Programme Specification

A statement of the knowledge, understanding and skills that underpin a taught programme of study leading to an award from The University of Sheffield

1	**Programme Title**	Psychological Research Methods with Advanced Statistics
2	**Programme Code**	PSYT35 (Full-time), PSYT36 (Part-time)
3	**JACS Code**	C800
4	**Level of Study**	Masters
5a	**Final Qualification**	MSc
6a	**Intermediate Qualification(s)**	Postgraduate Diploma, Postgraduate Certificate
7	**Teaching Institution** (if not Sheffield)	Not applicable
8	**Faculty**	Science
9	**Department**	Psychology
10	**Other Departments providing credit bearing modules for the programme**	None
11	**Mode(s) of Attendance**	Full-time and Part-time
12	**Duration of the Programme**	One academic year (Sep-Aug) for Full-time, Two academic years for Part-time
13	**Accrediting Professional or Statutory Body**	Not applicable
14	**Date of production/revision**	January 2017

15. Background to the programme and subject area

With the increased availability of large behavioural datasets in all walks of life (e.g., social media, health care, consumer internet use) and the increased sophistication of statistical tools that can handle them, specialist training in both psychological research methods and advanced statistical methods is becoming highly desirable.

The Psychology Department (http://www.sheffield.ac.uk/psychology) is uniquely well positioned to offer such training. We are a large department with both an outstanding reputation for research in Psychology and amongst the best statistical training in the country. This programme is for students at the beginning of their research careers and provides training in a broad range of research methods along with advanced training in statistics. The research project offers the opportunity to focus on a selected method and to apply advanced statistics to the resulting data.

The course would be ideal training for a student seeking to enter the data science job market (a newly emerging sector analysing large behavioural data sets for companies like Facebook, Google and start-ups who perform similar functions). It would also benefit those wishing to go on to do a PhD, as it would put them in an ideal position to win ESRC Advanced Quants PhD Scholarships. Graduates are also likely to be at an advantage when pursuing careers in applied psychology (e.g., in educational and clinical psychology).

The programme balances breadth and depth. Students are provided with a foundation in a wide range of methodological and professional research related skills and, at the same time, are allowed to focus on both methods and topics of interest to them so they can develop specific expertise. During their literature review and project (comprising 50% of programme credit), students work closely with supervisors who are international leaders in their field. The Department has strengths in theoretical and applied aspects of clinical, social, health, cognitive and developmental psychology and neuroscience. Expert supervision is offered on diverse topics including modelling attitude formation, processing health-risk information, infant development, the application of electroencephalography to social development and analysis of family and environmental risk factors for psychopathology in national datasets. There is substantial potential for advanced statistics to be used in research projects in any of these areas.

16. Programme aims

The aim of the programme is to provide comprehensive training in a variety of psychological research methods and in advanced statistical methods. This will include training in expertise that relates specifically to research in psychology, general research skills and key personal development and transferable professional skills.

17. Programme learning outcomes

Knowledge and understanding: Students are expected to acquire:	
K1	comprehension of basic principles of research design and strategy, including an understanding of how to formulate researchable problems and an appreciation of alternative approaches to research.
K2	competency in understanding and applying a range of psychological research methods and tools.
K3	capabilities for managing research (including managing data), conducting and disseminating research in a way that is consistent with professional practice.
K4	Advanced knowledge of current statistical methods.

Skills and other attributes: Subject-specific skills: students are expected to:	
S1	Develop a critical awareness of the conceptual basis of the various quantitative and qualitative research methods, their advantages and limitations, and the relationship between a research question and the choice of method of data collection.
S2	Carry out empirical psychological studies using appropriate methods of data collection.
S3	Decide on the appropriate method of analysis to answer research questions involving a number of inter-related independent and dependent variables; prepare the data for advanced statistical analysis and interpret the output drawing the correct conclusions accurately and with confidence.
S4	Become familiar with accepted ethical principles of psychological investigation and with the broader context in which psychological research in conducted; enable students to write an ethical proposal for psychological work.
S5	Produce independent research and describe it in a written report and as a verbal presentation to an audience of psychologists.

Skills and other attributes: Transferable skills: students are expected to be able to:	
S6	Understand the structure and content of complex presentations, whether these are scientific data or difficult texts, using problem solving and reasoning skills.
S7	Use software for communication, word-processing, statistical analyses and accessing databases.
S8	Reflect on difficult issues, including the ethical dimension of any work or activity, and to make judgements based on available evidence and argument.
S9	Communicate ideas and arguments effectively, where applicable backed up by empirical evidence, both orally and in writing.
S10	Develop the skills and confidence of an independent learner, with the ability to manage time effectively by working to deadlines.
S11	Work autonomously to research and produce substantial pieces of writing, including empirical work of a recognised scientific quality, to specified standards of content and presentation.
S12	Work effectively as part of a team, with awareness of the psychological aspects of interpersonal communication and shared skills;
S13	Use libraries and IT resources effectively for the purposes of searching for and acquiring relevant information;
S14	Manage and synthesise bodies of psychological literature in a systematic and replicable fashion.

18. Teaching, learning and assessment

Development of the programme learning outcomes is promoted through various teaching and learning methods as described below.

The primary teaching methods, except for the research project which is individually supervised, are seminars and workshops. These methods maximise staff-student interaction and active participation by students in discussions, individual presentations and team-working on practical problems. They also provide a supportive context in which immediate feedback can be offered to, and discussed with, students on aspects of their performance. Additionally students have the opportunity for reflective practice and critical examination of issues through discussion, and to enhance their transferable skills such as use of IT, communication and presentation skills, and the ability to work effectively in groups.

The frequency of project supervision meetings varies according to students' needs. Frequent email contact between meetings is also encouraged. Assignment milestones will be agreed and all students will have planned their project by the start of the Easter vacation.

Opportunities to demonstrate achievement of the programme learning outcomes are provided through various assessment methods as described below.

A variety of assessment methods are used throughout the modules. The main exception is the research project, which will be assessed on the basis of a dissertation. The remainder of the course will be assessed using a combination of course-work exercises undertaken concurrently with particular sessions and/or a summary assessment (e.g. in the form of an extended essay or short dissertation) at the conclusion of the modules. The assessment for each module is outlined below:-

- 'Advanced multivariate statistics for psychology (1) and (2)' - the assessment will be on the basis of a coursework assignment where students interpret and report a set of presented statistical analyses. The assessment addresses outcomes K1-4, S1-3, and S7.
- 'Research methods in psychology' - assessed on the basis of a written assignment in which students identify recent research papers that report studies using methods demonstrated in practical sessions and critically evaluate the efficacy of those methods compared to available alternatives. For K1-3, S1-3, S6-9 and S12.
- 'Professional skills for psychologists' – the assessment involves a portfolio of coursework including a written research proposal, an essay addressing ethical issues in research and an assessed oral presentation. The presentation addresses the students' empirical project and is assessed for clarity of content, style, pacing of delivery, and responses to questions. The assessments address K1-2, S1, S3-5, S6 and S8-10.
- 'Systematically Reviewing Psychological Research" – the assessment involves writing a 7000 word literature review on a topic of the student's choice. For K1-2, S5, and S8-10.

'Research project in psychology with advanced statistics' – assessment will be on the basis of a dissertation that reports a study with advanced statistical analysis of a dataset (6000 words). The project will address all the learning outcomes, in particular K1-4, S2-5 and S6-13.

19. Reference points

The learning outcomes have been developed to reflect the following points of reference:

Subject Benchmark Statements
http://www.qaa.ac.uk/AssuringStandardsAndQuality/subject-guidance/Pages/Subject-benchmark-statements.aspx

Framework for Higher Education Qualifications (2008)
http://www.qaa.ac.uk/Publications/InformationAndGuidance/Pages/The-framework-for-higher-education-qualifications-in-England-Wales-and-Northern-Ireland.aspx

University Strategic Plan
http://www.sheffield.ac.uk/strategicplan

Learning and Teaching Strategy (2011-16)
http://www.shef.ac.uk/lets/strategy/lts11_16

The British Psychological Society

20. Programme structure and regulations

For full-time students the programme follows a two-semester structure, with most units (also referred to as modules) being delivered in semester 1 or 2, but with some delivered over the two semesters. The research project commences in semester 1 and is submitted in August. Part-time students spread their taught modules and research project over 2 years, with the taught component more heavily weighted in the first year and the research project more heavily weighted in the second.

Each student must take the following core modules (totalling 180 credits):

- Intermediate Multivariate Statistics for Psychology 1 (15 credits)
- Advanced multivariate statistics for Psychology (15 credits)
- Systematically Reviewing Psychological Research (30 credits)
- Professional Skills for Psychologists (30 credits)
- Research Methods in Psychology (30 credits)
- Research Project in Psychology with Advanced Statistics (60 credits)

In Year 1 part-time students will take 90 credits:

- Intermediate Multivariate Statistics for Psychology (15 credits)
- Advanced multivariate statistics for Psychology (15 credits)
- Systematically Reviewing Psychological Research (30 credits)
- Research Methods in Psychology (30 credits)

In Year 2 part-time students will take 90 credits:

- Professional Skills for Psychologists (30 credits)
- Research Project in Psychology with advanced statistics (60 credits)

A candidate who has been awarded *one hundred and twenty* credits in respect of units listed above and who does not complete the requirements for the Degree of MSc shall be eligible for the award of the Postgraduate Diploma in Psychological Research Methods with Advanced Statistics.

A candidate who has been awarded *sixty* credits in respect of units listed above and who does not complete the requirements for the Degree of MSc shall be eligible for the award of the Postgraduate Certificate in Psychological Research Methods with Advanced Statistics.

Detailed information about the structure of programmes, regulations concerning assessment and progression and descriptions of individual modules are published in the University Calendar available on-line at http://www.shef.ac.uk/govern/calendar/regs.html.

21. Student development over the course of study

The course is structured to provide students with tutor-led research methods training in the earlier stages. As the course develops students have more independence to choose their own topics as they prepare assessments and conduct their empirical projects. Support remains from research supervisors throughout the course.

Evaluating the progress of individual students towards completion of module assessments is achieved through interactive seminars and individual meetings with supervisors. For 50% of the course (literature review and research project) the student will meet regularly with their supervisor to set goals and monitor progress. In addition, students will meet on a 1 to 1 basis with the MO of the Reviewing Psychological Research module to discuss a plan of their review.

22. Criteria for admission to the programme

Detailed information regarding admission to the programme is available at http://www.sheffield.ac.uk/psychology/prospectivepg/masters/msc-psychological-research

The usual level of English language is required for overseas applicants. Our standard English requirement is a minimum IELTS 7.0 (with no less than 7.0 in the writing component and no less than 6.0 in reading, speaking and listening).

23. Additional information

Further information about the department is available from: http://www.sheffield.ac.uk/psychology

Prospective applicants might also benefit from browsing the following Doctoral training centre web page: http://www.shef.ac.uk/social-sciences-dtc/index

This specification represents a concise statement about the main features of the programme and should be considered alongside other sources of information provided by the teaching department(s) and the University. In addition to programme specific information, further information about studying at The University of Sheffield can be accessed via our Student Services web site at www.shef.ac.uk/ssid.