Course Specification

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Produced By:	Oliver Jones
Status:	Validated

Core Information

Awarding Body / Institution:	University of Wolverhampton
School / Institute:	Wolverhampton School of Sciences
Course Code(s):	SE114H01UV University of Wolverhampton Full-time 3 Years
UCAS Code:	X13A
Hierarchy of Awards:	Bachelor of Science with Honours BSc (Hons) Biology with Secondary Education (QTS) Bachelor of Science with Honours BSc (Hons) Biology with Secondary Education (QTS) Bachelor of Science with Honours BSc (Hons) Biology with Secondary Education (QTS) Bachelor of Science Bachelor of Science Biology with Secondary Education (QTS) Bachelor of Science Bachelor of Science Biology with Secondary Education Diploma of Higher Education Diploma of Higher Education Biology Certificate of Higher Education Certificate of Higher Education Biology University Statement of Credit University Statement of Credit
Language of Study:	English
Date of DAG approval:	31/Mar/2020
Last Review:	2020/1
Course Specification valid from:	2020/1
Course Specification valid to:	2026/7

Academic Staff

Course Leader:	Dr Roy Protheroe
Head of Department:	Georgina Manning

Course Information

Location of Delivery:	University of Wolverhampton
Category of Partnership:	Not delivered in partnership
Teaching Institution:	University of Wolverhampton
Open / Closed Course:	This course is open to all suitably qualified candidates.

Entry Requirements:

Entry requirements are subject to regular review. The entry requirements applicable to a particular academic year will be published on the University website (and externally as appropriate e.g. UCAS

- All entrants should have achieved a standard equivalent to a grade C+/4 in the GCSE examinations in English and Mathematics, or equivalent.
- All entrants, as part of the provider's selection procedures, have taken part in a rigorous selection process designed to assess their suitability to train to teach.

AND

- A-Level minimum BB or CDD to include a Science subject preferably Biology
- Access to Higher Education Diploma requires 60 credits overall, 45 credits at Level 3 to include at least 18 Science credits at Merit.
- BTEC QCF Level 3 Extended Diploma in Applied Science grade MMP or BTEC National Diploma grade DM.
- Successful completion of the International Foundation Year in Science and Engineering guarantees entry on to this course
- Suitable International entry requirements and application guidance can be found here

Please note we do not accept GCSE Equivalent Tests from other institutions or organisations and be aware that not all equivalency tests are accepted.

An offer of a place will not be made until you have attended a formal interview. Those successful at interview will be subsequently required to meet enhanced DBS checks, fitness to teach, medical check and prohibition order check requirements.

If you have accepted a Conditional Offer made by the University of Wolverhampton you will receive correspondence asking you to complete an enhanced Disclosure and Barring Service (DBS) check. The charge for this will be a DBS fee of £44.00 and a £6.00 ID check service fee. You will also need an Occupational Health Check and a prohibition check prior to starting the course.

All applicants must meet the DfE requirements for Initial Teacher Training.

Those who do not meet the entry requirements may be offered an alternative course.

Distinctive Features of the Course:

The BSc (Hons) Biology with Secondary Education (QTS) course will provide you with a direct route to a recommendation for Qualified Teacher Status as a biology teacher in just three years. The course combines a high standard of theoretical and practical biology with the pedagogical knowledge and skills required to enable you to enter directly into the secondary science classroom and the launch of a rewarding career as a

biology teacher. You will be taught by enthusiastic and experienced staff and you will undertake your biology practical learning in our modern biology laboratories or out in the field. The teacher training component of the course starts in your first year and builds up, allowing you time to reflect on and develop your pedagogical understanding and skills. You will have two extended placements in secondary schools in classes covering the 11-16 age range, one in your second year and one in your third year.

Educational Aims of the Course:

Biology is a vast and endlessly fascinating area – this course provides an in-depth education in the molecular cellular and genetic activities of micro-organisms, plants, animals and humans while simultaneously giving you the pedagogical knowledge and skills required to enable you to be recommended for Qualified Teacher Status (QTS) to teach biology in secondary schools.

With an emphasis on the applied aspects of the subject area, the course integrates technical, practical, problem solving and career relevant aspects of the course. Technical competence is an important aspect of the course hence you will be provided with ample opportunity to undertake hands-on experiments and computer based exercises supported by a full range of analytical equipment for the analysis of biological materials and for the investigation of microorganisms, plants, animals and human biology.

Intakes:

September

Major Source of Funding:

Department for Education

Tuition Fees:

Tuition fees are reviewed on an annual basis. The fees applicable to a particular academic year will be published on the University website.

Year	Status	Mode	Amount
2020/1	H	Full Time / Sandwich	£9250.00
2020/1	Overseas	Full Time / Sandwich	£12250.00
2021/2	H	Full Time / Sandwich	£9250.00
2021/2	Overseas	Full Time / Sandwich	£12950.00

PSRB:

None

Course Structure:

September (Full-time)

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

Year 1

Full time and Sandwich Undergraduate Honours students normally study 120 credits per academic year; 60 credits semester 1 and 60 credits semester 2.

Module	Title	Credits	Period	Type
4AB023	Introduction to Biosciences	20	SEM1	Core
4BC003	Cell Biology and Genetics	20	SEM1	Core
4BM024	Introduction to Microbiology	20	SEM2	Core
4SE001	Subject-specific Pedagogy: Justifying the Specialist Subject	20	SEM2	Core

For this option group you must choose a minimum of 20 credits and a maximum of 20 credits

Select one option module for Semester 2

4AB014	Ecology	20	SEM2	
4BM023	Human Biology Practicals	20	SEM2	

For this option group you must choose a minimum of 20 credits and a maximum of 20 credits

Select one option module for Semester 1

4AB010	Animal Behaviour	20	SEM1	
4BM016	Human Form & Function	20	SEM1	

September (Full-time)

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

Year 2

Full time and Sandwich Undergraduate Honours students normally study 120 credits per academic year; 60 credits semester 1 and 60 credits semester 2.

Module	Title	Credits	Period	Type
5BC005	Molecular Biosciences Practical Techniques	20	SEM1	Core
5BC001	Molecular Biosciences	20	SEM1	Core
5AB031	Cellular and Organismal Biosciences	20	SEM2	Core
5SE002	Professional Development: The Beginning Teacher	20	INYR	Core
5SE001	Subject-specific Pedagogy: Teaching the Specialist Subject	20	SEM2	Core

Linked Option Group Rule: Select a minimum of 20 credits and a maximum of 20 credits from the linked (*) groups.

*** For this option group you must choose a minimum of 0 credits and a maximum of 20 credits**

Select one option module for Semester 1.
If you have taken 4SE001 then choose either 5BM048 or 5AB010.
If you have not taken 4SE001 then you must choose 5SE003.

5BM048	Anatomy and Physiology	20	SEM1	
5AB010	Animal Behaviour and Captivity	20	SEM1	

*** For this option group you must choose a minimum of 0 credits and a maximum of 20 credits**

5SE003	Subject Specific Pedagogy 1a: Exploring the Teaching of the Specialist Subject	20	SEM1	

September (Full-time)

Part time students study alongside full time students. However, they do not study more than 80 credits in each academic calendar year.

Year 3

Full time and Sandwich Undergraduate Honours students normally study 120 credits per academic year; 60 credits semester 1 and 60 credits semester 2.

Module	Title	Credits	Period	Type
6SE007	Professional Development: The Developing Teacher	40	YEAR	Core
6AB020	Honours Project (Biosciences)	40	YEAR	Core
6SE008	Subject-specific Pedagogy: Investigating Practice	20	SEM2	Core

For this option group you must choose a minimum of 20 credits and a maximum of 20 credits

Select one option module for Semester 1

6BC012	Advanced Topics in Biological Sciences	20	SEM1	
6BM017	Advanced Human Physiology	20	SEM1	
6AB008	Conservation of Aquatic Vertebrates	20	SEM1	

Please note: Optional modules might not run every year, the course team will decide on an annual basis which options will be running, based on student demand and academic factors, to create the best learning experience.

Learning, Teaching and Assessment

Academic Regulations Exemption:

Section 1.2.3 - Exemption for delivery outside the standard University Academic Calendar in order to enable students to complete the required hours for two placement modules;

5SE002 Professional Development: The Beginning Teacher

6SE007 Professional Development: The Developing Teacher.

Including exemption from the standard University Academic Framework, allowing for an unbalanced programme of study at Level 5, by including a Year Long module.

Section 1.3.3 - Exemption to exclude the use of non-subject option modules at Level 4, Level 5 and Level 6 in order to meet QTS requirements.

Section 4.3.3 - Exemption in accordance with the standards required for Qualified Teacher Status (granted by the National College for Teaching and Leadership). There will be no automatic right to a second attempt for any failed practice components at the discretion of the Assessment Board (second attempts are permitted for theory components);

5SE002 Professional Development: The Beginning Teacher

6SE007 Professional Development: The Developing Teacher.

Section 4.4.3 - Exemption in accordance with the standards required for Qualified Teacher Status (granted by the National College for Teaching and Leadership). Compensation will not be permitted for any core modules which are required in order to meet these standards;

4SE001 Subject-specific Pedagogy: Justifying the Specialist Subject

5SE001 Subject-specific Pedagogy: Teaching the Specialist Subject

5SE002 Professional Development: The Beginning Teacher

5SE003 Subject Specific Pedagogy 1a: Exploring the Teaching of the Specialist Subject

6SE007 Professional Development: The Developing Teacher

6SE008 Subject-specific Pedagogy: Investigating Practice.

Effective date: September 2019.

APPROVED (by Chair's Action on 3/3/2020).

Reference Points:

Quality Code - Part A: Setting and Maintaining Academic Standards. Including;

Qualifications Frameworks

Characteristics Statements

Credit Frameworks

Subject Benchmark Statements

Quality Code - Part B: Assuring and Enhancing Academic Quality

University Policies and Regulations

Equality Act (2010).

Initial Teacher Training Criteria and Supporting Advice (DfE, June 2020) Initial Teacher Training Criteria and Supporting Advice

The recommendation of Qualified Teacher Status (QTS) is subject to meeting the Teachers' Standards. These standards set the minimum requirements for teachers' practice and conduct.

Teachers' Standards (DfE, 2011) Teachers' Standards

Initial Teacher Training Courses are subject to inspection by the Office for Standards in Education (OFSTED).

Ofsted Handbook (Ofsted, June 2020) Ofsted Initial Teacher Education Inspection Handbook

Learning Outcomes:

CertHE Course Learning Outcome 1 (CHECLO1)

"Demonstrate knowledge of the underlying concepts and principles associated with your area(s) of study, and

an ability to evaluate and interpret these within the context of that area of study"

CertHE Course Learning Outcome 2 (CHECLO2)

"Demonstrate an ability to present, evaluate and interpret qualitative and quantitative data, in order to develop lines of argument and make sound judgements in accordance with basic theories and concepts of your subject(s) of study."

CertHE Course Learning Outcome 3 (CHECLO3)

Evaluate the appropriateness of different approaches to solving problems related to your area(s) of study and/or work

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CertHE Course Learning Outcome 4 (CHECLO4)

"Communicate the results of your study/work accurately and reliably, and with structured and coherent arguments"

CertHE Course Learning Outcome 5 (CHECLO5)

Demonstrate the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility

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DipHE Course Learning Outcome 1 (DHECLO1)

"Demonstrate knowledge and critical understanding of the well-established principles of your area(s) of study, and of the way in which those principles have developed with an understanding of the limits of your knowledge, and how this influences analyses and interpretations based on that knowledge."

DipHE Course Learning Outcome 2 (DHECLO2)

"Demonstrate the ability to apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context"

DipHE Course Learning Outcome 3 (DHECLO3)

"Demonstrate knowledge of the main methods of enquiry in the subject(s) relevant to the named award, and ability to evaluate critically the appropriateness of different approaches to solving problems in the field of study"

DipHE Course Learning Outcome 4 (DHECLO4)

"Use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to problems arising from that analysis"

DipHE Course Learning Outcome 5 (DHECLO5)

"Effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively"

DipHE Course Learning Outcome 6 (DHECLO6)

"Demonstrate the qualities and transferable skills necessary for employment, requiring the exercise of personal responsibility and decision-making and undertake further training, developing existing skills and acquire new competences that will enable them to assume significant responsibility within organisations."

Ordinary Degree Course Learning Outcome 1 (ORDCLO1)

Understand the breadth of biology from chemical, biochemical and genetic levels, and appreciate their organismal function

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Ordinary Degree Course Learning Outcome 2 (ORDCLO2)

Demonstrate an understanding of the biological relationships between the structure and activity of biomolecules and genetic organisation with the form and function of living organisms

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Ordinary Degree Course Learning Outcome 3 (ORDCLO3)

Perform a range of techniques relevant to the study of biology, including microorganisms, plants, humans and animals

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Ordinary Degree Course Learning Outcome 4 (ORDCLO4)

Use knowledge acquired to understand conservation and ecology, animal biology and genetics, together with microbiological applications in industry, including, where appropriate, social and ethical considerations

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Ordinary Degree Course Learning Outcome 5 (ORDCLO5)

Act independently, exercise initiative and act as a positive role model in a range of complex teaching and learning situations.

Honours Degree Course Learning Outcome 1 (DEGCLO1)

Understand the breadth of biology from chemical, biochemical and genetic levels through to conservation, ecology and animal biology.

Honours Degree Course Learning Outcome 2 (DEGCLO2)

Demonstrate an understanding of the biological relationships between the structure and activity of biomolecules and genetic organisation with the form and function of living organisms

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Honours Degree Course Learning Outcome 3 (DEGCLO3)

Perform a range of techniques relevant to the study of biology, including microorganisms, plants, humans and animals

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Honours Degree Course Learning Outcome 4 (DEGCLO4)

Participate in the development of biology through an independent research project, to initiate theories, gather and formulate scientific information, reliably collate and analyse data, apply appropriate statistical tests, debate and draw conclusions.

Honours Degree Course Learning Outcome 5 (DEGCLO5)

Act independently, exercise initiative and act as a positive role model in a range of complex teaching and learning situations.

Honours Degree Course Learning Outcome 6 (DEGCLO6)

Display the technical, pedagogical and subject competence to meet the standards required to be recommended for QTS and to teach chemistry in secondary schools.

Overview of Assessment:

Module	Title	Course Learning Outcomes
4AB010	Animal Behaviour	CHECLO1, CHECLO2, CHECLO3, CHECLO4
4AB014	Ecology	CHECLO1, CHECLO2, CHECLO3, CHECLO4
4AB023	Introduction to Biosciences	CHECLO1, CHECLO2, CHECLO3, CHECLO4, CHECLO5
4BC003	Cell Biology and Genetics	CHECLO1, CHECLO2, CHECLO3, CHECLO4
4BM016	Human Form & Function	CHECLO1, CHECLO2, CHECLO3, CHECLO4
4BM023	Human Biology Practicals	CHECLO1, CHECLO2, CHECLO3, CHECLO4
4BM024	Introduction to Microbiology	CHECLO1, CHECLO2, CHECLO3, CHECLO4
4SE001	Subject-specific Pedagogy: Justifying the Specialist Subject	CHECLO5
5AB010	Animal Behaviour and Captivity	DHECLO1, DHECLO2, DHECLO5, DHECLO6
5AB031	Cellular and Organismal Biosciences	DHECLO1, DHECLO2, DHECLO5, DHECLO6
5BC001	Molecular Biosciences	DHECLO1, DHECLO2, DHECLO5, DHECLO6
5BC005	Molecular Biosciences Practical Techniques	DHECLO3, DHECLO4
5BM048	Anatomy and Physiology	DHECLO1, DHECLO2, DHECLO5, DHECLO6
5SE001	Subject-specific Pedagogy: Teaching the Specialist Subject	DHECLO6
5SE002	Professional Development: The Beginning Teacher	DHECLO6
5SE003	Subject Specific Pedagogy 1a: Exploring the Teaching of the Specialist Subject	DHECLO6
6AB008	Conservation of Aquatic Vertebrates	DEGCLO2, DEGCLO3, ORDCLO2, ORDCLO3, ORDCLO4
6AB020	Honours Project (Biosciences)	DEGCLO1, DEGCLO2, DEGCLO3, DEGCLO4
6BC012	Advanced Topics in Biological Sciences	DEGCLO1, DEGCLO2, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4
6BM017	Advanced Human Physiology	DEGCLO1, DEGCLO2, ORDCLO1, ORDCLO2, ORDCLO3, ORDCLO4
6SE007	Professional Development: The Developing Teacher	DEGCLO5, DEGCLO6, ORDCLO5
6SE008	Subject-specific Pedagogy: Investigating Practice	DEGCLO5, DEGCLO6, ORDCLO5

Teaching, Learning and Assessment:

The course will include a diverse range and variety of learning activities. These may include lectures, tutorials, seminars, laboratory or field sessions, discussion, case study investigation and in-school placements.

Information central to a module will be principally delivered by lectures with a proportion through directed e-learning. Fundamental principles will be reinforced and given applied relevance by case studies, both from the UK and worldwide to offer an international perspective, within tutorials and seminars. Increasingly, problem based exercises will be used to enable the application of knowledge to real-world situations. Group working will be encouraged both within formal sessions and on-line. Practical skills will be undertaken and practiced to increasing levels of independence from the use of elementary equipment, to more advanced skills development and ultimately to the independent final year project as you progress through the course.

Academic skills will be introduced initially by the Introduction to Biosciences module which runs in Semester 1 of the first year to provide a foundation in literature searching, data collection, statistical analysis and scientific presentation, including writing, referencing and oral presentation. The skills module will support both generic and practical skills which will be used in related modules during the year.

Development of skills will be assisted by workshops and formative assessment exercises to prepare for summative assessment with timely and constructive feedback from assessed work to foster experiential learning.

In addition to your development as a biologist, you will develop competency in teaching skills. Trainee teachers undertake a minimum of 120 days training in school as part of this course. Successful completion of the school placement modules leads to recommendation for Qualified Teacher Status (QTS). Trainee teachers recommended for the award of QTS will be well-placed to obtain employment in schools as qualified teachers. Throughout the course you are required to complete two placements in secondary schools which contribute towards credit bearing education modules. As a trainee you will teach across the 11-16 age range across the secondary age phase.

Assessment methods will include summative, formative, self, tutor and peer assessment and a wide range of assessments are incorporated into the course in order for you to demonstrate your knowledge, understanding and skills, including:

- Case studies and problem solving exercises
- Essay and report writing (including the final year project report)
- Phase tests and examinations (seen and unseen)
- Numerical and statistical analyses
- Oral and Poster Presentations
- Practical reports
- Written assignments
- Structured assessment of an education-related Biology research project (from planning through to thesis submission)

The assessment requirements of the course include the need for trainee teachers to demonstrate that they have reached the standards required for Qualified Teacher Status. The assessment methods will include;

- Written assignments and presentations to tutors and peers to demonstrate secure subject knowledge and understanding, the ability to undertake research and the ability to reflect critically on your own teaching practice;
- Completion of school-based activities to demonstrate the ability to observe and research into classroom practice;
- Two sustained periods in school undertaking the full range of the teacher's duties and taking increasing independent responsibility for organising and managing teaching and learning across all of the 11-16 age range within the secondary age phase, groups for which they are being trained. Also, there will be a report on a short placement in a primary school.
- Compilation of two teaching files

Record of Professional Development.

Assessment Methods:

At the University of Wolverhampton, a variety of modes of assessment will be used to support and test your learning and progress and to help you develop capabilities that are valued beyond your University studies and into your working life. Your course may include a variety of assessment activities:

Written examinations (including online examinations, open and closed book examinations and quizzes)
Coursework (for example, essays, reports, portfolios, project proposals and briefs, CVs, poster presentation)
Practical (for example, oral and video presentations, laboratory work, performances, practical skills assessment)

In the final year of your undergraduate degree, and at the end of your postgraduate degree, you are likely to be expected to write an extended piece of work or research, such as a dissertation or a practice-based piece of research.

Student Support:

General University support:

University Libraries are the key source of academic information for students providing physical library resources (books and e-books, journals, DVDs etc.) and offer a range of study areas to allow you to study in the environment that suits you best: Social areas, quiet and silent areas. The Harrison Library also provides access to wide range of online information sources, including eBooks, e-Journals and subject databases.

The Harrison Library also provides you with academic skills support via the Skills for Learning programme. Students on campus can attend workshops or ask for one-to-one help on a range of skills such as academic writing and referencing.

The University Student Support website offers advice on a variety of matters (careers, counselling, student union advice, etc.) Students can also access these services by booking appointment with the SU, careers, counselling services, etc.

Course Specific Support

We have a well-established system of student support available throughout the course.

You will be assigned a personal tutor at the start of the course and you can meet with them regularly (made possible via the SAMS* appointment system). The Course and Module Leaders will also be able to offer guidance and assistance with course and module related problems as required.

The team of Teaching Associates in the Faculty of Science and Engineering provides drop-in sessions for general study skills advice. You will be also supported with study skills and mentoring support by the team of Graduate Teaching Assistants and student Peer Support 'Study Buddies' in the faculty.

The Institute of Education will provide face to face tutorials to help you prepare for your teaching placements and as a trainee you will also work with a school-based mentor in school, who will guide you on their pedagogy and delivery of curriculum within the classroom.

**Student Appointment Management System which allows you to book appointments with your tutors at specific times.*

Employability in the Curriculum:

This course prepares you for a career in teaching Biology at secondary level, providing you with a strong grounding of knowledge in your core science subject, and a recommendation for Qualified Teaching Status. You will emerge with the solid capabilities in critical thinking, evidence gathering and evaluation, argument or point-of-view construction and advocacy, and problem solving which are essential for a successful career in education at all levels. Other transferable skills including team working, time management and communication are integrated throughout the course.

The Secondary Education component of the course guarantees a minimum of 120 hours of classroom experience in Years 2 and 3 under the close supervision of experts in the field, providing one-to-one support with all aspects of your development as a teaching professional. The core modules in the course will also satisfy the requirements of the Wolverhampton Enterprise and Employability Award.

A number of activities run in the University Career Development Week, to heighten your awareness of the application of science in industry and beyond. These include visits to industry, museums, or participation in team building activities. Within modules guest speakers from industry who are practitioners in specialist roles, provide explanation and insights into the roles of biologists in the workplace. Such awareness will be vital to take into the classroom to support careers advice amongst secondary school learners.