



**UNIVERSITY
CENTRE**
SOUTH DEVON



**UNIVERSITY OF
PLYMOUTH**

PROGRAMME QUALITY HANDBOOK 2018-2019

FdSc Biosciences (incorporating Foundation Year)



Royal Society of
Biology

Accredited Foundation Degree

Contents

1. Welcome and Introduction to FdSc Biosciences (incorporating Foundation Year)	3
2. Programme Specification.....	6
3. Module Records.....	15

1. Welcome and Introduction to FdSc Biosciences (incorporating Foundation Year).

Welcome to FdSc Biosciences (incorporating Foundation Year) delivered at University Centre South Devon.

This foundation degree, with foundation year, has been designed to provide you with the key knowledge and understanding of biological science at undergraduate level as well developing the skills required of a professional graduate biologist. We have had input from local employers and the Royal Society of Biology in the design of the programme's content and its assessment. We have a suite of modules across the foundation year and then the first two years of undergraduate study that cover the core aspects of biology that you would expect, with an increasing focus on cellular and molecular biology, genetics and human physiology. The broader aspects of plant biology, ecology and biodiversity are also included as well as an appropriate level of preparation for the statistical analysis of data. The foundation year is particularly suitable for students who do not have the appropriate advanced level biological knowledge and understanding as well as the practical skills associated with preparation for undergraduate study in biology. The programme has a requirement for the completion of a minimum of 80 hours of work experience in the bioscience sector and this is an excellent opportunity to gain the essential skills and experience that will help set you apart when pursuing future employment opportunities. You will benefit from a really vibrant and supportive learning environment and learning community with excellent teaching and resources.

This Programme Quality handbook contains important information including:

The approved programme specification
Module records

Note: The information in this handbook should be read in conjunction with the current edition of:

- Your Institution & University Student Handbook which contains student support based information on issues such as finance and studying at HE
 - o Available in University News & Information on Moodle.
- University of Plymouth's Student Handbook
 - o available at:
<https://www.plymouth.ac.uk/your-university/governance/student-handbook>

1.1. Programme Management

Role	Person
Programme Manager and HE Lead	Luke Peakman
Programme Coordinator for Science	Janet Ellis
Section Head	James McCauley
Assistant Principle	Matt Burrows
HE Senior Quality Co-ordinator – Academic Standards	Amy-jo Jaycock
Higher Education Manager and Academic Registrar	Alastair Wilson
Deputy Manager Higher Education	Jon Hall

1.2. Personal Tutor

Personal tutors are designated as a sustained and first point of reference for individual students on personal, domestic or academic matters; detailed information will be available in your teaching, learning and assessment handbooks.

Personal Tutor for 18/19: **Luke Peakman**

Further information can be found by following this link to the [University personal tutoring](#) policy.

1.3. Module Leaders

Module Leader	Module	Contact
Luke Peakman	<ul style="list-style-type: none"> • Study Skills • Introduction to Biosciences • Professional Practice • Genes, Genetic Analysis and Evolution • Laboratory Techniques • Molecular Genetics, Biotechnology and Cancer • Immunology 	lukepeakman@southdevon.ac.uk
Julie Day	<ul style="list-style-type: none"> • Skills for Biological Science • Introduction to Chemistry 	julieday@southdevon.ac.uk
Janet Ellis	<ul style="list-style-type: none"> • Introduction to Cellular Biology • Introduction to Systems Biology • Cell Biology • Cells and Adaptions • Human Physiology 	jellis@southdevon.ac.uk

Kenneth Armstrong	<ul style="list-style-type: none"> • Biochemistry Toolkit • Research Project 	kennetharmstrong@southdevon.ac.uk
Paul Hallas	<ul style="list-style-type: none"> • Microbiology 	paulhallas@southdevon.ac.uk
Matt Rossin	<ul style="list-style-type: none"> • Biodiversity and Speciation 	mattrossin@southdevon.ac.uk

1.4. Course Contact List

If you have questions about a module, please contact the appropriate module leader.

If you have any questions about the programme or your pastoral needs please contact your personal tutor, Luke Peakman, on lukepeakman@southdevon.ac.uk

If you have any questions about fees, funding or support from the university please contact university@southdevon.ac.uk

Name	Role	Phone number	Email
Alison Tyler	Laboratory Manager	01803 540318	alison Tyler@southdevon.ac.uk
Katrina McFadyen	Laboratory Technician	01803 540318	katrinamcfadyen@southdeovn.ac.uk
Amy-jo Jaycock	HE Senior Quality Co-ordinator	01803 782791	amyjojaycock@southdevon.ac.uk
Lauren Dommett	Academic Resource and Employability Officer	07595278510	laurendommett@southdevon.ac.uk
Sandy Akerman	Higher Education Support	07970 593 505	sakerman@southdevon.ac.uk
Catherine Smith	Higher Education Support and Wellbeing Officer	01803 540780	catherinesmith@southdevon.ac.uk
Thea Jones	Higher Education Employability and Enterprise Coordinator	01803 540788	theajones@southdevon.ac.uk

2. Programme Specification

1. Foundation Year (Year 0)

Final award: Foundation degree in Biosciences

UCAS code: C900

JACS code: C190

2. Awarding Institution: University of Plymouth

Teaching institution(s): South Devon College

3. Accrediting body(ies): N/A

4. Distinctive Features of the Programme and the Student Experience

This is a three-year Foundation Degree programme starting at Year Zero. It is one of 2 such programmes, designed for students who are not appropriately qualified in subject knowledge, attainment or recent experience, for entry to Level 4 of undergraduate programmes. On successful completion of Year Zero, students can progress to Level 4 of a Foundation degree at South Devon College, and ultimately to Level 6 at Plymouth University or a BSc top-up year at South Devon College depending on the degree.

Distinctive features of this programme are that it:

- is suitable for non-standard entrants, including mature returners to study, those without Science qualifications or with Science qualifications below the standard required for entry to Level 4
- assumes no prior knowledge of science and welcomes applications from those who have studied other disciplines.
- provides study in chemistry, biology and mathematics, as preparation for progression to an undergraduate programme in bioscience
- provides a high proportion of experiential work in field or lab, and intensive and early assessment, with rapid feedback designed to support learning

- provides personal support for learning through regular meetings with your personal tutor and input from specialist staff
- is delivered by staff with experience of teaching both at degree level, and of teaching adults who often have a limited knowledge base at the start of the year, on Access to HE programmes
- is delivered in small groups allowing a more student centred approach with opportunity for on-going discussion and feedback

5. Relevant QAA Subject Benchmark Group(s)

The programme is devised with reference to the subject benchmarks for Biosciences.

6. Programme Structure for Foundation year of study

All modules are worth 20 credits. 'Study Skills' combines Study Skills and Mathematics. 'Skills for Biological Science' combines Statistics and Biochemistry. All modules are core. The programme runs as a full-time course running over 1 year of study.

Semester 1

SOUD0000	Study Skills
SOUD0004	Introduction to Chemistry
SOUD0002	Introduction to Cellular Biology

Semester 2

SOUD0001	Skills for Biological Science
SOUD0003	Introduction to Systems Biology
SOUD0005	Introduction to Biosciences

7. Programme Aims

The aims shown below are those for the Foundation Year (Level Zero) element of this programme. They should be read in conjunction with the aims of the FdSc Biosciences programme to which you wish to progress to show the full scope of your intended study programme.

The aims of the Foundation Year programme are to:

- 7.1 enable students to have a broad yet comprehensive understanding of the fundamentals of science that are necessary for successful progression to a degree programme in bioscience
- 7.2 develop in students the ability to apply scientific knowledge and skills appropriately and successfully in undergraduate studies
- 7.3 equip students with the study skills necessary to successfully progress to a degree programme in bioscience
- 7.4 enable students to become confident, critically self-aware independent learners
- 7.4 begin to develop in students a range of key and transferable skills of value in the world of employment, including skills in the areas of communication, problem solving, team-working, information-handling and processing.
- 7.5 prepare students for, and initiate students into, the culture of University level study, both in terms of the academic standards and the study patterns required

8. Programme Intended Learning Outcomes

The intended learning outcomes shown below are those for the Level 3 element of this programme. They should be read in conjunction with the Intended Learning Outcomes of the FdSc Biosciences programmes to show the full scope of your intended study programme.

8.1. Knowledge and understanding

On successful completion graduates should have developed:

- 1) A broad understanding of the fundamental knowledge base and the terminology of the disciplines of biology and chemistry
- 2) An awareness of current areas of debate and discovery in science and how scientific knowledge and methods can be applied to investigate them

8.2. Cognitive and intellectual skills

On successful completion graduates should be able to:

- 1) Correctly identify the concepts and principles underlying theoretical frameworks in biology and chemistry, and begin to identify strengths and limitations of such models
- 2) Judge the reliability of data, results and information using well defined techniques and/or criteria

- 3) Operate in a range of varied but predictable contexts relevant to science, requiring the use and application of specified scientific techniques and information sources.

8.3. Key transferable and employment-related skills

On successful completion graduates should be able to demonstrate:

- 1) Written and oral communication skills and be able to use these in a variety of contexts
- 2) Problem-solving skills, relating to qualitative and quantitative information.
- 3) Numeracy and computational skills appropriate to the study of undergraduate science at university
- 4) Information-retrieval skills, in relation to primary and secondary information sources
- 5) Demonstrate an awareness of their own capabilities in key areas and engage in development activity through guided self-direction

8.4. Practical skills

On successful completion graduates should be able to demonstrate:

- 1) Skills in the safe handling of materials in experimental settings, taking into account their physical and chemical properties, including any specific hazards associated with their use.
- 2) Demonstrate the skills required to conduct standard laboratory procedures in biology and chemistry
- 3) Demonstrate skills in the monitoring, by observation and/or measurement, of a variety of physical, chemical or biological properties, events or changes, of both a quantitative and qualitative nature, together with their systematic and reliable recording and documentation, in the laboratory or the field.

9. Admissions Criteria

Entry Requirements for Foundation Year (Year 0) with progression to FdSc Biosciences		
	Qualifications required	Levels required
General entry requirements	The Foundation Year for FdSc Biosciences is open for all adult (18+) learners who wish to progress to degree level study in biosciences. Applications are assessed on an individual basis. For applicants without a minimum of GCSE grade C/level 4 (or equivalent) in English and Maths there is an expectation that these subjects will be taken alongside their degree level studies.	
International students	IELTS	IELTS 6.0 overall with at least 5.5 in each element

In accordance with the University's policies, the Foundation Year programme welcomes applications from disabled students who are appropriately qualified, academically, for the programme. Information interviews are conducted with applicants to determine the nature of adjustments required.

10. Progression criteria for Final and Intermediate Awards

Students will progress to the FdSc Biosciences programme provided they achieve 120 credits in their Foundation Year and an overall mean of at least 40% in the programme, averaged across all 120 credits.

There is no guarantee of progression to programmes other than FdSc Biosciences. Students intending to progress to other programmes at South Devon College should contact the HE Faculty regarding admissions. You should be aware that some programmes may ask you to apply through UCAS so please make these enquiries in good time.

11. Exceptions to Regulations

None

12. Transitional Arrangements

N/A

13. Mapping and Appendices:

13.1. ILOs against Modules' Mapping

Knowledge and understanding		
On successful completion graduates should have developed:		
1	A broad understanding of the fundamental knowledge base and the terminology of the disciplines of Biology and Chemistry	SOUND0002 Introduction to Cellular Biology SOUND0003 Introduction to Systems Biology SOUND0004 Introduction to Chemistry SOUND0001 Skills for Biological Science SOUND0005 Introduction to Biosciences
2	An awareness of current areas of debate and discovery in Science and how scientific knowledge and methods can be applied to investigate them.	SOUND0002 Introduction to Cellular Biology SOUND0003 Introduction to Systems Biology SOUND0004 Introduction to Chemistry SOUND0000 Study Skills SOUND0001 Skills for Biological Science SOUND0005 Introduction to Biosciences

Cognitive and intellectual skills		
On successful completion graduates should be able to:		
1	Identify correctly the concepts and principles underlying theoretical frameworks in Biology and Chemistry, and begin to identify strengths and limitations of such models	SOUND0002 Introduction to Cellular Biology SOUND0003 Introduction to Systems Biology SOUND0004 Introduction to Chemistry SOUND0001 Skills for Biological Science SOUND0005 Introduction to Biosciences
2	Judge the reliability of data, results and information using well	SOUND0002 Introduction to Cellular Biology SOUND0003 Introduction to Systems Biology SOUND0004 Introduction to Chemistry

	defined techniques and/or criteria	SOUD0000 Study Skills SOUD0001 Skills for Biological Science SOUD0005 Introduction to Biosciences
3	Operate in a range of varied but predictable contexts relevant to Science, requiring the use and application of specified scientific techniques and information sources.	SOUD0002 Introduction to Cellular Biology SOUD0003 Introduction to Systems Biology SOUD0004 Introduction to Chemistry SOUD0001 Skills for Biological Science SOUD0005 Introduction to Biosciences

Key transferable and employment-related skills		
On successful completion graduates should be able to demonstrate:		
1	Written and oral communication skills and be able to use these in a variety of contexts	SOUD0002 Introduction to Cellular Biology SOUD0003 Introduction to Systems Biology SOUD0004 Introduction to Chemistry SOUD0000 Study Skills SOUD0001 Skills for Biological Science SOUD0005 Introduction to Biosciences
2	Problem-solving skills, relating to qualitative and quantitative information.	SOUD0002 Introduction to Cellular Biology SOUD0003 Introduction to Systems Biology SOUD0004 Introduction to Chemistry SOUD0000 Study Skills SOUD0001 Skills for Biological Science SOUD0005 Introduction to Biosciences
3	Numeracy and computational skills appropriate to the study of undergraduate science at university	SOUD0002 Introduction to Cellular Biology SOUD0003 Introduction to Systems Biology SOUD0004 Introduction to Chemistry SOUD0000 Study Skills SOUD0001 Skills for Biological Science SOUD0005 Introduction to Biosciences
4	Information-retrieval skills, in relation to primary and	SOUD0002 Introduction to Cellular Biology SOUD0003 Introduction to Systems Biology SOUD0004 Introduction to Chemistry

	secondary information sources	SOUD0000 Study Skills SOUD0001 Skills for Biological Science SOUD0005 Introduction to Biosciences
5	Demonstrate an awareness of their own capabilities in key areas and engage in development activity through guided self-direction	SOUD0000 Study Skills 1

Practical skills		
On successful completion graduates should be able to demonstrate:		
1	Skills in the safe handling of materials in experimental settings, taking into account their physical and chemical properties, including any specific hazards associated with their use.	SOUD0002 Introduction to Cellular Biology SOUD0003 Introduction to Systems Biology SOUD0004 Introduction to Chemistry SOUD0001 Skills for Biological Science SOUD0005 Introduction to Biosciences
2	Demonstrate the skills required to conduct standard laboratory procedures in Biology and Chemistry	SOUD0002 Introduction to Cellular Biology SOUD0003 Introduction to Systems Biology SOUD0004 Introduction to Chemistry SOUD0001 Skills for Biological Science SOUD0005 Introduction to Biosciences
3	Demonstrate skills in the monitoring, by observation and/or measurement, of a variety of physical, chemical or biological properties, events or changes, of both a quantitative and qualitative nature, together with their	SOUD0002 Introduction to Cellular Biology SOUD0003 Introduction to Systems Biology SOUD0004 Introduction to Chemistry SOUD0001 Skills for Biological Science SOUD0005 Introduction to Biosciences

	systematic and reliable recording and documentation, in the laboratory or the field.	
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13.2. Assessment against Modules' Mapping

Module	Coursework (%)	P (Practice)	Test (%)
SOUD0000 Study Skills	50		50
SOUD0001 Skills for Biological Science	70		30
SOUD0002 Introduction to Cellular Biology	70	Pass/Fail	30
SOUD0003 Introduction to Systems Biology	100		0
SOUD0004 Introduction to Chemistry	70	Pass/Fail	30
SOUD0005 Introduction to Biosciences	75		25

13.3. Skills against Modules Mapping

See above practical

3. Module Records

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD.

MODULE CODE: SOUD0000

MODULE TITLE: Study Skills

CREDITS: 20

FHEQ LEVEL: Year 0

JACS CODE: X220

PRE-REQUISITES: None

CO-REQUISITES: None

COMPENSATABLE: Yes

SHORT MODULE DESCRIPTOR: (max 425 characters)

This module is designed to develop an independent and reflective approach to learning as required for effective study at Levels 4 and 5. It will include mathematical skills, scientific writing, and time management.

ELEMENTS OF ASSESSMENT [Use HESA KIS definitions] – see Definitions of Elements and Components of Assessment			
E1 (Examination)		C1 (Coursework)	50%
E2 (Clinical Examination)		A1 (Generic assessment)	
T1 (Test)	50%	P1 (Practical)	

SUBJECT ASSESSMENT PANEL to which module should be linked: FdSc Biosciences

Professional body minimum pass mark requirement: NA

MODULE AIMS:

The module will help students become independent, reflective learners who can manage their time effectively. It will develop skills such as researching, referencing, scientific writing and presentation including data handling.

ASSESSED LEARNING OUTCOMES: At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes	Award/ Programme Learning Outcomes contributed to
1. Communicate scientific information effectively. 2. Demonstrate effective study skills. 3. Demonstrate fundamental data handling skills in a scientific context. 4. Present and interpret scientific data	Knowledge and understanding – 2 Cognitive and intellectual skills - 2 Key transferable and employment-related skills – 1, 2, 3, 4

Guidance for Learning Outcomes is given below; please refer to the Programme Specification for relevant Award Learning Outcomes.

DATE OF APPROVAL: 02/05/2018	FACULTY/OFFICE: Academic Partnerships
DATE OF IMPLEMENTATION: 17/09/2018	SCHOOL/PARTNER: South Devon College
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	SEMESTER: Semester 1

Additional notes (for office use only):

University of Plymouth Academic Partnerships Programme Quality Handbook UK Page 15 of 28

Last Saved: 11/02/2019

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

ACADEMIC YEAR: 18-19	NATIONAL COST CENTRE: 112
MODULE LEADER: Luke Peakman	OTHER MODULE STAFF: Paul Hallas

Summary of Module Content

Skills gap analysis; Taking notes and making use of feedback; scientific research and methodology, referencing, and writing; Revision and examination techniques; Calculations and measurement in science including unit conversions, standard form, introduction to algebra, and graphical presentation.

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities <i>[KIS definitions]</i>	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	44	Seminars may be led by students.
Practical classes and workshops	16	Laboratory based experiments
Guided independent study	140	Directed weekly reading, moodle based tasks, and assessment development/revision
Total	200	(NB: 1 credit = 10 hours of learning; 20 credits = 200 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name	Component Weighting
In class test	In-Class Test – Topics in mathematics LO3 & LO4	100%
Coursework	Portfolio of work LO1 & LO2	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
In class test	In-Class Test – Topics in mathematics LO3 & LO4	100%
Coursework	Portfolio of work LO1 & LO2	100%

To be completed when presented for Minor Change approval and/or annually updated

Updated by: Janet Ellis
Date 05/03/2018

Approved by: Luke Peakman
Date:05/03/2018

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD.

MODULE CODE: SOUD0001

MODULE TITLE: Skills for Biological Science

CREDITS: 20

FHEQ LEVEL: Year 0

JACS CODE: X220

PRE-REQUISITES: None

CO-REQUISITES: None

COMPENSATABLE: Yes

SHORT MODULE DESCRIPTOR: *(max 425 characters)*

This module is designed build on mathematical and chemical understanding gained in semester one to provide a solid knowledge base in these topics that will allow students to progress confidently to their chosen degree.

ELEMENTS OF ASSESSMENT [Use HESA KIS definitions] – see Definitions of Elements and Components of Assessment			
E1 (Examination)		C1 (Coursework)	70%
E2 (Clinical Examination)		A1 (Generic assessment)	
T1 (Test)	30%	P1 (Practical)	

SUBJECT ASSESSMENT PANEL to which module should be linked: FdSc Biosciences

Professional body minimum pass mark requirement: NA

MODULE AIMS:

The module will help students develop an understanding of topics in organic chemistry in the context of biological processes. It will also introduce a number of statistical techniques and aid students in the identification of appropriate tests for particular data sets.

ASSESSED LEARNING OUTCOMES: At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes	Award/ Programme Learning Outcomes contributed to
1. Present and name organic chemicals using IUPAC rules. 2. Explain properties and reactions of organic molecules. 3. Select, carry out and evaluate appropriate statistical techniques.	Knowledge and understanding – 1 Cognitive and intellectual skills – 2, 3 Key transferable and employment-related skills – 1, 2, 3

DATE OF APPROVAL: 02/05/2018	FACULTY/OFFICE: Academic Partnerships
DATE OF IMPLEMENTATION: 14/01/2019	SCHOOL/PARTNER: South Devon College
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	SEMESTER: Semester 2

Additional notes (for office use only):

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

ACADEMIC YEAR: 18-19	NATIONAL COST CENTRE: 113
MODULE LEADER: Julie Day	OTHER MODULE STAFF: None

Summary of Module Content

Structural formulae, naming of molecules (alkanes; alkenes; aldehydes; ketones; alcohols; organic acids; esters), their properties and common reactions in a biological context.

Introduction to probability and interpretation of statistical tests; Standard deviation and standard error, Correlation coefficient; Student T test; Chi- squared; Spearman's rank; Mann-Whitney U-test.

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities <i>[KIS definitions]</i>	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	44	Seminars may be led by students.
Practical classes and workshops	16	Laboratory based experiments
Guided independent study	140	Directed weekly reading, moodle based tasks, and assessment development/revision
Total	200	(NB: 1 credit = 10 hours of learning; 20 credits = 200 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Structured reports and extension questions – LO1, LO2 Average mark after discarding the 2 lowest marks.	100%
Test	Open-book statistics test – LO3	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Written structured report – LO1, LO2	100%
Test	Open-book statistics test – LO3	100%

To be completed when presented for Minor Change approval and/or annually updated	
Updated by: Janet Ellis Date 05/03/2018	Approved by: Luke Peakman Date:05/03/2018

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD.

MODULE CODE: SOUD0002

MODULE TITLE: Introduction to Cellular Biology

CREDITS: 20

FHEQ LEVEL: Year 0

JACS CODE: C100

PRE-REQUISITES: None

CO-REQUISITES: None

COMPENSATABLE: Yes

SHORT MODULE DESCRIPTOR: *(max 425 characters)*

This module is designed to introduce students to cell structure and function in both prokaryotes and eukaryotes. It does not assume any prior knowledge on the part of the students. The module develops the under-pinning knowledge required for the understanding of higher levels of biological organisation.

ELEMENTS OF ASSESSMENT [Use HESA KIS definitions] – see Definitions of Elements and Components of Assessment			
E1 (Examination)		C1 (Coursework)	70%
E2 (Clinical Examination)		A1 (Generic assessment)	
T1 (Test)	30%	P1 (Practical)	Pass/Fail

SUBJECT ASSESSMENT PANEL to which module should be linked: FdSc Biosciences

Professional body minimum pass mark requirement: NA

MODULE AIMS:

To develop knowledge of cell structure and cell processes that is sufficient to enable students to progress with confidence. To develop practical skills in biology and relate both skills and knowledge gained in this module with those developed elsewhere in the programme.

ASSESSED LEARNING OUTCOMES: At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes	Award/ Programme Learning Outcomes contributed to
<ol style="list-style-type: none"> 1. Demonstrate knowledge and understanding of cell structure and organelle function. 2. Demonstrate knowledge and understanding of key biochemical molecules and processes. 3. Interpret, evaluate and discuss data from simple biological studies, with guidance if necessary 4. Demonstrate competence in basic laboratory tasks in biology. 	Knowledge and understanding – 1, 2 Cognitive and intellectual skills – 1, 2, 3 Key transferable and employment-related skills – 1, 2, 3, 4 Practical Skills – 1, 2, 3

DATE OF APPROVAL: 02/05/2018	FACULTY/OFFICE: Academic Partnerships
DATE OF IMPLEMENTATION: 17/09/2018	SCHOOL/PARTNER: South Devon College
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	SEMESTER: Semester 1

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

ACADEMIC YEAR: 18-19	NATIONAL COST CENTRE: 112
MODULE LEADER: Janet Ellis	OTHER MODULE STAFF: None

Summary of Module Content

Prokaryotic and eukaryotic cell ultrastructure; cell transport; the functions of biological molecules and macromolecules, including an introduction to molecular structure and bonding; cell division; inheritance; respiration and photosynthesis, including the importance of redox reactions; laboratory practice including microscopy, and the implementation, analysis and evaluation of experiments.

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities <i>[KIS definitions]</i>	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	44	Seminars may be led by students.
Practical classes and workshops	16	Laboratory based experiments
Guided independent study	140	Directed weekly reading, moodle based tasks, and assessment development/revision
Total	200	(NB: 1 credit = 10 hours of learning; 20 credits = 200 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Laboratory Workbook - A combination of experimental write-ups and extension questions. LO2, LO3 Average mark after discarding the 2 lowest marks.	100%
Practical	Practical laboratory skills – LO4	Pass/Fail
In-class test	In-class test - LO1	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Written structured report - LO2, LO3, LO4	100%
Practical	Practical laboratory skills – LO4	Pass/Fail
In-class test	In-class test - LO1	100%

To be completed when presented for Minor Change approval and/or annually updated	
Updated by: Janet Ellis Date 05/03/2018	Approved by: Luke Peakman Date:05/03/2018

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD.

MODULE CODE: SOUD0003

MODULE TITLE: Introduction to Systems Biology

CREDITS: 20

FHEQ LEVEL: Year 0

JACS CODE: C100

PRE-REQUISITES: None

CO-REQUISITES: None

COMPENSATABLE: Yes

SHORT MODULE DESCRIPTOR: *(max 425 characters)*

This module is designed to build on the students' knowledge of cell structure and apply this knowledge to physiological processes. Students will compare key systems across taxa and provide opportunities for associated practical work.

ELEMENTS OF ASSESSMENT [Use HESA KIS definitions] – see Definitions of Elements and Components of Assessment			
E1 (Examination)		C1 (Coursework)	100%
E2 (Clinical Examination)		A1 (Generic assessment)	
T1 (Test)		P1 (Practical)	

SUBJECT ASSESSMENT PANEL to which module should be linked: FdSc Biosciences

Professional body minimum pass mark requirement: NA

MODULE AIMS:

To apply the understanding of cellular processes developed in the first semester to the functioning of key biological systems in a range of organisms. The exemplar organisms will be chosen from a number of taxa to be relevant to the students' chosen progression routes. As well as theoretical knowledge the module will also continue to develop practical skills so students will be able to progress with confidence to their degree program.

ASSESSED LEARNING OUTCOMES: At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes	Award/ Programme Learning Outcomes contributed to
1. Demonstrate knowledge and understanding of key biological systems. 2. Compare and contrast structures and physiological processes across taxa. 3. Collect and interpret data from biological studies.	Knowledge and understanding – 1, 2 Cognitive and intellectual skills – 1, 2, 3 Key transferable and employment-related skills – 1, 2, 3, 4, 5 Practical Skills – 1, 2, 3

DATE OF APPROVAL: 02/05/2018	FACULTY/OFFICE: Academic Partnerships
DATE OF IMPLEMENTATION: 17/09/2018	SCHOOL/PARTNER: South Devon College
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	SEMESTER: Semester 2

Additional notes (for office use only):

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

ACADEMIC YEAR: 18-19	NATIONAL COST CENTRE: 112
MODULE LEADER: Janet Ellis	OTHER MODULE STAFF: None

Summary of Module Content

Comparison of systems and processes in mammals (humans), birds, fish, insects, and other taxa. Gas exchange, circulation, lymph and blood, digestion, homeostasis, nerves, hormones, liver, kidneys, skeleton, muscles.

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities <i>[KIS definitions]</i>	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	48	Seminars may be led by students.
Practical classes and workshops	12	Laboratory based experiments
Guided independent study	140	Directed weekly reading, moodle based tasks, and assessment development/revision
Total	200	(NB: 1 credit = 10 hours of learning; 20 credits = 200 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Laboratory Workbook - A combination of experimental write-ups and extension questions. LO1, LO2, LO3 Average mark after discarding the 2 lowest marks.	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Coursework	Written structured reports LO1, LO2, LO3	100%

To be completed when presented for Minor Change approval and/or annually updated

Updated by: Janet Ellis Date 05/03/2018	Approved by: Luke Peakman Date:05/03/2018
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UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD.

MODULE CODE: SOUD0004

MODULE TITLE: Introduction to Chemistry

CREDITS: 20

FHEQ LEVEL: Year 0

JACS CODE: C700

PRE-REQUISITES: None

CO-REQUISITES: None

COMPENSATABLE: Yes

SHORT MODULE DESCRIPTOR: (max 425 characters)

This module is designed to give a foundation in the basic concepts in chemistry. It will provide a solid knowledge base in these topics that will allow students to progress confidently to their chosen degree.

ELEMENTS OF ASSESSMENT [Use HESA KIS definitions] – see Definitions of Elements and Components of Assessment			
E1 (Examination)		C1 (Coursework)	70%
E2 (Clinical Examination)		A1 (Generic assessment)	
T1 (Test)	30%	P1 (Practical)	Pass/Fail

SUBJECT ASSESSMENT PANEL to which module should be linked: FdSc Biosciences

Professional body minimum pass mark requirement: NA

MODULE AIMS:

The module will help students develop an understanding of topics in atomic structure and bonding, acids and bases, quantitative analysis and solution chemistry. It will give students the essential chemical background which underpins their preferred pathway.

ASSESSED LEARNING OUTCOMES: At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes	Award/ Programme Learning Outcomes contributed to
1. Demonstrate knowledge and understanding of atomic structure, bonding and intermolecular forces 2. Demonstrate understanding of the mole and its practical applications. 3. Carry out a variety of key analytical techniques in chemistry.	Knowledge and understanding – 1, 2 Cognitive and intellectual skills – 1, 2, 3 Key transferable and employment-related skills – 1, 2, 3, 4, 5 Practical Skills – 1, 2, 3

DATE OF APPROVAL: 02/05/2018	FACULTY/OFFICE: Academic Partnerships
DATE OF IMPLEMENTATION: 17/09/2018	SCHOOL/PARTNER: South Devon College
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	SEMESTER: Semester 1

Additional notes (for office use only):

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

ACADEMIC YEAR: 18-19	NATIONAL COST CENTRE: 113
MODULE LEADER: Julie Day	OTHER MODULE STAFF: None

Summary of Module Content

Atomic structure, electron configuration, structure and bonding, intermolecular forces, moles and related calculations, acids and bases, solution chemistry and its relevance in the environment, quantitative techniques such as titrations and other forms analysis, together with a range of qualitative analytical techniques.

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities <i>[KIS definitions]</i>	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	40	Seminars may be led by students.
Practical classes and workshops	20	Laboratory based experiments
Guided independent study	140	Directed weekly reading, moodle based tasks, and assessment development/revision
Total	200	(NB: 1 credit = 10 hours of learning; 20 credits = 200 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name	Component Weighting
In class test	In Class Test – LO1	100%
Coursework	Portfolio of practical work – LO2, LO3	100%
P (Practical)	80% minimum attendance	Pass/Fail

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
In class test	In Class Test – LO1	100%
Coursework	Portfolio of practical work – LO2, LO3	100%
P (Practical)	80% minimum attendance	Pass/Fail

To be completed when presented for Minor Change approval and/or annually updated

Updated by: Janet Ellis Date 05/03/2018	Approved by: Luke Peakman Date:05/03/2018
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UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD.

MODULE CODE: SOUD0005

MODULE TITLE: Introduction to Biosciences

CREDITS: 20

FHEQ LEVEL: Year 0

JACS CODE: C500

PRE-REQUISITES: None

CO-REQUISITES: None

COMPENSATABLE: Yes

SHORT MODULE DESCRIPTOR: *(max 425 characters)*

This module is designed to introduce students to biological concepts that they will meet during their chosen degree. It will allow students to continue to apply knowledge and practical skills gained in Biology 1 and integrate learning from all 3 Biology modules taken during their introductory year.

ELEMENTS OF ASSESSMENT [Use HESA KIS definitions] – see Definitions of Elements and Components of Assessment			
E1 (Examination)		C1 (Coursework)	75%
E2 (Clinical Examination)		A1 (Generic assessment)	
T1 (Test)	25%	P1 (Practical)	

SUBJECT ASSESSMENT PANEL to which module should be linked: FdSc Biosciences

Professional body minimum pass mark requirement: NA

MODULE AIMS:

To introduce concepts and practical techniques that will lay the foundations for successful progression to the Biosciences degree. This module will allow students to apply knowledge and skills gained from all other modules in the Foundation Year.

ASSESSED LEARNING OUTCOMES: At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes	Award/ Programme Learning Outcomes contributed to
<ol style="list-style-type: none"> Demonstrate knowledge and understanding of the basic principles and techniques of environmental biology. Explain the basic principles of biotechnological processes. Explain human responses to disease. Design and implement simple biological experiments, and recognize and discuss the outcomes and any limitations 	Knowledge and understanding – 1, 2 Cognitive and intellectual skills – 1, 2, 3 Key transferable and employment-related skills – 1, 2, 3, 4, 5 Practical Skills – 1, 2, 3

DATE OF APPROVAL: 02/05/2018	FACULTY/OFFICE: Academic Partnerships
DATE OF IMPLEMENTATION: 17/09/2018	SCHOOL/PARTNER: South Devon College
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	SEMESTER: Semester 1

Additional notes (for office use only):

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

ACADEMIC YEAR: 18-19	NATIONAL COST CENTRE: 112
MODULE LEADER: Luke Peakman	OTHER MODULE STAFF: None

Summary of Module Content

Microbiology, biotechnology, immunology, cell signalling, speciation, populations and evolution, ecosystems, energy flow through the environment, nutrient cycles, ecological techniques.

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities <i>[KIS definitions]</i>	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture	40	Seminars may be led by students.
Practical classes and workshops	20	Laboratory and field based experiments
Guided independent study	140	Directed weekly reading, moodle based tasks, and assessment development/revision
Total	200	(NB: 1 credit = 10 hours of learning; 20 credits = 200 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name	Component Weighting
In class test	In-class test - LO3	100%
Coursework	Experimental write-ups – LO1, LO2, LO4	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
In class test	In-class test - LO1, LO3	100%
Coursework	Experimental write-up - LO2, LO4	100%

To be completed when presented for Minor Change approval and/or annually updated	
Updated by: Janet Ellis Date 05/03/2018	Approved by: Luke Peakman Date:05/03/2018

UNIVERSITY OF PLYMOUTH MODULE RECORD

SECTION A: DEFINITIVE MODULE RECORD.

MODULE CODE: SOUD0006
CREDITS: 20
PRE-REQUISITES: None

MODULE TITLE: Introduction to Animal Health and Welfare
FHEQ LEVEL: Year 0
CO-REQUISITES: None

JACS CODE: D328
COMPENSATABLE: Yes

SHORT MODULE DESCRIPTOR: *(max 425 characters)*

This module is designed to introduce the students to the principles of animal health and welfare. It does not assume any prior knowledge on the part of the student. It provides under-pinning knowledge and prepares the students for further study in animal science.

ELEMENTS OF ASSESSMENT [Use HESA KIS definitions] – see Definitions of Elements and Components of Assessment			
E1 (Examination)		C1 (Coursework)	60%
E2 (Clinical Examination)		A1 (Generic assessment)	
T1 (Test)		P1 (Practical)	40%

SUBJECT ASSESSMENT PANEL to which module should be linked: FdSc Biosciences

Professional body minimum pass mark requirement: NA

MODULE AIMS:

To develop knowledge and understanding of the concepts and constructs relating to issues of animal health and welfare. This includes an introduction to pathogens, how they affect the animal and the basic principles of immunology. Students are encouraged to explore the link between animal health and welfare.

ASSESSED LEARNING OUTCOMES: At the end of the module the learner will be expected to be able to:

Assessed Module Learning Outcomes	Award/ Programme Learning Outcomes contributed to
<ol style="list-style-type: none"> Demonstrate knowledge and understanding of animal welfare concepts and their link to health, animal welfare legislation and welfare requirements Demonstrate knowledge and understanding of the principles of animal health, disease processes and immunity Explain how health management regimes are devised, implemented and recorded and their impact on health and welfare. 	Knowledge and understanding – 1, 2 Cognitive and intellectual skills – 1, 3 Key transferable and employment-related skills – 1, 2, 3, 4, 5 Practical Skills – 1, 3

DATE OF APPROVAL: 02/05/2018	FACULTY/OFFICE: Academic Partnerships
DATE OF IMPLEMENTATION: 14/01/2019	SCHOOL/PARTNER: South Devon College
DATE(S) OF APPROVED CHANGE: XX/XX/XXXX	SEMESTER: Semester 2

SECTION B: DETAILS OF TEACHING, LEARNING AND ASSESSMENT

ACADEMIC YEAR: 18-19	NATIONAL COST CENTRE: 110
MODULE LEADER: Marianne Readman	OTHER MODULE STAFF: Rachel Rayers

Summary of Module Content

The structure, growth and reproduction of bacteria, viruses, fungi and parasites. The role of the immune system in defending against disease, including passive and active immunity. Management techniques used to prevent or manage disease. Finally concepts and terminology found in animal welfare legislation and current recommendations to promote and maintain animal health and welfare

SUMMARY OF TEACHING AND LEARNING		
Scheduled Activities <i>[KIS definitions]</i>	Hours	Comments/Additional Information (briefly explain activities, including formative assessment opportunities)
Lecture/seminars	60	Seminars may be led by students.
Guided independent study	140	Directed weekly reading, moodle based tasks, and assessment development/revision
Total	200	(NB: 1 credit = 10 hours of learning; 20 credits = 200 hours, etc.)

SUMMATIVE ASSESSMENT

Element Category	Component Name	Component Weighting
Practical	Presentation – LO3	100%
Coursework	Report – LO1 & LO2	100%

REFERRAL ASSESSMENT

Element Category	Component Name	Component Weighting
Practical	Presentation – LO3	100%
Coursework	Report – LO1 & LO2	100%

To be completed when presented for Minor Change approval and/or annually updated	
Updated by: Marianne Readman Date: 17/01/2018	Approved by: Luke Peakman Date: 17/01/2018