

Validated Programme Element Specification for BPC Life Sciences Foundation

Applicable for all undergraduate students commencing the programme element on or after 1st September 2022

| <u>Version No.</u> | <u>Date</u> | <u>Notes – Brunel QA USE ONLY</u> | <u>QA</u> |
|--------------------|-------------|--|-----------|
| 1.0 | Sept 2023 | Validated Programme Element Specification (VPES) for academic year 2023-24. Withdrawal of BPC routes to BSc & MSci Environmental Sciences. | BGS |

| Validated programme element | |
|--|---|
| 1. Awarding and validating institution | Brunel University London |
| 2. Providing institution(s) | Brunel University London Pathway College (BPC) |
| 3. Associated Brunel University college / department / division | College of Health and Life Sciences |
| 4. Associated Contributing Brunel University college / department / division | N/A |
| 5. Programme Element accredited by | N/A |
| 6. Validated for inclusion in Brunel University programmes at Level | Foundation |
| 7. Validated for inclusion in Brunel University programmes (list): | BSc Biomedical Sciences BSc Biomedical Sciences (Biochemistry) BSc Biomedical Sciences (Genetics) BSc Biomedical Sciences (Human Health) BSc Biomedical Sciences (Immunology) BSc Psychology (Sport, Health and Exercise) BSc Psychology BSc Sport, Health and Exercise Sciences (Physical Education, Coaching and Social Issues) BSc Sport, Health and Exercise Sciences BSc Sport, Health and Exercise Sciences with Business Studies BSc Life Sciences |
| 8. Normal length of element for each mode of study | 26 weeks |
| 9. Maximum length of element for each mode of study | See Programme Specification for Brunel programme of which this element forms part |
| 10. Programme Intakes | September January |
| 11. Modes of study | F/T |
| 12. Modes of delivery | Standard |
| 13. JACS code | In line with Brunel University London programme |

| | |
|--|--|
| 14. BPC-related Route Code(s) | <p>C722UNVBIMEC: BSc Biomedical Sciences (Biochemistry) C400UNVBIMEG: BSc Biomedical Sciences (Genetics) B990UNVBIMEH: BSc Biomedical Sciences (Human Health) C550UNVBIMIM: BSc Biomedical Sciences (Immunology) C900UNVBIOME: BSc Biomedical Sciences C800UNVPSYCH: BSc Psychology C800UNVPYSHE: BSc Psychology (Sport, Health and Exercise) 3D9CUNVPECS: BSc Sport, Health and Exercise Sciences (Physical Education, Coaching and Social Issues) C600UNVSPHES: BSc Sport, Health and Exercise Sciences C600UNVSHEBS: BSc Sport, Health and Exercise Sciences with Business Studies C900UNVLIFSC: BSc (Hons) Life Sciences</p> |
| 15. Relevant subject benchmark statements and other external and internal reference points used to inform programme design | <p>QAA UK Quality Code for Higher Education Most recent QAA Subject Benchmark statement - statements for Psychology (2016), Hospitality, Leisure, Sport and Tourism (2008; 2016), and Biomedical Science (2015) have informed the design. Brunel 2030</p> |
| 16. Admission Requirements/pre-requisites for the programme element | <p>5 GCSE passes including Maths and a Science at minimum Grade 4 (pre-2017 Grade C), or their NARIC international equivalent See https://pathway.brunel.ac.uk/academic-requirements for standard entry requirements. English Language entry requirements: minimum of IELTS 5.5 (with 5.5 minimum in each component part) or equivalent</p> |
| 17. Other relevant information | <p>The programme element is compliant with both the generic assessment regulations of Navitas UK and those more specifically of the College and Brunel University, see Senate Regulations 2, as well as the BUL moderation policy http://www.brunel.ac.uk/about/quality-assurance/documents/pdf/Protocol-for-Moderation.pdf and the BPC Affiliate College Collaborative Operations Manual (CoM) section 7.</p> |
| 18. Any departure from relevant regulations specified in Senate Regulation 2 must be stated here and approved by Senate. | None |
| 19. Further information about study with BPC can be found on the BPC website. | https://pathway.brunel.ac.uk/ |
| 20. EDUCATIONAL AIMS OF THE PROGRAMME ELEMENT | |

The educational aims of the programme element are to:

1. Prepare students, who would not normally be considered qualified, to an appropriate standard for progression to the next stage of the programme at the University.
2. Develop in students a fundamental knowledge and understanding of key theoretical constructs underpinning scientific approaches, study, research and statistical methodologies and formal academic discourse, scholarship, ICT, presentation and communication skills to support progression to the next stage of the programme at BPC or BUL.
3. Develop in students an appreciation and desire to learn based on competent intellectual and practical skills that build to a set of transferable skills underpinning all aspects of their onward academic studies/career programme.
4. Ensure students acquire and foster an appreciation of the wider scientific context and its underlying principles, as well as the potential careers involved so as to support their preparedness for progression to the next stage of the programme at the University.
5. Ensure that students have attained the prescribed level of inter-disciplinary language competence described as Level B2 'Proficient User' by the Council of Europe, see *Common European Framework of Reference for languages: Learning, teaching assessment 2001*, Council of Europe, CUP, Cambridge, p. 24, Table 1. *Common Reference Levels: global scale*.

21. LEARNING OUTCOMES

The programme element provides opportunities for students to develop and demonstrate knowledge and understanding (K) cognitive (thinking) skills (C) and other skills and attributes (S) in the following areas:

| Level | Category (K = knowledge and understanding, C = cognitive (thinking) skills, S = other skills and attributes) | Learning Outcome | Associated Assessment Blocks Code(s) | Associated Study Blocks Code(s) | Associated Modular Blocks Code(s) |
|-------|---|--|--------------------------------------|---------------------------------|--|
| 0 | K1 | Describe fundamental concepts, principles, and theories of science with particular reference to biology, chemistry, mathematics and research skills. | | | NG0602 NG0603 NG0604 NG0605 |
| 0 | K2 | Display a comprehension of the nature and application of basic scientific vocabulary and nomenclature. | | | NG0602 NG0603 NG0604 NG0605 |
| 0 | K3 | Describe the fundamentals underpinning scientific methods, methodology, research and philosophy. | | | NG0602 NG0603 NG0604 NG0605 |
| 0 | K4 | Develop enhanced awareness of the application of scientific concepts, principles and theories and their importance in society. | | | NG0602 NG0603 NG0604 NG0605 |
| 0 | K5 | Demonstrate knowledge and application of fundamental IT concepts and software | | | NG0601 NG0606 NG0607 NG0600 |
| 0 | K6 | Develop an ability to manipulate elementary scientific and mathematical constructs and apply numerical techniques, including statistics | | | NG0602 NG0603 NG0604 NG0605 NG0606 NG0607 |
| 0 | K7 | Recognise the importance of developing a range of study skills including an | | | NG0602 NG0603 |

| | | | | | |
|---|----|---|--|--|--|
| | | understanding of scientific discourse and the formal nature and rules of studying science. | | | NG0604 NG0605 |
| 0 | C1 | Communicate scientific data and analyse, interpret and explain data | | | NG0602 NG0603 NG0604 NG0605 NG0607 |
| 0 | C2 | Apply basic research techniques to sourcing and selecting appropriate academic data and literature. | | | NG0600 |
| 0 | C3 | Organise, assess and present reasoned, critical and comprehensive arguments backed up by evidence | | | NG0601 NG0602 NG0603 NG0604 NG0605 NG0606 NG0607 NG0600 |
| 0 | C4 | Demonstrate an ability to analyse data and various modes of information using appropriate techniques. | | | NG0602 NG0603 NG0604 NG0605 NG0606 NG0607 |
| 0 | S1 | Demonstrate an understanding of experimental design. | | | NG0602 NG0603 NG0604 NG0605 |

Learning/teaching strategies and methods to enable learning outcomes to be achieved, including formative assessments

The principal aim of the programme is to enable students to linguistically and academically negotiate the transition from school to university and be prepared for the demands of an undergraduate degree programme in an appropriate Life Sciences discipline. The programme syllabus is designed around the acquisition of core academic skills and literacy development that underpins successful higher education: academic, research, IT, critical thinking and the promotion of self-awareness.

Students learn through a combination of formal, interactive lectures in relevant content areas, interactive seminars, practical laboratory sessions and IT-enabled self-study opportunities: practical application of theoretical knowledge allows students to develop further skills and understanding of relevant topics and concepts. Formative assessment opportunities are incorporated into each of the module blocks in the form of homework assignments, Moodle exercises and the opportunity to submit assignment draft for review prior to submission.

The focus on academic literacy development in all parts of the course ensures that students develop strong linguistic competence and advanced numeracy skills as well as a mastery of their discipline at an appropriate level. Through the course, students will be encouraged to engage appropriately with peers and tutors as members of an international academic community. This will involve the development of critical self-awareness and personal literacy as students become more attuned to their identity as global citizens.

This is an intensive programme with 16 hours per week and a corresponding number of ongoing assessment tasks designed to provide a scaffolded structure for students at this entry level to Higher Education.

Formative assessment opportunities are incorporated into each of the module blocks in the form of regular homework assignments, Moodle exercises and the opportunity to submit an assignment draft for review prior to final submission.

Each of the blocks will make use of the Navitas Moodle Virtual Learning Environment (typically for additional module resources, but also for blended content, as well as quizzes and coursework submissions). Private study should be additional reading to support both the lecture material and as research for assignments.

Summative assessment strategies and methods to enable learning outcomes to be demonstrated.

The purpose of assessment is to enable students to demonstrate that they have met the Learning Outcomes (LOs) of a given programme and to provide the evidence of achievement that is used to determine whether prescribed progression or completion criteria of a stage of study have been met. To achieve this purpose, Navitas UK supports and promotes the following principles for assessment in each of its colleges:

The following principles underlie Navitas UP EU Assessment strategy:

- Effective assessment techniques enhance learning and should be fully integrated within the curriculum at each stage, not a separate activity that takes place in isolation.
- Assessment contributes positively to learning development and growth and measures the learning gain that takes place throughout the student journey
- Assessment is a joint responsibility and must involve a continuous dialogue between tutor and student
- Successful graduates of Navitas programmes are those who are able to self-assess and assess the work of peers
- The development of assessment literacy amongst students is a core component of the Navitas curriculum

To achieve this Navitas will ensure that:

- Assessment processes are fair, reliable, constant and equitable with all students being assessed fairly and on their own individual merit and ability
- Assessment processes are robust and all appropriate College staff and invigilators will be trained accordingly
- Feedback is supportive, constructive timely and presented to students in accessible language including the use of electronic formats
- The balance of assessment tasks and types on modules and programmes will address the target needs of students in the next stage of their academic study, as well as their current needs
- Programmes and modules include assessment activities that involve students

Students are expected to:

- Familiarise themselves with the Navitas and partner University regulations, particularly in relation to academic conduct and submission deadlines
- Engage fully and enthusiastically with the feedback process
- Provide thoughtful feedback individually or via the student representative system on the assessment process at appropriate stages

Summative assessment methods are varied to ensure appropriate assessment of learning outcomes. These methods include: individual and group projects; open-book examinations; oral presentations and case studies and closed-book final examinations.

The assessment map is designed with the following strategy in mind: class tests develop the skills necessary to demonstrate a broad understanding of the course syllabus and problem-solving skills. Oral presentations provide opportunities for advancing communication skills and written assignments including case studies and reports are underpinned by a critically aware research and data gathering process (to aid research literacy). Reflective assignments encourage students to engage in critical self-awareness and on-going improvement both linguistically and academically.

The BrunELT exit English language assessment task ensures that students have achieved the appropriate English language proficiency level for entry to the next stage of their course.

22. Programme element structure and progression requirements (if applicable)

Programme Element Structure

| Compulsory assessment block codes, titles and credit volume | | | Optional assessment block codes, titles and credits |
|---|--|----------------------|--|
| Compulsory study block codes, titles and credit volume | | | Optional Study block codes, titles and credit volume |
| Compulsory modular block codes, titles and credits | | | Optional modular block codes, titles and credits |
| Code | Title | Credit points | |
| NG0601 | Information and Communication Technology Skills | 10 | |
| NG0602 | Chemistry 1 | 20 | |
| NG0603 | Chemistry 2 | 10 | |
| NG0604 | Biology 1 | 15 | |
| NG0605 | Biology 2 | 15 | |
| NG0606 | Research Methods, Critical Thinking and Expression | 15 | |
| NG0607 | Mathematics for Science and Computing | 20 | |
| NG0600 | Learning Skills & Communication | 15 | |

Chemistry 1 and Biology 1 will be studied in semester 1, followed by Chemistry 2 and Biology 2 studied in semester 2.

Assessment and Progression Requirements

| | | | | | | | |
|---|---|---|--------|-------------|--------|-------------|--|
| For inclusion in Programmes: | <ul style="list-style-type: none"> : BSc Biomedical Sciences (Biochemistry) : BSc Biomedical Sciences (Genetics) : BSc Biomedical Sciences (Human Health) : BSc Biomedical Sciences (Immunology) : BSc Biomedical Sciences : BSc Psychology : BSc Psychology (Sport, Health and Exercise) : BSc Sport, Health and Exercise Sciences (Physical Education, Coaching and Social Issues) : BSc Sport, Health and Exercise Sciences : BSc Sport, Health and Exercise Sciences with Business Studies : BSc Life Sciences | | | | | | |
| <p>The following assessment or modular blocks are core</p> <table border="0"> <tr> <td>NG0601</td> <td>Information and Communication Technology Skills</td> </tr> <tr> <td>NG0602</td> <td>Chemistry 1</td> </tr> <tr> <td>NG0603</td> <td>Chemistry 2</td> </tr> </table> | NG0601 | Information and Communication Technology Skills | NG0602 | Chemistry 1 | NG0603 | Chemistry 2 | <p>Progression requirements as per Brunel University London Senate Regulation 2</p> <p>All modules must be passed at C-/ 50% with the exception of NG0600 which must be passed at 40%</p> |
| NG0601 | Information and Communication Technology Skills | | | | | | |
| NG0602 | Chemistry 1 | | | | | | |
| NG0603 | Chemistry 2 | | | | | | |

| | | |
|--------|--|--|
| NG0604 | Biology 1 | |
| NG0605 | Biology 2 | |
| NG0606 | Research Methods, Critical Thinking and Expression | |
| NG0607 | Mathematics for Science and Computing | |
| NG0600 | ILSC | |

Reassessment

Students will be entitled to be re-assessed in any modules for which they have failed, at the first attempt, to achieve the pass mark(s) as defined above under 'Progression requirements'. Any such reassessment of a module may normally only be attempted on one occasion and shall be capped at the pass mark for the module as defined above under 'Progression Requirements' and in accordance with Brunel University's senate regulations (SR2).

Please note: this specification provides a concise summary of the main features of the programme element and the learning outcomes that a student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes, content and teaching, learning and assessment methods can be found in the modular block, assessment and study block outlines and other programme and block information. The accuracy of the information contained in this document is reviewed by the University from time to time and whenever a major modification occurs.