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**	Medicine
2	**Programme Code**	MEDU19
3	**JACS Code**	Not applicable
4	**Level of Study**	Undergraduate
5a	**Final Qualification**	Bachelor of Medical Science with Honours (BMedSci Hons)
5b	**QAA FHEQ Level**	Honours
6	**Intermediate Qualification(s)**	None
7	**Teaching Institution** (if not Sheffield)	Not applicable
8	**Faculty**	Health
9	**School**	Medicine and Population Health
10	**Other school(s) involved in teaching the programme**	Biosciences
11	**Mode(s) of Attendance**	Full-time
12	**Duration of the Programme**	One year
13	**Accrediting Professional or Statutory Body**	None
14	**Date of production/revision**	January 2009

15. Background to the programme and subject area

Approximately twenty students a year apply to do an intercalated BMedSci degree whilst studying Medicine. This programme is only available to students studying Medicine in Sheffield. Students undertaking the BMedSci take a year out from their main MB, ChB degree and design and carry out a scientific research project in a medical or medically-related area at the end of which they must produce a dissertation of 50,000 words.

Medical students wishing to develop a career in academic medicine or medical research find it invaluable to attain a BMedSci degree qualification as do those who want to intensively study a single area of medicine as a possible springboard into that speciality once they have graduated.

In the course of this year students acquire skills in research methodology, IT, statistical analysis and research ethics. They are also given opportunities to verbally present their work and where possible, gain an academic publication.

Students complete their BMedSci research projects under the supervision of academics and clinicians from a range of disciplines within and relevant to medicine. Additional funding is available to support medical students wishing to undertake this further year of study.

16. Programme aims

The aims of the programme are:

1. To provide an enhanced knowledge and understanding of biomedical research and its methods
2. To develop skills in research evaluation, communication and ethics
3. To allow students to apply the above through an extended research project

17. Programme learning outcomes

Knowledge and understanding:	
Students will have knowledge and understanding of:	
K1	The place of research in medicine
K2	Current medical research and it methods
K3	The conduct of research in accordance with correct research methodologies and procedures
K4	The importance of conducting research in accordance with up-to-date ethical guidelines and policies
K5	The fundamental principles of designing research projects and protocols

Skills and other attributes:	
Academic and intellectual skills: students will be able to:	
S1	Design a research project in accordance with appropriate research methodologies and ethical principles
S2	Exercise independent judgment and critical thinking
S3	Apply basic statistical methods to data evaluation and interpretation
S4	Present work orally and in writing to an academic audience
S5	Where their project requires it, carry out practical experiments and tasks in a laboratory setting in accordance with health and safety guidelines
S6	Produce a well-structured and substantial dissertation to present the results of their research project
S7	Conduct an extensive literature review using relevant sources

Skills and other attributes:	
Transferable skills: students will be able to:	
T1	Apply good time-management skills to structure their work and meet deadlines
T2	Effectively use a wide range of IT packages for a variety of tasks
T3	Work independently on a project
T4	Display good written and oral communication skills
T5	Understand and apply basic statistical methods
T6	Self-direct their learning

18. Teaching, learning and assessment

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

All students attend a set programme of teaching sessions at the start of the course covering project design, ethics, statistics, literature searching and health and safety. Additionally, each student receives an individual programme of teaching sessions with relevance to the subject matter of his or her research project. This is provided by the academic department/division in which the student receives supervision and may incorporate, for example, ward rounds and other clinical sessions, a selection of modules from an existing higher degree course, and instruction in laboratory methods.

However, due to the high degree of independent thought necessary to complete successfully a BMedSci research project, students are encouraged to self-direct their learning at every opportunity. This approach is fostered by the development of a close, professional supervisor/supervisee relationship as is more commonly found in the structure of higher degrees by research.

Students are encouraged to present their work at departmental research seminars and all students have to attend a presentation day at the end of the BMedSci year to present their work to an academic audience. Students are also encouraged to write for publication and to attend conferences in their field wherever possible.

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

The learning outcomes relating to the conduct of research, including project design, statistical analysis, interpretation of results and dissertation, are all subject to summative assessment based on a viva voce examination of the candidate in terms of his or her dissertation: to count towards 70% of the final mark.

All students also complete two pieces of written work in the form of short assignments relating separately to ethics and statistical methods. Thestatistics assignment accounts for 20% of the final mark and the Ethics coursework 10%.

	TEACHING / LEARNING					**ASSESSMENT**	
LEARNING OUTCOME	Lectures in Short Course	Oral presentation	Individual research project	Coursework assignments		Viva voce examination on dissertation	Coursework submissions
K1 The place of research in medicine	*		*				
K2 Current medical research and it methods	*		*				
K3 The conduct of research in accordance with correct research methodologies and procedures	*		*	*		*	*
K4 The importance of conducting research in accordance with up-to-date ethical guidelines and policies	*		*	*			*
K5 The fundamental principles of designing research projects and protocols	*		*			*	
S1 Design a research project in accordance with appropriate research methodologies and ethical principles	*		*			*	*
S2 Exercise independent judgment and critical thinking		*	*	*		*	*
S3 Apply basic statistical methods to data evaluation and interpretation	*	*		*		*	*
S4 Present work orally and in writing to an academic audience		*	*	*		*	*
S5 Where their project requires it, carry out practical experiments and tasks in a laboratory setting in accordance with health and safety guidelines	*		*				
S6 Produce a well-structured and substantial dissertation to present the results of their research project	*		*			*	
S7 Conduct an extensive literature review using relevant sources	*		*			*	*
T1 Apply good time-management skills to structure their work and meet deadlines			*	*			*
T2 Effectively use a wide range of IT packages for a variety of tasks		*	*	*			*
T3 Work independently on a project		*	*	*		*	*

T4 Display good written and oral communication skills		*	*	*		*	*
T5 Understand and apply basic statistical methods	*	*	*	*		*	*
T6 Self-direct their learning		*	*	*		*	*

The overall proportions of assessment by the various methods are given in the following table:

	Proportion of total assessment (%)
Dissertation and viva voce examination	70
Ethics coursework submission	15
Statistics coursework submission	15

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

'Tomorrow's Doctors'. General Medical Council.

The evaluations of students.

20. Programme structure and regulations

A person who has passed the Phase 1b Examination for the Degrees of MB, ChB at a standard acceptable to the Board may read for the Degree of BMedSci in Medicine. Other persons from within the Faculty of Medicine may be permitted by the Board to read for the programme. The programme may also be intercalated between any of the subsequent phases of the programme of study for the Degrees of MB, ChB or undertaken after graduation.

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

Due to the diverse nature of the projects taken in this year it is not possible to identify the precise timings of the development of the knowledge, skills and attributes listed in Section 17.

In order to undertake this project, students must research the available literature, identify suitable research questions and hypotheses and design experiments that will successfully answer these issues. These activities, as well as the conduct of the practical experiments, will be facilitated and supervised by an experienced academic tutor. Throughout the periods of designing and conducting experiments students will be required to read widely around their subject area and integrate this knowledge and that acquired from teaching during the programme.

It is anticipated that for most students the last two to three months of the year will be spent writing-up their results and finalising their dissertations.

22. Criteria for admission to the programme

Detailed information regarding admission to the programme is available at http://www.shef.ac.uk/prospective/.

23. Additional information

A number of bursaries are available from charities and research organisations to support students doing BMedSci Degrees. These bursaries are there to provide a contribution to the recipients' tuition fees and living costs. They are allocated to students on the basis of academic performance in the MB, ChB and/or on the basis of the topic of their research project. Students who are not in receipt of a bursary are still able to enter the programme and are charged tuition fees at the standard rate for an undergraduate programme.
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 http://www.shef.ac.uk/ssid.