. The latter will enable students to practice and receive feedback on the skills required for the assessment.

Assessment

Essay of 3000 words worth 100%.

Preliminary Reading

- Field, A. (2013). *Discovering Statistics Using SPSS* (2nd Ed.). London: Sage Publications.
- Linneman, T. (2011). *Social Statistics: The basics and beyond*. Taylor & Francis. (Linneman covers regression in much more practical detail than Field, but does not cover factor analysis.)

Aim

To give students: (a) a firm grounding in the basics of statistical inference and probability, (b) an understanding of how model considerations affect the kinds of inferences that can be drawn from different kinds of social science data, (c) the confidence and ability to draw different kinds of statistical inferences from real data, and (d) having a working knowledge of modelling and inferential assumptions of linear models and their extensions.

Content

The course consists of six main parts: (1) fundamental concepts in probability theory (2) Common probability distributions and their properties (3) Population, samples and the principles of design-based inference (4) Estimators (5) Hypothesis testing (6) How 1-5 fits into statistical modelling and practical considerations in social science

Assessment

Assessment task	Length	Weighting within unit (if relevant)
Other		10%
Exam	2 hours	60%
Set exercise		30%

Teaching and Learning

Twelve teaching occasions comprising a lecture component and a practical. The practical element may involve computer based activities and/or discussion sessions. Computer exercises will be done using the R environment and will not be scheduled every week. A number of extra tutorials led by the course TAs will be scheduled in addition.

Preliminary main reading

- Agresti, A. (2018) Statistical Methods for the Social Sciences (5th Edition). Pearson International Edition.

Online learning modules on R

<https://www.datacamp.com/swirl-r-tutorial>

<http://eclr.humanities.manchester.ac.uk/index.php/R>

Additional readings may include excerpts from

- Bluman, A. G. (2012). Probability demystified. McGraw-Hill.
- Gill, J. (2006) Essential Mathematics for Political and Social Research. Cambridge University Press. (Electronic version available in UoM library)
- Dekking, F.M., Kraaikamp, C., Lopuhaä, H.P., Meester, L.E. (2007). A Modern Introduction to Probability and Statistics: Understanding Why and How. Springer
- Crawshaw, J., Chambers. J. (2014). A concise course in Advanced level statistics: with worked examples. Nelson Thornes Ltd; 4th Revised edition

Aims

This course aims primarily to help students learn the skills needed to develop a good research proposal and to plan and deliver a research project successfully. This course is based on weekly lectures and seminars structured around three broad topics: (a) philosophy of social science; (b) research methodology and practical research strategies; and (c) research design, with an emphasis on comparative and longitudinal research.

A secondary aim of the course is to provide students with opportunities and guidance to develop their presentation skills. These skills are vital for researchers in order to communicate their ideas and research findings to a variety of audiences and in different settings. Most of the lectures will provide opportunities for students to present and discuss key articles to the group. The final lecture of the series has students presenting their own research design. This final session is an excellent opportunity for students to put their presentation skills into practice and to receive feedback from the group.

The course can be understood as a gateway to other methods courses taught as part of the SRMS program and other Research Training (RT) programmes in the University of Manchester.

Learning Outcomes: *At the end of this module, students should be able to:*

- Recognise the theoretical context of their research agenda.
- Identify a worthwhile research question and operationalize its key components for analysis.
- Understand how different research methods can provide different research conclusions.
- Have a broad understanding of the different research methods available.
- Present their research ideas to a group.
- Evaluate a research design.
- Provide feedback on methodological issues and use the feedback received from others to improve your research designs.
- Write a convincing research proposal.

Content

The course will be structured around the following main topics (a detailed week by week time plan will be given at the first session):

- Social Research in Historical Perspective
- Philosophical Issues in Social Research
- Doing Research. Basic steps, the research puzzle
- Measuring Concepts
- Norms, Objectivity and Ethics
- Comparative Research I: Strategies and examples
- Comparative Research II: Data and the Micro-Macro link.
- Longitudinal Research and the Analysis of Change

Teaching and learning methods

A mixture of lectures, formative assessment work, seminars, and practical sessions involving group work and a presentation.

Assessment:

One 3,000 word research proposal and one research presentation.

Preliminary reading

- Blaikie, N. (2009) *Designing Social Research. 2d Edition*, Cambridge: Polity.
- Bryman, A. (2016) *Social Research Methods*. Oxford University Press.
- De Vaus, D. A. (2001) *Research Design in Social Research*, London: Sage. (Other works by DeVaus are

also useful)

- Winch, P. (1958) The Idea of A Social Science. London: Routledge

Online

- Methods@manchester - <http://www.methods.manchester.ac.uk>
- Sage Methods - <http://methods.sagepub.com>
- NCRM - <http://www.ncrm.ac.uk>
- UK Data Service - <https://www.ukdataservice.ac.uk>
- Bryman OUP toolkit – <http://global.oup.com/uk/orc/sociology/brymansrm4e/01student/toolkit/>

Sign up to key journal alerts – for example

- <http://mmr.sagepub.com>
- <http://qrj.sagepub.com/content/early/recent>
- <https://uk.sagepub.com/en-gb/eur/environment-and-planning-a/journal202436#description>
- [http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1467-985X](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1467-985X)
- <http://www.socresonline.org.uk>

Longitudinal Data Analysis - SOST70022

Alexandru Cernat

Optional for SRMS

Part time students must take ISM as a pre-requisite

Aim

To provide students with an understanding of different longitudinal designs and the skills needed to conduct appropriate analyses using longitudinal data. Methods covered include the multilevel model for change, and models for investigating event occurrence over time.

Teaching Methods

The course will comprise 5 days of teaching and learning spread over one month. The days of intensive training will be made up of lectures and computer-lab examples and exercises implemented with appropriate statistical software, focusing on the use of R for longitudinal data analysis.

Objectives

- To gain facility in the concepts, designs and terms of longitudinal research;
- To be able to apply a range of different methods of longitudinal data analysis;
- To have a general understanding of how each method represents different kinds of longitudinal processes;
- To be able to choose a design, a plausible model and an appropriate method of analysis for a range of research questions.

Course

The UK is fortunate in having a rich and growing store of longitudinal studies for researchers to analyse. The course will introduce students to the methodological and statistical skills that will enable them to address questions about the measurement and explanation of change.

Assessment

The module will be assessed based on an essay of 3000 words that uses longitudinal data analysis methods to answer a substantive question.

Preliminary Reading and References

- Singer, J., & Willett, J. (2003). Applied longitudinal data analysis: modeling change and event occurrence. Oxford University Press. (available online)
- Long, J. D. (2011). Longitudinal Data Analysis for the Behavioral Sciences Using R. Thousand Oaks, Calif: SAGE Publications, Inc.
- Newsom, J. T. (2015). Longitudinal Structural Equation Modeling: A Comprehensive Introduction. Routledge.

Aims

This course provides an insight into the design and methodological issues for the analysis of complex surveys. It also introduces analytical methods and software for handling complex datasets.

Learning Outcomes: At the end of this module, students should be able to:

- Understand methodological concepts in survey design, estimation and adjusting for nonresponse.
- Assess the strengths and weaknesses of complex survey designs and the resulting secondary survey data.
- Assess how aspects of survey design will impact on the analysis.
- Use STATA (and other) software to analyse complex survey data.
- Understand the difference between model-based and design-based approaches to handling complex survey designs.

Content

This module extends the students' skills on conducting survey research and dealing with complex datasets by focussing on more advanced methodological aspects of surveys. It covers the most important features of design and analysis in complex surveys. Different sampling strategies involving stratification and clustering will be discussed, in regards to their impact on analysis. Further aspects of survey methodology such as how to compensate for non-response, will be presented as well as methodological issues arising in longitudinal designs, such as clustering and attrition. Since a major focus of the course relates to how these methodological aspects affect the analysis, two different statistical approaches of dealing with all these features of complex surveys will be discussed: the design and model-based approach. [The module will also go into more detail and practice with multilevel modelling.](#) A substantial part of the course will be based on computer sessions whereby the techniques of handling complex surveys will be practised with complex datasets.

Assessment

The assessment for this module will be based on an online multiple-choice test (15%) and one piece of coursework of 3,000 words (85%).

Prerequisites

The students should have some familiarity with survey research and statistical modelling. A pre-requisite of the course is: Introduction to Statistical Modelling (ISM - SOST70011).

Background Reading

- Blair, J., Czaja, R. and Blair, E. (2014) *Designing Surveys: A Guide to Decisions and procedures*, 3rd edition. CA: Sage Publication.
- Heeringa, S. G., West, B. T. & Berglund, P. A. (2010). *Applied Survey Data Analysis*. Boca Raton: CRC Press.
- Lehtonen, R. and Pahkinen, E.J. (2004) *Practical Methods for Design and Analysis of Complex Surveys*, 2nd edition. Chichester: John Wiley & Sons.
- Lohr, S.L. (2009) *Sampling: Design and Analysis*, 2nd edition. Boston: Brooks/Cole.
- Snijders, T.A.B. & Bosker, R.J. (2012) *Multilevel analysis: An Introduction to Basic and Advanced Multilevel Modelling*, 2nd edition. London: Sage.

Prerequisites

The students should have some familiarity with statistical inference, modelling and programming in R. A pre-requisite of the course is: Introduction to Statistical Modelling (SOST70011) and Statistical Foundations (SOST70151).

Aims

To provide the knowledge and skills required to analyse the population structure and forecast the population change, in the context of the CoViD-19 pandemic. Population change is driven by changes in mortality, fertility, and both international and internal migration. The pandemic is set to make an important contribution to the population change due to the highly selective fatality affecting persons at older ages, of male gender, and with existing comorbidities. Therefore, we derive, interpret and apply a range of demographic measures to the past and current populations at various levels of geography with a critical appraisal of their accuracy in the light of the available data sources and their quality. We focus on measures of mortality, such as life tables, multiple-decrement and cause-deleted life tables, bilinear and hierarchical models for estimating and forecasting mortality and other components of population change. We also learn and apply a cohort-component model for population forecasting that integrates all components of change. Methods are then applied to the real world data focusing on outcomes of the CoViD-19 pandemic in the UK and other countries, and critically interpreted.

Intended Learning Outcomes: Students should be able to*Knowledge and Understanding:*

- Understanding of the key concepts and theories related to population change and population components
- Understanding the key measures used to analyse population change

Intellectual skills:

- Understanding and critically appraise the methods and data used to measure and forecast population change

Practical skills:

- Produce a range of demographic measures using statistical techniques in R software
- Evaluate the quality of the claims by the media and statistical authorities about the population change

Transferable skills and personal qualities:

- Apply the learnt methods to the real world data and other settings such as at local authorities, governments and companies that utilise population estimation and forecasting as part of their activities

Content**Syllabus:**

1. Population balance equation – main components of population change
2. Life tables
3. Fertility – data and modelling techniques (postponement and recuperation)
4. Mortality – data and modelling techniques (mortality decline)
5. International Migration – data, modelling and uncertainty
6. Population forecasting I – cohort component method
7. Population forecasting II – the effect of internal migration
8. Uncertainty in demographic modelling and forecasting

Teaching and Learning Methods (including the use of e-Learning):

8 x Lecture (2 hours) + 4 x Tutorial – lab session (2 hour)

Assessment

[Group work] (formative)	Slides & Talk	Formative
[Group work] Critical appraisal of one or two selected journal articles	1000 words	formative
Analysis of a given aspect of population change/producing population forecasts/assessing impact of population change of a selected country/region accompanied by software output and code (in R)	1500 of written essay text; no limit on computer code and output	100%

Indicative Reading

Preston, S., Heuveline, P., & Guillot, M. (2000). Demography: measuring and modeling population processes.

Castles, S., De Haas, H., & Miller, M. J. (2013). The age of migration: International population movements in the modern world. Palgrave Macmillan.

Rowland, D. T. (2003). Demographic methods and concepts. OUP Catalogue.

Bijak, J. (2010). Forecasting international migration in Europe: A Bayesian view (Vol. 24). Springer Science & Business Media.

Gerland, P., Raftery, A. E., Ševčíková, H., Li, N., Gu, D., Spoorenberg, T., ... & Bay, G. (2014). World population stabilization unlikely this century. *Science*, 346(6206), 234-237.

Wiśniowski, A., Smith, P. W., Bijak, J., Raymer, J., & Forster, J. J. (2015). Bayesian population forecasting: extending the Lee-Carter method. *Demography*, 52(3), 1035-1059.

Overview

Researchers, government and policy takers, business leaders and people in general are motivated by “causal questions” of the type “Does X cause Y” (e.g. does policing reduce crime? Do minimum wages increase unemployment? Does a new educational innovation increase educational achievement? Does a new policy reduce waiting lists in hospitals? Does expenditure in marketing increase sales? Does affirmative action reduce discrimination?). Standard statistical methods, regardless of their complexity, cannot answer these questions on their own and a new set of statistical tools are needed.

This unit introduces the modern methods of causal inference. You will learn Rubin’s Potential Outcomes framework, and how to use this framework to clarify what data can tell you about a causal effect of interest. You will learn various methods to estimate causal effects from observational and experimental data. Critically, you will be able to gain a deep understanding of the role that different assumptions play in determining what one can learn from data regarding causal questions. The skills you can acquire in this course are applicable to explore causal questions and undertake policy evaluation in a myriad of fields, including economics, criminology, sociology and politics, development, medicine, epidemiology or psychology, to mention but a few.

Aims

Specifically, by completing this module, you will

- Learn to estimate causal effects and answer causal questions in a rich variety of situations ranging from experimental settings to observational data from irregular assignment mechanisms
- Understand the role played by assumptions in the identification of causal effects in different settings
- Become acquaintance with a wide range of estimation and inferential methods for causal models in design based setting (e.g. instrumental variables, regression discontinuity, difference in difference) and model based settings (panel data, matching methods) as well as some more advanced techniques (principal stratification and partial identification)
- You will learn to use the free software R to implement those statistical methods

Objectives: *On completion of this unit successful students will be able to:*

- Select, among a pool of competing methods, those most appropriate to estimate the effect of a policy, experiment or intervention on an outcome of interest.
- Implement the selected estimator using widely available software such as R.
- Successfully write a report explaining and supporting the findings of their analyses.
- Conditional on having a clear policy or research question, students will be able to design policies, experiments and interventions to estimate causal effects.

Course content:

The course is built around 7 topics, to be spread along the 11 weeks of the course. This will allow a paced introduction of each topic and the active engagement of the students.

1. Introduction to the potential outcomes framework. Confounding. Causal Effects. Classification of assignment mechanisms.
2. Randomized control trials and Field Experiments.
3. Non-compliance and cross-over. Wald estimator. Natural experiments in the social sciences. Instrumental Variables.
4. Regression for secondary and experimental data. Instrumental Variables revisited.
5. Further regression methods: Difference-in-Differences, Fixed Effects, Matching methods.
6. Regression Discontinuity.
7. Partial identification.

Teaching and Learning Methods:

Teaching will be based on asynchronous lectures, regular exercises, and a weekly live session. Please note the information in scheduled activity hours are for guidance only and may change.

Assessment

Assessment task	Length required	Weighting within unit
Written assignment	2000 words	60%
Set Exercise	Tutorial exercises	30%
Other	participation	10%

Indicative reading:

There is not, at present, a textbook on the topic of causal inference/policy evaluation aimed at students with a low-to-intermediate level of statistics (though perhaps “Mastering metrics” by Angrist and Pischke might provide a template for future developments). Therefore, lecture notes, gauged at the expected level of the audience, will be provided to students. These notes will be based on the indicative readings.

Most of the empirical papers listed are suitable for broad audiences and students will be able to read them after introducing the corresponding topic in the classes. When possible, data from the papers will be used in the tutorials for replication.

Some of the indicative readings more than exceed the level of the course in terms of complexity (for example, Angrist, Imbens and Rubin, 1996), and are provided for completeness.

Some textbooks/textbook-length articles on the topic of causal inference (which will often be above the level of this course) but which provide useful passages are:

- Winship, Christopher, and Stephen L. Morgan. 1999. The estimation of causal effects from observational data. *Annual Review of Sociology* 25: 659-706.
- Angrist and Pischke (2014) *Mastering metrics: the path from cause to effect*, Princeton University Press.
- Morgan and Winship, (2015). *Counterfactual and Causal Inference: Methods and Principles for Social Science Research*. Cambridge University Press.
- Angrist and Pischke (2008) *Mostly Harmless Econometrics*, Princeton University Press.

In addition to these, the background statistics and probability required can be sourced from a number of books:

- Bartholomew, D. J. (2016). *Statistics without the maths*, Sage Publishing.
- Dancey, C. and Reidy, J. (2017). *Statistics without the maths for psychology*. Prentice Hall.
- Barrow, M. (2017) *Statistics for Economics, Accounting and Business Studies*, Pearson

Topic by topic (this list does not currently describe materials on a week-by-week basis)

1. Introduction to the potential outcomes framework. Confounding. Causal Effects.
 - a. Angrist and Pischke (2008), chapter 1.
 - b. Rubin, D. B. (1974). Estimating causal effects of treatments in randomized and nonrandomized studies. *Journal of Educational Psychology*, 66(5), 688-701.
 - c. Messerli, F. (2012) Chocolate Consumption, Cognitive Function, and Nobel Laureates, *New England Journal of Medicine* 367(16):1562-4 · October 2012.
 - d. Lawlor, D.A., Smith, G.D., Bruckdorfer, K.R., Kundo, D., Ebrahim, S. (2004) Those confounded vitamins: What can we learn from the differences between observational versus randomized trial evidence? *Lancet* 363, 1724–1727.
2. Randomized control trials and Field Experiments.
 - a. Lind, J. (1772) *A treatise on the scurvy*, 3rd Edition. Sands, Murray and Cochran.
 - b. Sanders, Charles and Jastrow, Joseph (1885) On Small Differences in Sensation, *Memoirs of the National Academy of Sciences*, 3, 73-83 (<http://psychclassics.yorku.ca/Peirce/small-diffs.htm>)
 - c. Vohs, K., Mead, N., and Goode, M. (2006) The psychological consequences of money. *Science*, 314, Issue 5802, 1154-1156.

- d. Yip Winnie, Powell-Jackson Timothy, Chen Wen, Hu Min, Fé Eduardo, Hu Mu, Jian Weiyan, Lu Ming, Han Wei, Hsiao William C. (2014) Capitation combined with pay-for-performance improves antibiotic prescribing practices in rural China. *Health Affairs* Vol 33, pp. 502-510.
- e. Bertrand, Marianne, and Sendhil Mullainathan. 2004. "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination." *American Economic Review*, 94 (4): 991-1013.
- f. Pate, A. M., & Hamilton, E. E. (1992). Formal and informal deterrents to domestic violence: The Dade County Spouse Assault Experiment. *American Sociological Review*, 57(5), 691-697.
- g. Sophie Webber & Carolyn Prouse (2018) The New Gold Standard: The Rise of Randomized Control Trials and Experimental Development, *Economic Geography*, 94:2, 166-187.
- h. Bickman, L. and Reich, S. (2014) Randomized Control Trials: A gold standard or gold plated?
- i. King, Gary, Schneer Benjamin and Ariel White (2017) How the news media activate public expression and influence national agendas. *Science*, 358, 776-780.
- j. Gerber, A. and Green, D. (2012), *Field experiments: Design, Analysis and Interpretation*. W. W. Norton & Company.
3. Non-compliance and cross-over. Wald estimator. Instrumental Variables.
 - a. Imbens and Rubin (2010), Chapter 1.
 - b. Angrist and Pischke (2009), Chapter 2.
 - c. Rubin, D. B. (1974). Estimating causal effects of treatments in randomized and nonrandomized studies. *Journal of Educational Psychology*, 66(5), 688-701.
 - d. Joshua D. Angrist, Guido W. Imbens & Donald B. Rubin (1996) Identification of Causal Effects Using Instrumental Variables, *Journal of the American Statistical Association*, 91:434, 444-455
4. Regression for secondary and experimental data. Instrumental Variables revisited.
 - a. Angrist and Pischke (2009), Chapter 3, 4.
 - b. Angrist, J.D., Lavy, V.: Using Maimonides' rule to estimate the effect of class size on scholastic achievement. *Quarterly Journal of Economics* 114, 533–575 (1999),
5. Further regression methods: Matching Methods, Difference-in-Differences, Fixed Effects.
 - a. Angrist and Pischke (2009), Chapters 3, 4, Chapter 5.
 - b. Todd, Petra E.; Wolpin, Kenneth I. On the Specification and Estimation of the Production Function for Cognitive Achievement. *Economic Journal*, v113 n485 pF3-F33 Feb 2003
 - c. [Loopstra](#), R., [Reeves](#) A., [Barr](#) B. , [Taylor-Robinson](#) D., [McKee](#), M. and [Stulker](#) (2016) The impact of economic downturns and budget cuts on homelessness claim rates across 323 local authorities in England, 2004–12. *Journal of Public Health*, Volume 38, Issue 3, 17 September 2016, Pages 417–425
6. Natural experiments in the social sciences.
 - a. Dunning, Thad (2012) *Natural Experiments in the Social Sciences: A Design-Based Approach*, Cambridge University Press
 - b. Diamond, J. and Robinson, J. (2011) *Natural experiments of History*. The Belknap Press of Harvard University Press.
7. Regression Discontinuity.
 - a. Donald Thistlethwaite and Donald Campbell (1960) Regression Discontinuity Analysis: An alternative to ex post facto experiments. *Journal of Educational Psychology*, 56(6)
 - b. Wilbert van der Klaauw (2008) Breaking the link between poverty and low student achievement: An evaluation of Title I. *Journal of Econometrics*, 142, 731-756.
 - c. David S. Lee, Enrico Moretti, Matthew J. Butler; Do Voters Affect or Elect Policies? Evidence from the U. S. House, *The Quarterly Journal of Economics*, Volume 119, Issue 3, 1 August 2004, Pages 807–859,
 - d. Lee, D. and D. Card (2008). Regression discontinuity inference with specification error. *Journal of Econometrics* 142, 655–674.
 - e. Oreopoulos, Philip. 2006. "Estimating Average and Local Average Treatment Effects of Education when Compulsory Schooling Laws Really Matter." *American Economic Review*, 96 (1): 152-175.
 - f. Ojmarh Mitchell, Joshua C. Cochran, Daniel P. Mears & William D. Bales (2017) Examining Prison Effects on Recidivism: A Regression Discontinuity Approach, *Justice Quarterly*, 34:4, 571-596, DOI: [10.1080/07418825.2016.1219762](https://doi.org/10.1080/07418825.2016.1219762)
8. Partial Identification
 - a. Manski (2019) [The Lure of Incredible Certitude](#) (<http://faculty.wcas.northwestern.edu/~cfm754/>)

- b. Manski, C. (1990). Nonparametric bounds on treatment effects. *American Economic Review*, 80: 319-323
- c. Manski, C. (1997). Monotone treatment response. *Econometrica*, 65: 1311-1334
- d. Manski, C. and Pepper, J. (2000). Monotone Instrumental Variables: with an application to the returns to schooling. *Econometrica*, 68: 997-1010
- e. Manski, C.F. and Pepper, J.V. (2013). Deterrence and the death penalty: Partial identification analysis using repeated cross sections. *Journal of Quantitative Criminology*, 29(1):123-141
- f. Manski, C.F. and Pepper, J.V. (2017). How do right-to-carry laws affect crime rates? coping with ambiguity using bounded-variation assumptions. *The Review of Economics and Statistics*

Aims

- To introduce the concepts of social networks and the various kinds of relation that can occur between members of the network.
- To explain how to describe social networks, including visualisation using UCINET software.
- To show how statistical models can be used for social network analysis. To demonstrate the use of software for modelling social networks – in particular the use of R..

Objectives: *On completion of this unit successful students will be able to:*

- Understand the concept of a social network, and the various kinds of relations that can occur with it.
- Know how to describe and visualise the network using appropriate software and summary measures.
- Be familiar with how to model a social network using appropriate software, and understand the substantive reasons for doing so.
- Be able to relate social network dependencies, and understand the substantive reasons for modeling these, to complex design more broadly.
- To critically assess the use of social network analysis in the social sciences.
- Use UCINET, Pnet and R for social network analysis, and organise the network data for use with each of these software packages.
- Participate in a discussion about the strengths and weaknesses of a given piece of research that involves social network analysis.
- Understand the main arguments in methodological journal articles on social network analysis.

Course content : The course will be split into two parts :

Part I: Concepts, description, visualisation. Social networks occur in many situations in the social sciences and other disciplines. We begin with some illustrative examples, and consider the various relations that can occur in a social network such as directed relationships, undirected relationships, reciprocation, and valued relations. We then consider ways to visualise a network, making use of the software UCINET (co-developed by Martin Everett, University of Manchester), and related visualisation package NETDRAW. To complement the visualisations we consider summary statistics for networks such as density and degree. We then move on to other important ideas such as the centrality and betweenness of network members. Substantively these are extremely important concepts: e.g. to find out who are the key people in the network that facilitate information flow in an organisation. We mainly focus on one-mode networks, but we also other kinds of social networks. Finally we briefly touch on other topics, including the collection of network data.

Part II: Statistical models for social networks. This part is composed of two key topics. Firstly, we will explore how we can apply standard statistical approaches to analyzing network data, such as regressing individual-level outcomes on network features and predicting connections between individuals using logistic regression. We will then discuss how the network structure departs from a standard data sets and what implications this might have. This will lead on to the second key topic, namely how we can accommodate the dependencies associated with network data through tailor-made statistical methods for network data. Students are expected to gain experience with addressing the complexities that network data entails and to be able to relate this to issues with complex survey designs, multilevel models, longitudinal designs, spatial modelling etc. Practical examples will be given, including hands-on experience using R software. A brief discussion of R is included at the beginning of the practical session, but it would be helpful if the participant has some prior experience of this software, for example, via a CMI short course on R. The Quick-R website: <http://www.statmethods.net> is also a useful reference.

Teaching Methods:

Computer labs are an integrated part of the course. The course will comprise four taught days, including interactive hands-on sessions, and two days entirely based on computer workshops.

Assessment:

One report equivalent to a 3,000 word essay, and comprising two parts: part one (1500 words) on concepts, description and visualisation of social networks and part two (1500) on statistical models for social networks.

Reading list

- Borgatti, S.P., Everett, M.G., Johnson, J.C. (2013). *Analyzing Social Networks*. Sage.
- Crossley, N., Bellotti, E., Edwards, G., Everett, M. G., Koskinen, J., & Tranmer, M. (2015). *Social Network Analysis for Ego-Nets*. SAGE.
- Hanneman, R.A. and Riddle. M. (2005) *Introduction to social network methods*. Riverside, CA: University of California, Riverside (published in digital form at <http://faculty.ucr.edu/~hanneman/>)
- Scott, J (2000) *Social Network Analysis: A handbook*. Sage
- Lusher D, Koskinen J, Robins G [editors] (2013). *Exponential Random Graph Models for Social Networks: Theory, Methods, and Applications (Structural Analysis in the Social Sciences)*. NY: Cambridge University Press.
- Robins, G. (2015). *Doing Social Networks Research: Network Research Design for Social Scientists*. Sage
- Snijders, T. A. (2011). Statistical models for social networks. *Annual Review of Sociology* 37, 131–153.

Note: for preliminary reading we recommend only the introductory and discussion chapters or sections of these books and papers; we do not expect you to be familiar with all the technical details prior to the course.

See also Statnet in R (for fitting ERGMS): <http://statnet.csde.washington.edu>

Compulsory for SRMS

Dissertation Training Workshops

These two work sessions are designed to provide students with appropriate skills for undertaking a dissertation using secondary analysis. They are required training for all dissertation students (including those who are not currently registered for the Masters, but who wish to progress to the dissertation).

Work session 1. Locating Research Data and Data Access

This session will introduce the UK Data Service and other data resources for undertaking secondary analysis. In this session you will explore the data available and consider how to assess what constitutes good quality data for your own research project.

Work session 2. Dissertation Research Design, Ethics And Getting The Best Out Of Supervision

This session will provide an overview of the dissertation requirements, the project management skills that are required and the role of the supervisor. It will also cover the research ethics process and link to the issues covered in the other modules.

Learning Outcomes: By the end of the sessions, students will have:

- Developed their research and project management skills
- Developed their understanding of research ethics
- Understood how to get the best out of supervision
- Demonstrated skills in accessing secondary data sources and to assessing their appropriateness for a given research topic.
- Have an awareness of good practice in secondary analysis

Presentations:

In the spring term all students are required to give a short presentation of their dissertation outlines. These presentations are given in a supportive environment in which to develop your ideas and benefit from the feedback of staff and fellow MSc and PhD students.

Self-Study Groups:

Students are also encouraged to hold their own dissertation study groups to discuss ideas and share learning. Study rooms and refreshments are made available for these activities.