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**	Clinical Neurology
2	**Programme Code**	SMPT056 / MEDT21
3	**HECoS Code**	100272
4	**Level of Study**	Postgraduate
5a	**Final Qualification**	Master of Science (MSc)
5b	**QAA FHEQ Level**	7
6a	**Intermediate Qualification(s)**	Postgraduate diploma (PGDip)
6b	**QAA FHEQ Level**	7
7	**Teaching Institution** (if not Sheffield)	Not applicable
8	**Faculty**	Health
9	**School**	School of Medicine and Population Health
10	**Other Schools involved in teaching the programme**	None
11	**Mode(s) of Attendance**	Full time
12	**Duration of the Programme**	1 year
13	**Accrediting Professional or Statutory Body**	Not applicable
14	**Date of production/revision**	July 2024

15. Background to the programme and subject area

Clinical Neurology applies the basics of contemporary neuroscience to enable understanding of the functioning of the nervous system and modern approaches to neurological disease. With an ageing population neurological diseases are an increasing economic burden to society and a cause of much suffering to patients and carers alike. Our MSc programme offers theoretical and practical training in fundamental aspects of clinical neurology and contemporary neuroscience encompassing basic neuro anatomy, neurophysiology, clinical skills training, disease specific teaching, modern therapeutics, and important clinical neuroscience research developments molecular.

The course combines the clinical and research strengths within the School of Medicine and Population Health in the Faculty of Health and the School of Bioscience to provide a progressive programme of fundamental neurobiology through to applied clinical practice. Students on our MSc programme study a range of modules that provide detailed theory and specific practical skills in clinical neuroscience. Students will have the opportunity to attend a variety of neurology clinics and attend small group tutorials with patient focused teaching. Students have the opportunity to undertake an individual research project. This can be within one of our laboratories to provide practical experience and training in research methods in basic neuroscience. Alternatively, the research project may be primary or secondary research within the clinical sphere. There is also an option to spend a period of time as an “apprentice” working closely with a specialist neurologist to develop in depth experience in a particular sub-specialty. The research projects, clinical experience, course work projects, seminar programmes and taught modules provide a range of subject specific and transferable skills pertinent to a career in health care settings, academia or in industry around the world.

16. Programme aims

1. To enable students to develop independence of thought, intellectual curiosity and a critical approach to evidence, theories and concepts.

2. To provide stimulating and enjoyable teaching that is informed and invigorated by the research and scholarship of the staff.

3. To foster a commitment to continuing professional development and lifelong learning.

4. To train students to be able to describe how the pathophysiology, clinical features, investigations, treatment and key research areas are interlinked and translated from bench to bedside.

5. To prepare students for further postgraduate work and/or a professional career in clinical neuroscience or other areas of biomedical practice through transferable skills.

17. Programme learning outcomes

Knowledge and understanding: Candidates completing the programme will have:	
K1	An in-depth knowledge of key areas and topics in Clinical neuroscience.
K2	An appreciation of the current and potential impact of neurological disease on society.
K3	A detailed critical knowledge in the retrieval, interpretation, referencing and presentation of scientific information.
K4	A critical understanding of clinical research activities including research design, data collection and analysis and research conduct.
K5	An in-depth knowledge of one key neurology subspecialty (MSc clinical learning experience in neurology module only).

Skills and other attributes:	
S1	Ability to translate knowledge of the neuroanatomical and neuro-biological basis underlying neurological disease to communicate key aspects of the biopsychosocial and societal impact and management plan for common and important neurological diseases.
S2	Retrieve, critically analyse, synthesize and summarise published information and present the results in a range of formats.
S3	Demonstrate independent thought and judgement in relation to critical analysis of scientific literature and research data.
S4	Analyse and interpret basic clinical and research data in a critical, objective manner and use appropriate tools to do this.
S5	Be able to communicate information to a range of audiences using a range of methods including peers, academics, patients and a lay audience.
S6	Demonstrate the awareness of how to plan and execute aspects of simple clinical research studies including awareness of legal, governance, ethical, inclusivity and sustainability considerations.
S7	Work effectively with peers, colleagues, patients and the public in a professional manner to be part of a research team.

18. Teaching, learning and assessment

Development of the learning outcomes is promoted through the following teaching and learning methods:

The School of Medicine and Population Health fosters an environment that provides many opportunities for individual and group learning. However, the primary responsibility for learning lies with the student, who must be organised and self-motivated to make the most of the programme. Theoretical information will be provided through lectures, seminars, practical demonstration classes and interactive tutorials. Students are also expected to undertake a significant amount of independent study using library and web-based resources.

Professional behaviours are developed through contact with expert patients, observation of clinical encounters in the outpatient School, interactive tutorials and through the 15-week project. The students are provided with written feedback for each piece of formative assessment. Verbal feedback is provided in lectures, tutorials, journal clubs and through direct supervision with an experienced professional/academic in the 15-week module.

Assessment aims to assess a range of skills recognised to be key to the role of a junior researcher or healthcare professional with an interest in research. The style of the assessments becomes more reflective of the role of a junior researcher throughout the year to provide opportunity for supportive feedback early on in the Autumn term to allow them to build on their skills in the later modules.

The linkage between the main teaching, learning and assessment methods adopted for each outcome are tabulated below.

Learning outcome	Teaching							Assessment					
	Lectures	Ward/ Clinic teaching		Practical classes	Problem Based Learning	Research Project	Tutorials	Oral presentation	Written exam	Open book coursework	Viva voce	Reflective log	Research dissertation (Masters only)
K1	x	x		x	x	x	x	x	x	x	x	x	x
K2	x	x		x	x	x	x	x	x	x	x	x	x
K3	x					x	x	x	x	x	x	x	x
K4	x					x	x				x	x	x
K5	x	x					x		x	x		x	
S1	x	x		x	x	x	x	x	x	x	x	x	x
S2	x	x			x		x		x			x	
S3	x				x	x	x	x	x	x			x
S4	x					x	x	x		x			x
S5					x	x	x	x	x	x			x
S6	x	x		x		x	x	x	x			x	x
S7						x	x						x

Opportunities to demonstrate achievement of the learning outcomes are provided through the following assessment methods:

Each thirty-credit module has more than one assessment.

Critical analysis is assessed in a summative manner through peer led journal clubs and in a formative manner through a critical analysis essay (15 credits). Neuroanatomy, basic neurobiology, neuroradiology and neurophysiology are assessed using a spotter and short answer question (15 credits). Students are required to prepare a presentation and a short piece of work aimed at a lay audience focussing on the ethical and methodological aspects of a simple research project (15 credits). There are three open book examinations with short essay questions (15 credits each). Students are required to create a poster and present it in the style of a conference poster presentation to their peers (15 credits). In the neurodegeneration module students are required to produce a piece of science communication aimed at a lay audience and write a short scientific and lay abstract based on a research paper (15 credits in total).

In the third semester the students have to select one of two 60 credit options out of: 1) A research project (with or without patient contact) and 2) Clinical Neurology Experiential Learning module (CNELM)

The research project (60 credits) is assessed from the written dissertation and viva voce examination. The viva is an opportunity for the student to discuss/defend their dissertation and is used by the external examiner as a means of assessing the quality of the projects.

The CNEL Module is assessed by means of a portfolio (30 credits) and a 6000-word dissertation (30 credits) on an aspect of the sub-specialty chosen for the apprenticeship. The portfolio will contain a reflective log, anonymised details of cases seen and work-based assessments. This reflects the learning requirements of junior doctors training in the NHS. Students will be expected to have covered a core sub-specialty spread of cases that reflects the learning outcomes agreed by the student with their supervision. The students will perform work-based assessments (mini CEX and case-based discussions). The number and type will be agreed with the student and supervisor in line with their learning objectives. A 6000-word coursework essay will also be used to test in depth knowledge on a particular subject (30 credits).

Learning outcomes are mapped to the appropriate assessment. Students are well informed of the University's attitude towards plagiarism. Assignments are all screened with plagiarism software. Plagiarism is punished according to the University's rules.

19. Reference points

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

Subject Benchmark Statements
https://www.qaa.ac.uk/quality-code/subject-benchmark-statements

https://www.qaa.ac.uk/the-quality-code/qualifications-frameworksUniversity Strategic Plan
http://www.sheffield.ac.uk/strategicplan

Feedback from lecturers, students and external examiners on other MSc courses, including the MSc in Molecular Medicine, MSc in Translational Neuroscience

20. Programme structure and regulations

All students complete two modules during the first semester:

- Cerebrovascular disease and disorders of consciousness.
- Inflammation and disorders of the peripheral nervous system.

All students complete two modules during the second semester:

- Applied neuroanatomy and clinical neuroscience.
- Neurodegeneration.

In the third semester, all students select one of the following modules.

Option A:

- Research project (with or without patient contact).

Option B:

- Clinical Neurology Experiential Learning Module

Option A is open to all students. Option B is available only to students who are qualified doctors. All students will need honorary contracts with Sheffield teaching hospitals NHS Foundation trust. This will be processed on starting the course. Students attaining 120 credits only will be awarded a Postgraduate Diploma and on attainment of 90 credits a Postgraduate Certificate.

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 https://www.sheffield.ac.uk/calendar/regs

21. Student development over the course of study

The programme is designed so that students progressively achieve more advanced levels of learning and practice. In semester 1 and 2, students take four modules designed to ensure that all students, irrespective of their background, have a thorough knowledge of the fundamentals of neuroscience and the practice of clinical neurology. The course recruits students from medical, paraclinical and biological science backgrounds. Option A is tailored for students with a biological science background, allowing them to develop an in-depth knowledge of clinical neuroscience before embarking on a laboratory-based research project or secondary research such as a meta-analysis. Option B is aimed at students with a medical or paraclinical background who have previous professional experience of working with patients. The style of assessment develops through the course to ensure the student is supported to develop skills required of a junior researcher or healthcare professional with an interest in research.

22. Criteria for admission to the programme

Detailed information regarding admission to programmes is available from the University's On-Line Prospectus at http://www.shef.ac.uk/courses/.

II degree in appropriate subject after minimum of 3 years study or

MBChB or equivalent

Additionally for Non-UK

IELTS 6.5

Candidates will normally have a good (upper second class or better) degree or equivalent in a relevant biomedical subject. Candidates will also have an IELTS mean of 6.5 (with a minimum of 6.0 in each component). The course also represents a career development opportunity for overseas medical graduates seeking to undertake PhD study.

23. Additional information

Sheffield combines the advantages of a top-quality University, an outstanding Student's Union, a large city and a pleasant location adjacent to the Peak District National Park.

Information on the wealth and breadth of Neuroscience teaching and research at the University of Sheffield can be found by browsing the following websites:

https://www.sheffield.ac.uk/neuroscience-institute

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 School(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 http://www.shef.ac.uk/ssid.