

UNIVERSITY OF WALES, NEWPORT
PROGRAMME SPECIFICATION

B.Sc. SECONDARY SCIENCE WITH MATHEMATICS WITH
QUALIFIED TEACHER STATUS (QTS);

SCHOOL OF EDUCATION

Programme Overview

1. Awarding Institution	University of Wales, Newport
2. Teaching Institution	University of Wales, Newport
3. Programme validated by	University of Wales
4. Final Award	B.Sc.
5. Programme Title	B.S. Secondary Science with Mathematics with QTS:
6. Mode of Study	Full Time

This B.Sc. Secondary studies degree programme is an integrated University and Secondary school-based programmes leading to Qualified Teacher Status. Through a combination of high level academic study and practical teaching experience you will become a confident and competent secondary school teacher, be able to contribute positively to the professional ethos of the Secondary school and motivate pupils through creative and reflective teaching. The focus of the degree is on the development of subject knowledge and the practical skills required by a newly qualified teacher to become an effective and innovative teacher.

The course leads to a recommendation for Qualified Teaching Status on successful completion of all modules, including block school experience. The General Teaching Council for Wales (GTCW) confers Qualified Teaching Status following the final Examination Board.

Science and mathematics are designated as priority subjects by the Welsh Assembly Government. GTCW reports that high quality graduates continue to be in demand in secondary schools, particularly in priority subject areas. Therefore your employment prospects are excellent and career progression is typically rapid for teachers in these fields.

The B.Sc. degree programme builds on the established high quality initial teacher training provided at the University of Wales, Newport. This began in 1914 when Monmouthshire Training College catered for males only and female students were admitted in 1962. The programme was validated by the University of Wales in 1997 and revalidated in 2006. The degree has at its center the rigorous, professional study of secondary school education.

The degree takes into account the requirements of the National Standards: DELLS 021-06: Becoming a Qualified Teacher, which identify criteria for the award of Qualified Teacher Status. The design and planning of the programme has been informed by current developments in the National Curriculum at Key Stages 3 and 4, Estyn inspection reports and collaboration with secondary schools. School colleagues have a role in delivery and management and share responsibility for selection and assessment.

The course reflects the National Curriculum in Wales and takes account of the unique cultural heritage of Wales. There is opportunity to learn Welsh as a second language and undertake school experience in a Welsh medium school. However, learned teaching skills will have transferability across UK boundaries and you will be eligible to apply for posts both within and outside Wales.

The degree programme offers you:

- a relevant vocational degree which is embedded in classroom practice;
- rigorous quality assurance systems;
- small trainee groups, regular tutorials, and a high level of pastoral care;
- strong collaborative partnerships between the University and local schools;
- delivery by a programme team who have a breadth of experience of working with trainees in a range of contexts and settings;
- access to excellent facilities including laboratories, ICT resources, and library and information services.

A central element of the degree is block school experience, which consists of 24 weeks practical teaching spent in two different schools. You will undertake one week's observation in a primary school and one week in a secondary school before starting the degree. During the course, you will gain experience in at least two different schools, undertaking 7/8 weeks block school experience in Year 1 and 15/14 weeks block school experience in Year 2. Throughout the degree, there will be an emphasis on appropriate preparation for successively more

challenging school experiences. Your ability to plan, teach and manage a class, assess and monitor pupils' progress and operate effectively as part of the secondary school team develops incrementally over the course of the block school experiences. You will have experience of teaching your major subject to Key Stage 4 and your minor subject to Key Stage 3. Study of the minor subject will be an enhancement and basis for further professional development.

The degree is modular and each module contributes at one of two increasingly challenging levels to the development of competent, confident and self-evaluative newly qualified teachers. As you move from one year of study to the next you are expected to demonstrate increasingly independent capability in University-based and school-based activities. In addition to studying your subject specialism at degree level you will undertake Teaching Studies, which bridges the University and school-based elements, and establishes your awareness of generic and subject-specific professional issues. After successful completion of the degree you may opt to undertake further part-time study to achieve Honours status.

Programme Aims

Each module of the degree course has its individual aims and learning outcomes related to level of study, course content and learning and teaching methodologies that are consistent with the overall aims of the course. The overall aim of the degree is to provide high quality initial teacher training for trainees preparing to be secondary school teachers which satisfies the criteria laid down in the National Standards and, in doing so, meets the needs of schools in the new century with energy, vision, imagination and critical awareness.

The overall aims of your programme of study are:

- to enable you to become a competent teacher, capable of displaying effective management skills in a variety of learning situations with pupils of different ages and abilities in secondary schools;
- to promote in you an enthusiastic and professional attitude to your work in schools;
- to assist you to develop further your existing knowledge of your subject specialism, in order to teach the same in accordance with the requirements of the National Curriculum;
- to encourage you to work together with other trainees and with teachers in schools, so as to develop cross-curricular collaborative approaches in your teaching;

- to enable you to recognise the need to continue your own professional development throughout your teaching careers;
- to develop in you the ability to reflect critically on your teaching performance and to evaluate it with a view to prescribing future action.

Learning Outcomes

On successful completion of the B.Sc. degree, you will have the necessary personal qualities for teaching pupils and will have achieved the levels of subject knowledge and understanding, and standards of professional competence, necessary to maintain and improve standards in schools. The degree will be awarded only to those who have demonstrated the ability to teach effectively, to secure effective learning, to maintain discipline and manage pupil behaviour.

The learning outcomes for professional competence and subject knowledge are taken from the National Standards: DELLS 021- 06: Becoming a Qualified Teacher. You will be assessed against all of the standards and need to meet all standards in order to be eligible for the award of Qualified Teacher Status.

The current standards are set out under the following headings:

S1: Professional values and practice

To gain QTS, trainees must show that they understand and uphold the principles of the General Teaching Council for Wales's 'Statement of Professional Values and Practice' by demonstrating all of the following:

S1.1 They understand the diverse learning needs of pupils and endeavour to provide the best possible education for them to maximise their potential, whatever their individual aspirations, personal circumstances or cultural, linguistic, religious and ethnic backgrounds.

S1.2 They demonstrate the professionalism to motivate and inspire pupils and secure their intellectual and personal development ensuring that relationships with pupils are built on mutual trust and respect.

S1.3 They demonstrate combinations of professional characteristics which aim to motivate and inspire pupils and secure their intellectual and personal development.

S1.4 They recognise the importance of communicating information and expectations clearly and sensitively to parents and guardians and of fostering positive relationships between home and school.

S1.5 They endeavour to promote the place of the school within the wider community.

S1.6 They recognise and understand the contribution provided by and needed from support staff and other professionals in the learning process.

S1.7 They are able to contribute to the wider development of the school and profession and are aware of the importance of maintaining up-to-date professional knowledge, understanding and skills and are able to reflect on their own practice. They recognise their own needs and take responsibility for their continuing professional development.

S1.8 They are aware of, and work within, the statutory frameworks relating to teachers' responsibilities.

S2: Knowledge and understanding

To gain QTS, trainees must demonstrate all of the following:

S2.1 They have a secure knowledge and understanding of the subject(s) they are trained to teach. For those qualifying to teach secondary pupils this knowledge and understanding should be at a standard equivalent to degree level. In relation to specific phases, this includes:

(c) For Key Stage 3

- they know and understand the relevant National Curriculum Programme(s) of Study
- if they are qualifying to teach one or more of the core subjects, they are familiar with the principles of *Aiming for Excellence in Key Stage 3* and with the subsequent guidance materials *Raising Standards in Literacy and Numeracy* and *Raising Standards in Information and Communication Technology*
- they know and understand the common requirements of the National Curriculum and are familiar with the guidance set out in *Aiming for Excellence in Key Stage 3*.

(d) For Key Stage 4 and post-16

- they must, if their courses cover Key Stage 4, know and understand the relevant National Curriculum Programme(s) of Study
- they are aware of the Learning Pathways for progression through the 14-19 phase in school, college and work-based settings
- they are aware that Learning Pathways include programmes from several domains including the statutory national curriculum requirements at Key Stage 4, the Learning Core and wider experiences
- they are familiar with the Key Skills as specified by ACCAC before 1 April 2006, or by the National Assembly, and the National Qualifications Framework

- they know the progression within and from their own subject and the range of qualifications to which their subject contributes
- they understand how courses are combined in students' curricula.

S2.2 They know and understand the National Curriculum aims and guidelines; in particular:-

- they know and understand the values, aims and purposes and the general teaching requirements set out in the Introduction to the School Curriculum in Wales
- they understand that, in Wales, pupils should be given opportunities, where appropriate, to develop and apply their knowledge and understanding of the cultural, economic, environmental, historical and linguistic characteristics of Wales (the Curriculum Cymreig)
- as relevant to the age range they are trained to teach, they are familiar with the Personal and Social Education Framework (PSE) and A Framework for Work-Related Education for 14 to 19-Year-Olds in Wales (WRE)
- they are familiar with the most recent national guidance on the promotion of Education for Sustainable Development and Global Citizenship.

S2.3 They are aware of expectations, typical curricula and teaching arrangements in the Key Stages or phases before and after the ones they are trained to teach.

S2.4 They understand how pupils' learning can be affected by their physical, intellectual, linguistic, social, cultural and emotional development.

S2.5 They know how to use ICT effectively, both to teach their subject and to support their wider professional role.

S2.6 They understand their responsibilities under the *SEN Code of Practice for Wales*, and know how to seek advice from specialists on less common types of special educational needs.

S2.7 They know a range of strategies to promote good behaviour and establish a purposeful learning environment.

S3: Teaching

S3.1 *Planning, expectations and targets*

To gain QTS, trainees must demonstrate all of the following:

S3.1.1 They set challenging teaching and learning objectives which are relevant to all pupils in their classes. They base these on their knowledge of:-

- (a) the pupils;
- (b) evidence of their past and current achievement;
- (c) the expected standards for pupils of the relevant age range;
- (d) the range and content of work relevant to pupils in that age range.

S3.1.2 They use these teaching and learning objectives to plan lessons, and sequences of lessons, showing how they will assess pupils' learning. They take account of and support pupils' varying needs so that girls and boys, from all ethnic groups, can make good progress.

S3.1.3 They select and prepare resources, and plan for their safe and effective organisation, taking account of pupils' interests and their language and cultural backgrounds, with the help of support staff where appropriate.

S3.1.4 They take part in, and contribute to, teaching teams, as appropriate to the school. Where applicable, they plan for the deployment of additional adults who support pupils' learning.

S3.1.5 As relevant to the age range they are trained to teach, they are able to plan opportunities for pupils to learn in out-of-school contexts, such as school visits, museums, theatres, field-work and employment-based settings, with the help of other staff where appropriate.

S3.2 ***Monitoring and assessment***

To gain QTS, trainees must demonstrate all of the following:

S3.2.1 They make appropriate use of a range of monitoring and assessment strategies to evaluate pupils' progress towards planned learning objectives, and use this information to improve their own planning and teaching.

S3.2.2 They monitor and assess as they teach, giving immediate and constructive feedback to support pupils as they learn. They involve pupils in reflecting on, evaluating and improving their own performance.

S3.2.3 They are able to assess pupils' progress accurately using, as relevant, the early learning goals, National Curriculum level descriptions, criteria from national qualifications, the requirements of Awarding Bodies, National Curriculum assessment frameworks or objectives from the relevant guidance. They may have guidance from an experienced teacher where appropriate.

S3.2.4 They identify and support more able and talented pupils, those who are working below age-related expectations, those who are failing to achieve their potential in learning, and those who experience behavioural, emotional and social difficulties. They may have guidance from an experienced teacher where appropriate.

S3.2.5 With the help of an experienced teacher, they can identify the levels of attainment of pupils learning English or Welsh where this is the language in which they are being taught and is different from the language or form of language of their home. They begin to analyse the language demands and learning activities in order to provide cognitive challenge as well as language support.

S3.2.6 They record pupils' progress and achievements systematically to provide evidence of the range of their work, progress and attainment over time. They use this to help pupils review their own progress and to inform planning.

S3.2.7 They are able to use records as a basis for reporting on pupils' attainment and progress orally and in writing, concisely, informatively and accurately for parents, carers, other professionals and pupils.

S3.3 *Teaching and class management*

To gain QTS, trainees must demonstrate all of the following:

S3.3.1 They have high expectations of pupils and build successful relationships, centred on teaching and learning. They establish a purposeful learning environment where diversity is valued and where pupils feel secure and confident.

S3.3.2 They can teach the required or expected knowledge, understanding and skills relevant to the curriculum for pupils in the age range for which they are trained and make appropriate use of the Curriculum Cymreig.

In relation to specific phases:

- c) those qualifying to teach Key Stage 3 pupils teach their specialist subject(s) competently and independently using the National Curriculum Programmes of Study for Key Stage 3 and the relevant guidance. Those qualifying to teach the core subjects or ICT at Key Stage 3 use the relevant frameworks, methods and expectations set out in the *Aiming for Excellence in Key Stage 3* guidance. All those qualifying to teach a subject at Key Stage 3 must be able to use the common requirements, such as literacy and numeracy, in their teaching, as appropriate to their specialist subject;
- d) those qualifying to teach Key Stage 4 and post-16 pupils teach their specialist subject(s) competently and independently using, as relevant to the subject and age range, the National Curriculum Programmes of Study and related schemes of work, or programmes specified for national qualifications. They also provide opportunities for pupils to develop the Key Skills specified by ACCAC before it was abolished on 1 April 2006, or by the National Assembly.

S3.3.3 They teach clearly structured lessons or sequences of work which

interest and motivate pupils and which:

- make learning objectives clear to pupils
- employ interactive teaching methods and collaborative group work
- promote active and independent learning that enables pupils to think for themselves, and to plan and manage their own learning.

S3.3.4 They differentiate their teaching to meet the needs of pupils, including the more able and talented, and those with special educational needs. They may have guidance from an experienced teacher where appropriate.

S3.3.5 They are able to support those pupils learning English or Welsh where this is the language in which they are being taught and is different from the language or form of language of their home, with the help of an experienced teacher where appropriate.

S3.3.6 They take account of the varying interests, experiences and achievements of boys and girls, and pupils from different cultural and ethnic groups, to help pupils make good progress.

S3.3.7 They organise and manage teaching and learning time effectively.

S3.3.8 They organise and manage the physical teaching space, tools, materials, texts and other resources safely and effectively with the help of support staff where appropriate.

S3.3.9 They set high expectations for pupils' behaviour and establish a clear framework for classroom discipline to anticipate and manage pupils' behaviour constructively, and promote self-control and independence.

S3.3.10 They use ICT effectively in their teaching.

S3.3.11 They can take responsibility for teaching a class or classes over a sustained and substantial period of time. They are able to teach across the age and ability range for which they are trained.

S3.3.12 They can provide homework and other out-of-class work which consolidates and extends work carried out in the class and encourages pupils to learn independently.

S3.3.13 They work collaboratively with specialist teachers and other colleagues and, with the help of an experienced teacher as appropriate, manage the work of teaching assistants or other adults to enhance pupils' learning.

S3.3.14 They recognise and respond effectively to social inclusion and equal opportunities issues as they arise in the classroom, including by challenging stereotyped views, and by challenging bullying or harassment, following relevant

policies and procedures.

S3.3.15 They take appropriate opportunities to promote and teach education for sustainable development and global citizenship in all relevant aspects of their teaching.

These learning outcomes provide the framework for the learning outcomes at the module level. As you progress through the programme, the study of modules at an increasingly higher level will allow you to achieve the course based learning outcomes.

Benchmarks and Reference Points

Significant external steers have come from:

- National Standards for Initial Teacher Training: DELLS 021- 06: Becoming a Qualified Teacher;
- Recommendations from the 2004-2005 inspection of the degree programme by Estyn, Her Majesty's Inspectorate for Education and Training in Wales which was awarded grade 2, (good features with no important shortcomings), with grade 1, (good with outstanding features), for trainee support and guidance.
- External Examiner feedback. For example "the good relationship between the university – through the tutors – and the schools is obvious from the welcome received in these schools; both schools and trainees had nothing but praise for the communications between school and university"; "a commendable use of current issues in the work set and links made between the different subjects in the degree pathways, and also between the subject specialism and education; this is very relevant to trainees intended profession"; "Interesting and appropriate maths content of a very high standard and it was good to see trainees putting in far more than they needed to."
- The general outcomes outlined by QAA (www.qaa.ac.uk/academic_infrastructure/FHEQ) as appropriate to the award of B.Sc.

Learning and Teaching Strategies

Current research suggests that individuals learn most successfully when they are actively involved in participating, negotiating, planning, implementing and evaluating their learning experiences. The learning and teaching strategies adopted by the course team will, therefore, seek to demonstrate good practice at an adult level and be firmly embedded in the different academic disciplines being addressed by you.

The underlying philosophy is that the teaching and learning strategy should:

- help you to achieve intended learning outcomes;
- take account of current developments in secondary schools and provide you with models of good practice;
- maximise your experience of practice and knowledge and understanding of secondary school pupils and integrate them into teaching and learning sessions;
- suit methods to the development of knowledge, understanding and skills;
- encourage you to take responsibility for independence in your own learning;
- provide an appropriate range of, and balance between, learning methods;
- respond to your individual needs and targets for improvement;
- apply theory to practice, where appropriate, in directed study tasks;
- provide alternative learning methods for you if you have special needs.

Teaching and learning is designed to enable you to achieve the intended learning outcomes. The learning outcomes are taken from the National Standards, you will be assessed against all of the standards and need to meet these standards in order to pass the degree and be eligible for the award of Qualified Teacher Status.

We intend that the learning programme should be both stimulating and demanding, and should lead you through progressive stages of development, towards increasingly complex and open-ended tasks, increasingly sophisticated application of intellectual/conceptual and personal (transferable) skills, and increasingly independent study.

Career Development Learning

You will find that a range of transferable skills and attributes are developed in the study programme. These have been clearly identified as your needs in order to be effective in a changing world of work and develop your career. They include:

- skills of numeracy, literacy and IT;
- problem solving;
- self-management;
- working as part of a team;
- greater understanding of roles and responsibilities;
- career management, job search skills and knowledge about opportunities;
- presentation of CVs, application forms, and interview techniques.

The University's Careers Service is also available to help and support you, and can be accessed at: <http://careers.newport.ac.uk>

On-line Auditing

You will have the opportunity of completing on-line audits in mathematics, English and ICT. Feedback from the audits will help you self diagnose any weaknesses in your subject knowledge and direct you to appropriate study material for future development. Results from the audits will also be linked to professional development planning and target setting.

Learning Methods

The principles guiding the learning and teaching strategies are that the programme should:

- make clear links with the learning outcomes for knowledge, understanding and skills, specified in individual modules;
- take account of current developments in secondary schools and provide you with models of good practice;
- utilise your school experience;
- foster the development of independence in learning and the associated personal responsibilities involved;
- give attention to the promotion of key skills;
- provide a range of learning and teaching methods across the programme;
- be stimulating and demanding but set realistic goals;
- respond to individual needs and targets for improvement.

A variety of methods will be used, including:

- Lectures to provide specialist inputs to enable the sharing of a theoretical base, specific expertise and experiences, as well as collaborative input from your own experiences. It is expected that all taught sessions will incorporate interactive and participative learning methodologies. Where appropriate, there will be inputs from current secondary school practitioners and visiting speakers.
- Individual and collaborative practical work. Secondary school teachers need to be able to work in teams, supporting each other at all stages of planning, teaching, class management, evaluation, assessment, recording, reporting and accountability. You, therefore, need opportunities to learn skills of collaboration through involvement in collaborative approaches. Collaborative tasks will be organised in such a way that

individuals will contribute to a joint outcome. Your own specialist knowledge will be used to lead seminars.

- Interactive approaches to discussion and analysis in seminars; participatory and group approaches will be used particularly in the analysis of school experiences gained on block school experience.
- Involvement in practical activities in both the University and school-based elements of the programme. For example, you will have the opportunity to practise subject-specific skills and examine issues of safety. Whilst on block school experience, training is primarily practical.
- Research approaches will give you the opportunity to undertake small-scale research projects where you will plan, implement and reflect upon action research. This will enable you to gain insights into effective classroom practice associated with your specialist subjects.
- Directed study will give you additional planned opportunities to reflect upon, evaluate and integrate University-based and school-based experiences. Directed study approaches will be carefully planned and monitored. Directed study activities will include:
 - preparatory reading;
 - resource collection;
 - planning and preparation of teaching activities linked with block school experience;
 - portfolio completion, linked to an assignment task;
 - practise of a subject-specific or an ICT skill;
 - collaboration with members of a group in activities related to group assessment.
- Independent activities relating to your individual needs, identified through audits, assignments or block school experience. Following assignment completion and following completion of a block school experience, discussion with a tutor will focus attention on targets for improvement and ways in which these can be realised.
- Alternative methods will be provided should any of these prove difficult for you because you have special needs.

Assessment Strategies

Assessment processes and procedures adopted on the course will comply with the Modular Scheme Regulations of the University of Wales, Newport and National Standards: DELLS 021-06: Becoming a Qualified Teacher. Assessment forms an integral part of the learning process and will keep pace with the delivery of each module. Its purpose is to provide:

- feedback so that you are able to judge how well you are developing and achieving module learning outcomes, and what you might need to do to improve (formative assessment);
- a record of results relating to progression through the course and the achievement of final or intermediate awards or qualifications (summative assessment);
- testing of all learning outcomes (but not necessarily summatively);
- confirmation of the standard of your achievement measured against external benchmarks and National Standards for Qualified Teacher Status;
- evidence that you are able to critically reflect upon learning and teaching;
- examples of the application/transference of newly acquired knowledge, skills and theoretical understanding when working with pupils;
- evidence of professional development.

Assessment Methods

Formative Assessment

Formative assessment of learning outcomes will occur in all modules and will be provided by a variety of means including:

- oral and written commentary on summative assessments;
- regular feedback on classroom activities;
- tutorial sessions;
- subject knowledge audits;
- University tutor and school mentor feedback on block school experience.
- self-assessment;
- peer group assessment and profiling activities with University and school tutors.

Summative Assessment

Summative assessment will be undertaken through a variety of appropriate means including:

- written assignments;
- individual/group projects;
- presentations;
- examinations.

Both practical and theoretical knowledge, understanding and skills will be assessed. These assessments will make use of:

- practical experience;
- school experience;
- literature searches;
- range of electronic and paper-based resources.

The outputs to be assessed will include:

- written assignments;
- oral presentations;
- portfolios of work;
- examination scripts.

You will be given an assignment brief for each summative coursework assessment, which will tell you:

- (a) the module title;
- (b) the assessment title (and number if there are more than one);
- (c) the module leader;
- (d) the date on which it is to be submitted;
- (e) whether it is to be completed individually or by group;
- (f) the learning outcomes to be assessed;
- (g) the form and size of the output required and whether there will be any penalty for under- or over-size;
- (h) any working information - for example, case study, data, scenario and your role in it;
- (i) the criteria by which your work will be graded;
- (j) any advice on sources of information, techniques, module content to be used;
- (k) the means of retrieving a failure.

Alternative methods will be provided should any of these prove difficult for you because you have special needs.

Summative Assessment Framework

In order to pass the degree and achieve Qualified Teacher Status, you must pass all modules and achieve the National Standards. You will be made fully aware of the demands and requirements of each school placement before undertaking each stage. The expectations for achievement on each of the stages are progressive and you will be fully supported in achievement of the school-based elements through school mentor and university tutor supervision and support. You must achieve a pass in all elements of practical teaching. The overall course assessment will be 50% coursework and 50% examination. The balance and distribution within each year is:

Year 1	Level 5	50% examination, 50% coursework
Year 2	Level 5	100% examination
Year 2	Level 6	100% coursework

Modules will be assessed and credit awarded on completion of the module and results are subject to approval by the Examination Board at the end of the year.

Summary of Assessments:

Subject	Credits Newport	Credits ECTS	Semester	Assessment Mode/Length
Mathematics Core	30	15	1 + 2	(1) 3,000 word equivalent portfolio (50% overall grade) (2) 3 hour examination (50% overall grade)
Science Core	30	15	1 + 2	(1) 3,000 word equivalent portfolio (50% overall grade) (2) 3 hour examination (50% overall grade)
Science Further	30	15	1 + 2	(1) 3,000 word equivalent portfolio (50% overall grade) (2) 3 hour examination (50% overall grade)
Teaching Studies	30	15	1 + 2	(1) 2,000 word evaluation of school experience (50% overall grade) (2) 2 hour examination (50% overall grade)
Mathematics Core	20	10	3	Written examination, 3 hours. Choice of 4 questions from 6.
Science Core	20	10	3	Written examination, 3 hours. Choice of 3 questions from 6, from each of the three subject areas.
Science Further	20	10	3	Written examination, 3 hours. Choice of 3 questions from 6, from each of the three subject areas.
Science	20	10	4	Research project, 75% marks. Equivalent to 4,000 words. Seminar presentation, 25% marks.
Teaching Studies	40	20	3 + 4	Essay – EAL. Equivalent to 5,000 words and supporting lesson plans/resource evidence.
Research Methods	20	10		Research protocol of 1,500 words. (10% overall grade)
Dissertation	40	20		Dissertation of 10,000 words. (90% overall grade)

Programme Structure and Requirements, Levels, Modules, Credits and Awards

Modular Structure

The degree has been designed to meet the Aims stated above.

Each module carries a credit rating (defining how much study time it takes to complete), and a level rating. Level 4 is first-year full-time degree equivalent. One credit point equals 10 hours of trainee activity that might be supported, directed or independent learning.

The teaching year consists of three terms with no half term breaks. In each year you will complete modules worth 120 credits; 120 credits at level 5 in Year 1, 60 credits at level 5 and 60 credits at level 6 in Year 2.

In Year 1 of the programme you will spend 7 weeks in school. The first two weeks are for observation, for getting to know school colleagues and pupils and to begin to become familiar with the procedures and policies of the school. For the next six weeks you will be expected to teach approximately 50% of a normal teaching timetable and you will teach your major subject.

In Year 2, you will spend 15 weeks in a second school, one block of six weeks in the Autumn Term and one block of nine weeks in the Spring and Summer Term. On the final block you will be expected to teach approximately 75% of a normal teaching timetable, teach both subjects and teach the full age and ability range of pupils.

Science with Mathematics

Module	Level	Credit Value Newport	Credit Value ECTS
Year 1			
Mathematics Core 1	5	30	15
Science Core 1	5	30	15
Science Further 1	5	30	15
Teaching Studies 1	5	30	15
Year 2			
Mathematics Core 2	5	20	10
Science Core 2	5	20	10
Science Further 2	5	20	10
Teaching Studies 2	6	40	20
Science Project	6	20	10

Requirements and Awards

In order to pass a module you must attempt every summatively assessed element, you must achieve no result worse than E4 for any element, and you must achieve an average result for the whole module of at least D5. (Results will

include any penalised grades where the penalty has not been lifted on the instruction of the Student Affairs Panel).

To be eligible for the award of a B.Sc. degree you must achieve a total of 180 University of Wales, Newport credits at HE level 5 (90 ECTS credits) and 60 University of Wales, Newport credits at HE level 6 (30 ECTS credits).

Criteria for Admission to the Programme

You will be expected to have qualifications that enable you to undertake study in science and mathematics and you will be interviewed by a University tutor and a mentor from a partner secondary school.

The interview panel will want to ensure that:

- all entrants are able to communicate clearly and grammatically in spoken and written standard English;
- all entrants meet the Secretary of State's requirements for physical and mental fitness to teach as detailed in the relevant Circular;
- entrants have not previously been excluded from teaching or working with children;
- systems are in place to seek information on entrants' criminal backgrounds which might prevent employment as a teacher or with children or young persons (currently the Criminal Records Bureau procedure);
- selection procedures include representatives from those centrally involved in the training process, including school staff;
- all trainees possess the personal, intellectual and presentational qualities suitable for teaching; providers should seek evidence of relevant experience with children;
- as part of selection procedures, all candidates admitted to a course have been seen at an individual or group interview;
- all entrants have attained the standard required to achieve at least a grade C in the GCSE examination (or equivalent) in mathematics and English. Note that candidates who do not meet this requirement may sit a University of Wales, Newport equivalence test in either or both subjects;
- the content of entrants' previous qualifications should provide the necessary foundation for work as a teacher in the phase(s) and subject(s) they are to teach;

- entrants have satisfactorily completed the equivalent of at least one year of full-time higher education studies (120 credits at Level 4; 60 ECTS credits).

Interview Procedures

Candidates are welcomed to the interview in a group setting and the interview panel is introduced. An overview of the course will provide specific information and there will be an opportunity to ask questions. This session will be followed by individual interviews. Each interview lasts approximately 15-20 minutes during which time you will be asked some of the following key questions:

- Why do you want to become a teacher?
- What experience have you had in a Secondary school?
- How do your qualifications and/or work experience equip you to teach the subject(s) for which you are applying?
- What personal qualities do you possess that will make you an effective teacher?
- What current issues in education are of concern to you?

Selection Criteria

The initial selection for interview is based on a scrutiny of the application form. There are three main characteristics that the panel will look for:

- The academic reference.
- The accuracy of the information provided.
Are all the sections of the form completed correctly? For example, where the form asks for a detailed breakdown of the content of qualifications.
- The quality of the personal statement.
Is the writing clear and grammatically correct? Has the candidate written at sufficient length? Has the candidate clearly indicated their reasons for applying for this course?

During the interview, the panel will look for the following characteristics:

- Communication: does the candidate speak clearly, appropriately and expressively?
- Motivation: does the candidate appear to be enthusiastic about teaching and learning in secondary schools?

- Commitment: is the candidate fully aware of the demands of the teaching profession and the training process?
- Awareness: does the candidate demonstrate an awareness or knowledge of current educational issues?
- Subject knowledge: does the candidate have sufficient subject knowledge at an appropriate level to underpin successful completion of their chosen course of study?

Date at Which the Programme Specification Was Written or Revised: October 2009

Student Contract

All students will be required, as a condition of enrolment, to abide by and submit to the policies, regulations and procedures of the University, as amended from time to time. A copy of all the relevant documents can be found at www.newport.ac.uk or is available, on request, from the University Information Centre.

The University will use all reasonable endeavours to deliver courses in accordance with the descriptions set out in this programme specification. However, the University does not provide education to UK undergraduates on a commercial basis. It is also very largely dependent upon charitable and public funds, which the University has to manage in a way that is efficient and cost-effective, in the context of the provision of a diverse range of courses to a large number of students. The University therefore:

- Reserves the right to make variations to the contents or methods of delivery of courses, to discontinue courses and to merge or combine courses, if such action is reasonably considered to be necessary by the University. If the University discontinues any course, it will use its reasonable endeavours to provide a suitable alternative course.
- Cannot accept responsibility and expressly excludes liability, for damage to students' property, transfer of computer viruses to students' equipment or liability for breach of contract.