

PROGRAMME SPECIFICATION



1	Awarding Institution	Newcastle University
2	Teaching Institutions	Newcastle University Newcastle Hospitals
3	Final Award	Postgraduate Certificate in Clinical Transplantation
4	Programme Title	Clinical Transplantation
5	FHEQ Level	7
6	Programme Code	3057P
7	Programme Accreditation	N/A
8	QAA Subject Benchmark(s)	
9	Last updated	May 2012

10 Programme Aims

The Certificate in Clinical Transplantation is designed to provide the necessary scientific and clinical background for healthcare science professionals working in solid organ transplantation.

Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in the following areas.

Knowledge and Understanding

On completing the programme students should be able to:

A1. display a systematic understanding of the major issues and developments around clinical transplantation including; core procedures such as tissue typing, donor organ procurement, identification of the most appropriate recipient and use of stem cells.

A2. demonstrate a systematic understanding and critical awareness of the major ethical and legal issues associated with solid organ transplantation.

A3. display a systematic understanding of the processes of liver, kidney and pancreas transplantation from identifying the recipient through post-operative care.

A4. demonstrate a systematic understanding of the processes of heart, lung and heart-lung transplantation from identifying the recipient through to post-operative care.

Teaching and Learning Methods

Outcomes **A1 – A4** are achieved through a series of intensive (day release) lectures and seminars each with group discussions. Each day release is backed up by periods of self-directed learning and completion of subject specific exercises using various forms of on-line learning and discussion boards. **A1** and **A2** are specifically addressed in the module **TRX8001** but they also appear throughout the modules **TRX8002** and **TRX8003**. **A3** and **A4** are specific to modules **TRX8002** and **TRX8003**, respectively. In the latter case the same teaching strategy applies (intensive day release lectures and seminars followed up by self-directed learning periods and exercises using a variety of media).

Students will acquire knowledge through team work, case studies, presentations, and independent study and research. Some modules include short problem-solving exercises which will be consolidated through their workplace learning and rotations.

Assessment Strategy

Intended learning outcomes: A variety of assessment methods are used to ensure the module and programme outcomes are met. These include in **TRX8001**: power-point delivered case reviews; Power-point journal paper (group exercise) review; 2000 word essay; in **TRX8002**: case studies; journal club; quiz and 2000 word essay; in **TRX8003**: data assessment; presentation; 2000 word essay. All of the assessment methods employed in the programme are used to assess the learning outcomes listed above. Thus for **TRX8001** outcomes A1 and A2 are addressed predominantly in the essay but also in the case review and journal paper presentation. This mix of assessments is designed to test not only knowledge but also understanding in depth. Similarly in **TRX8002** the assessment methods all test outcome A3 with the essay testing knowledge and understanding and the journal club and quiz backing up this assessment. The relationship between outcomes and the assessments is the same in **TRX8003**. This assessment strategy applies across all three modules.

Intellectual Skills

On completing the programme students should be able to:

- B1.** discuss critically potential short and long term strategies for the use of immune suppression to prevent transplant rejection, the different mechanisms by which the immune system may reject transplanted organs and the impact of recent advances in this field.
- B2.** identify and discuss the various surgical problems that can occur in clinical transplantation and how these differ between different types of solid organ graft.
- B3.** critically review appropriate choices for the maintenance of different solid organ grafts.
- B4.** consider critically and present an appropriate personal care plan in a clinical setting and include evaluation of recent advances and developments in the field.

Teaching and Learning Methods

Intellectual skills (**B1 to B4**) are developed progressively throughout the programme in the lectures, seminars, case studies, presentations, group work and essays. Self-directed learning through reading for the different assessments encourages a greater depth of understanding to be acquired. This understanding is tested in the assessments.

Throughout the programme, students will develop intellectual skills by participating in group discussions and presentations involving case studies and journal clubs to enhance; **(a)** analytical and interpretative abilities and **(b)** their ability to formulate objective and coherent arguments.

Assessment Strategy

B1 is assessed throughout the programme in the essays and in the case histories, presentations, journal club and quiz. The underlying principles of immune suppression are introduced in **TRX8001** with the clinical application being discussed in modules **TRX8002** and **TRX8003**.

B2 is assessed via the case histories and essay in **TRX8002** and **TRX8003**.

B3 is central to the two modules **TRX8002** and **TRX8003** and is assessed through all assessments in both modules.

B3 & B4 are assessed through the taught modules **TRX8002** and **TRX8003**

Practical Skills

On completing the programme students should be able to:

C1. identify key risk factors in the post-transplant period for graft loss including rejection, infection and PTLD.

C2. critically evaluate appropriate choices for the maintenance of different solid organ graft including tolerance.

C3. produce an appropriate personal care plan for patients undergoing solid organ transplantation including a consideration of surgical procedures and pre- and post- operative care.

Teaching and Learning Methods

Practical Skills (**C1 to C3**) are primarily developed through coursework for the three modules. It is essential to complete all three modules to achieve a complete picture required for the different types of solid organ transplant and the different clinical situations which arise.

Assessment Strategy

The assessment of practical skills (**C1 to C3**) will occur in all three modules (TRX8001, TRX8002 and TRX8003). Students will study current published clinical evidence and case histories relevant to transplantation. They will develop and write presentations wherein the students' understanding of the subject and their ability to evaluate different options for patient management will be assessed. This will be backed up to some extent by the written essays and quiz.

Transferable/Key Skills

On completing the programme students should be able to:

D1. prepare short presentations working alone or in groups

D2. write short focussed essays

D3. exercise initiative and personal responsibility

Teaching and Learning Methods

Transferable/Key skills **D1 to D3** are developed throughout the programme. All modules involve presentations and/or case studies. All three involve a written essay and all require the application of initiative and personal skills.

Assessment Strategy

As a consequence of the mixture of assessments key skills are not individually assessed in any particular module instead they are assessed throughout the programme using a variety of techniques including; group and individual presentations, journal clubs, a knowledge based quiz and three medium length essays (one per module).

11 Programme Curriculum, Structure and Features

Basic structure of the programme

The programme consists of three compulsory 20 credit modules:

TRX8001: Principles of Transplantation Science (20 credits)

This module will provide the necessary background to understand transplantation sciences in a clinical setting and provide students with knowledge and understanding of the basic science and scientific knowledge that will underpin future studies in this area of healthcare science. This module will also introduce some of the framework concepts for underpinning professional practice in transplantation and this process will continue in modules TRX8002 and TRX8003.

The module will be delivered through a blend of intensive face-to-face teaching on day release and self-directed learning supported throughout the year and through the University's virtual learning environment (VLE) Blackboard.

TRX8002: Transplantation of the Kidney, Liver and Pancreas (20 credits).

This module will provide the necessary background to understand the clinical principles and procedures involved in solid organ transplantation below the diaphragm. Together with the introduction to the basic principles of transplantation sciences this module will provide students with knowledge and understanding of the basic science and clinical practices necessary in this area of healthcare science. This module will also build upon the framework concepts underpinning professional practice in transplantation introduced in the first module TRX8001 and this process will continue in the third module TRX8003.

The module will be delivered through a blend of intensive face-to-face teaching on day release and self-directed learning supported throughout the year and through the University's virtual learning environment (VLE) Blackboard.

TRX8003: Transplantation of the Heart & Lung (20 credits).

This module will provide the necessary background to understand the clinical principles and procedures that apply to solid organ transplantation above the diaphragm. Together with the other two modules from the postgraduate certificate (TRX8001 and TRX8002), this module completes the knowledge framework underpinning professional practice in transplantation.

The module will be delivered through a blend of intensive face-to-face teaching on day release and self-directed learning supported throughout the year and through the University's virtual learning environment (VLE) Blackboard.

12 Key features of the programme (including what makes the programme distinctive)

The programme provides an all round education in the principles and practice of solid organ transplantation above and below the diaphragm. The programme has been developed to link up with the Institute of Transplantation which is part of the Newcastle upon Tyne Hospitals NHS Foundation Trust on the Freeman Hospital site. Students with different roles within NHS Healthcare will benefit from the programme including – Medical and Surgical Trainees, Clinical Trial Managers, Transplant Coordinators and Nurses. Some students may wish to undertake individual modules for CPD and others will wish to complete the whole programme.

The programme has been designed to be delivered over a single year with each module consisting of face-to-face lectures, seminars and small group sessions delivered in day-release format to suit the needs of professional healthcare workers. The work will be supported through discussion groups and interaction on the University's VLE Blackboard and assessed in a variety of ways that reflect real practice in both everyday health care scenarios and in healthcare research.

The programme has been designed to provide academic support coupled with real-world practice for students and allow them to develop their clinical competency.

The programme allows an in-depth appreciation of Transplantation Sciences in the clinical setting thus providing a link between the theory provided by the academic inputs and clinical practice in the workplace and this makes this programme distinctive.

Programme regulations (link to on-line version)

<http://www.ncl.ac.uk/regulations/>

13 Criteria for admission

Entry qualifications

A candidate may be entered for the Transplantation Programme at the discretion of the Degree Programme Director and provided that such a candidate:

a) has successfully completed the final year of the Bachelor of Medicine and Bachelor of Surgery or Bachelor of Dental Surgery or equivalent; or

(b) has a minimum lower-second-class appropriate honours degree or equivalent professional qualification in a profession allied to medicine with at least two years post-qualification experience

If taking a module(s) for CPD will have an appropriate qualification (as above) and be in a post which will recognise the module(s) for CPD credit.

Admissions policy/selection tools

Applicants will apply online for consideration of a place. Where appropriate, paramedical professionals will be invited to participate in a short informal interview where suitability of the course for their particular training needs will be considered by the DPD and other course leaders as appropriate.

Non-standard Entry Requirements: None

Additional Requirements: None

Level of English Language capability: overall IELTS score of 7.0, minimum 6.5 in each component.

14 Support for Student Learning

The Student Services portal provides links to key services and other information and is available at: www.ncl.ac.uk/students/

Induction

During the first two days of the first semester students attend an induction programme providing a general introduction to University and their principle support services and general information about the Postgraduate Certificate, They will be given detailed programme information in the form of a programme handbook which will include the timetable of lectures, seminars, tutorials and assessment deadlines.

Study skills support

Students will learn a range of Personal Transferable Skills, including Study Skills, as outlined in the Programme Specification. Some of this material, e.g. time management, is covered in the appropriate Induction Programme. Students are explicitly tutored on their approach to both group and individual projects.

Numeracy support and help with academic writing is available in the University.

Academic support

The initial point of contact for a student is with a lecturer or module leader, or their tutor (see below) for more generic issues. Thereafter the Degree Programme Director or Head of School may be consulted. Issues relating to the programme may be raised at the Staff-Student Committee, and/or at the Board of Studies.

Pastoral support

All students are assigned a personal tutor whose responsibility is to monitor the academic performance and overall well-being of their tutees. In addition there is a Senior Tutor who looks after all Postgraduate Masters students who can be contacted through the link in the programme handbook. Further support can be obtained through the Student Wellbeing Service at the University who offer one-to-one counselling and guidance or group sessions/workshops on a range of topics, such as emotional issues e.g. stress and anxiety, student finance and budgeting, disability matters etc. There is also specialist support available for students with dyslexia and mental health issues, and support for all students on a range of topics including housing, debt, legal issues etc.

Support for students with disabilities

Newcastle University's Disability Support Service provides help and advice for disabled students at the University - and those thinking of coming to Newcastle. It provides individuals with: advice about the University's facilities, services and the accessibility of campus; details about the technical support available; guidance in study skills and advice on financial support arrangements.

Learning resources

The University's main learning resources are provided by the Robinson and Walton Libraries (for books, journals, online resources). On-line access to an extensive range of electronic data bases, journals and books will be provided by Newcastle University for all students on the course.

15 Methods for evaluating and improving the quality and standards of teaching and learning

Module reviews

All modules are subject to review by questionnaires which are considered by the Curriculum Committee (CC) and Board of Studies. Changes to, or the introduction of new, modules are considered by the CC, Board of Studies and the Faculty Learning, Teaching and Student Experience Committee (FLTSEC). Student opinion is sought at the Staff-Student Committee and/or the Board of Studies. New modules and major changes to existing modules are subject to approval by the FLTSEC.

Programme reviews

The Board of Studies conducts an Annual Monitoring and Review of the degree programme and reports to Faculty Learning, Teaching and Student Experience Committee.

External Examiner reports

External Examiner reports are considered by the Board of Studies. The Board responds to these reports through FLTSEC. External Examiner reports are shared with institutional student representatives, through the Staff-Student Committee.

Mechanisms for gaining student feedback

All modules, and the degree programme, are subject to review by student questionnaires. Informal student evaluation is also obtained at the Staff-Student Committee, and the Board of Studies.

Faculty and University Review Mechanisms

The programme is subject to the University's Internal Subject Review process. Every six years degree programmes in each subject area are subject to periodic review. This involves both the detailed consideration of a range of documentation, and a - review visit by a review team which includes an external subject specialist in addition to University and Faculty representatives. Following the review a report is produced, which forms the basis for a decision by University Learning, Teaching and Student Experience Committee (ULTSEC) on whether the programmes reviewed should be re-approved for a further six year period.

Additional mechanisms

University / Employer Liaison Group

16 Regulation of assessment

Pass mark

The pass mark is 50 (Postgraduate programmes)

Course requirements

Progression is subject to the University's Masters Degree Progress Regulations, Taught and Research (<http://www.ncl.ac.uk/calendar/university.regs/tpmdepr.pdf>) and Examination Conventions for Taught Masters Degrees (<http://www.ncl.ac.uk/calendar/university.regs/tpmdeprexamconv.pdf>).

Students are required to pass all assessment components of each module. This includes students taking the module via CPD.

Students who fail individual components will be allowed to resubmit for a second assessment on one occasion only. When resitting an assessment component, the mark for the assessment being re-sat will be capped at a maximum of 50.

Common Marking Scheme

The University employs a common marking scheme, which is specified in the Taught Postgraduate Examination Conventions, namely:

Summary description applicable to postgraduate Masters programmes

<50	Fail
50-59	Pass
60-69	Pass with Merit
70 or above	Pass with Distinction

Summary description applicable to postgraduate Certificate and Diploma programmes

<50	Fail
50 or above	Pass

Role of the External Examiner

An External Examiner, a distinguished member of the subject community, is appointed by Faculty Teaching, Learning and Student Experience Committee, after recommendation from the Board of Studies. The External Examiner is expected to:

- See and approve examination papers
- Moderate examination and coursework marking
- Attend the Board of Examiners
- Report to the University on the standards of the programme

In addition, information relating to the programme is provided in:

The University Prospectus (see <http://www.ncl.ac.uk/postgraduate/>)

The School Brochure (contact enquiries@ncl.ac.uk)

The University Regulations (see <http://www.ncl.ac.uk/regulations/docs/>)

Please note. This specification provides a concise summary of the main features of the programme and of the learning outcomes that a typical student might reasonably be expected to achieve if she/he takes full advantage of the learning opportunities provided. The accuracy of the information contained is reviewed by the University and may be checked by the Quality Assurance Agency for Higher Education.

ANNEX 1. Mapping of Intended Learning Outcomes onto Curriculum/Modules

Module	Type	Intended Learning Outcomes				Module Leader
		A	B	C	D	
Compulsory modules						
TRX8001: Principles of Transplantation Science (20 Credits)	Compulsory	1,2	1,2,3,4	1,2,3	1,2,3	
TRX8002: Transplantation of the Kidney, Liver & Pancreas (20 Credits)	Compulsory	3	1,2,3,4	1,2,3	1,2,3,	
TRX8003: Transplantation of the Heart & Lung (20 credits)	Compulsory	4	1,2,3,4	1,2,3	1,2,3	