University of the West of England
BRISTOL

Foundation Science Online
CDA3 Programme specification (2014-15)

CORPORATE AND ACADEMIC SERVICES

PROGRAMME SPECIFICATION

Part 1: Basic Data			
Awarding Institution	UWE Bristol		
Teaching Institution	UWE Bristol		
Delivery Location	Frenchay/Distance Learning		
Study abroad / Exchange / Credit recognition	None		
Faculty responsible for programme	Health and Applied Sciences		
Department responsible for programme	Biological, Biomedical and Analytical Sciences		
Modular Scheme Title	Applied Sciences / Biological, Biomedical and Analytical Sciences		
Professional Statutory or Regulatory Body Links	None		
Highest Award Title	Foundation Science		
Default Award Title	None		
Fall-back Award Title	None		
Interim Award Titles	None		
UWE Progression Route	BSc Programmes in Faculty of Health and Applied Sciences		
Mode(s) of Delivery	FT/DL		
Codes	**UCAS: BCF9**	**JACS: BCF9**	
	ISIS2:	**HESA:**	
Relevant QAA Subject Benchmark Statements	N/A		
First CAP Approval Date	3 February 2015	Valid from	September 2015
Revision CAP Approval Date		Revised with effect from	
Version	*1*		
Review Date	*September 2021*		

Part 2: Educational Aims of the Programme

The aim of the programme is to provide an online alternative access route to Higher Education for individuals not possessing the required entry qualifications for degree level awards but who are considered to be able, after a period of initial preparation, to benefit from, and to be successful in, a degree award in the Faculty.

The majority of the learning will be provided through innovative technology and support in the form of online interactive lectures, quizzes, webcam tutorials and further activities, which will result in an excellent student learning experience. In addition, the programme will consist of two weeks of essential on-site UWE attendance (at the beginning and end of the course) to facilitate the development of laboratory and study skills and to aid cohort cohesion.

With smartphones and tablets increasingly becoming the primary method for accessing the internet, the online materials will be provided using the most continuously applicable technology to maximise the number of accessible technological routes.

The Foundation prepares learners to be successful undergraduates across a multitude of BSc(Hons) programmes offered by the Faculty of Health and Applied Sciences. These programmes include, but are not necessarily limited to:

- Biological Sciences
- Biomedical Sciences
- Healthcare Science (Life Sciences)
- Healthcare Science (Physiological Sciences)
- Forensic Science
- Environmental Science
- Wildlife Ecology and Conservation Science
- Psychology
- Psychology with Sociology, or Criminology, or Law.

The Foundation teaching team is composed of academics from across this suite of programmes, and aims to create a friendly and supportive atmosphere that will facilitate individual learners develop the key foundation skills upon which they can develop their future careers here at UWE - and occasionally elsewhere - and engage in ongoing social and educational development.

To this end a programme has been designed which will enable students to:

- prepare for success as scientists by studying the breadth and relevance of the natural and applied sciences, encountering the multivariate contexts in which they will encounter the core concepts of mathematics, physics, biology, chemistry, and IT;
- be confident in the theory and practical application of a wide range of approaches and methodologies for experimental and data analysis relevant to the natural and applied sciences;
- be ready and able to contribute positively as undergraduates having become acquainted with key group-working and learner skills;
- be lifelong, reflective learners who understand the roles and responsibilities of scientists in society;
- engage in constructive analysis;
- successfully communicate science.

Part 2: Educational Aims of the Programme

Programme requirements for the purposes of the Higher Education Achievement Record (HEAR)

Successful students from the Foundation Science programme will have a strong grounding in biology, chemistry, mathematics and physics, along with the core concepts of psychology. They will also understand the place of a scientist in society, appreciating the importance of communication skills and the focus upon functional team working as the keystone of successful scientific endeavor. Successful students from the Foundation Science programme will have acquired excellent analytical, communication and time management skills. They will also have acquired experience in the qualitative and quantitative interpretation of scientific results and numerical data, a vital part of the scientific approach.

Part 3: Learning Outcomes of the Programme

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

Learning Outcomes:	USSKDM-30-0 The Physical World	USSKDK-30-0 The Chemistry World	USSKDL-30-0 The Living World	USSKDJ-30-0 Science & People
A) Knowledge and understanding of:				
Structure and function of the natural world	x	x	x	
The techniques used to gather and critically analyse data in the natural sciences	x	x	x	x
The techniques used to gather and critically analyse data in the social sciences				x
Terminology, nomenclature, taxonomy and classification	x	x	x	
Wider aspects of the context of science and the scientist in society	x			x
Methodology of scientific inquiry and research	x	x	x	x
Physics, IT and mathematics as tools for understanding physical processes	x			x
Principles of genetics, physiology, and biological energetics			x	
The facts, principles, practices and applications of organic, inorganic and physical chemistry		x		
The explanation of biological phenomena at a variety of levels from biological molecules to whole organisms			x	
Key theoretical perspectives in psychology				x
Fundamental laboratory techniques		x	x	

Part 3: Learning Outcomes of the Programme

(B) Intellectual Skills				
Using theories and paradigms	x	x	x	x
Analyse, synthesize, and summarize information	x	x	x	x
Collect evidence, test hypotheses	x	x	x	x
Apply knowledge to problems	x	x	x	x
Independent learning, self-manager	x	x	x	x
Appreciate moral, ethical issues around investigation				x
(C) Subject/Professional/Practical Skills				
Plan, conduct and report on investigations	x	x	x	x
Collect, record, and analyse data	x	x	x	x
Undertake lab investigations		x	x	
Use of technology for analyzing data	x			x
Undertake scientific case study	x			x
Reference work and compare to others			x	x
(D) Transferable skills and other attributes				
Evaluate own academic performance and plan work accordingly.	x	x	x	x
Study independently in a variety of learning styles	x	x	x	x
Work effectively as a team member	x	x	x	x
Practise good time management, prioritise workloads and recognise deadlines	x	x	x	x
Communicate effectively in a variety of media and contexts; in particular, express the interpretation of results in a manner comprehensible to the intended recipient and write comprehensive, comprehensible, rational and impartial reports	x	x	x	x
Use mathematical and statistical methods effectively in problem solving	x			
Use a variety of IT skills for data processing, communicating and supporting scientific research	x			x

Part 4: Student Learning and Student Support

Teaching and learning strategies to enable learning outcomes to be achieved and demonstrated

The programme seeks to provide an outstanding learning experience for all students, and create an environment that will stimulate students to take responsibility for aspects of their learning, while tutors take responsibility for facilitating that learning. Thus, the course has been designed (in direct alignment with the University's teaching and learning policies) to take a student-centred approach to learning by allowing students to take control of aspects of their learning and providing a learning environment that stimulates active participation and engagement with the learning process and reflection on their knowledge, experience and practice.

To encapsulate this ethos, the course has been designed to comprise of:

- Two block release periods (which require attendance at UWE), primarily for induction, laboratory work and assessments. They will also form the crucial function in creating a course and student cohort identity. Given the likelihood of a range of IT competency among the student body, part of the initial attendance block at UWE undertaken by these students will include introductory sessions to the technology-based resources used on this programme.
- Several distinct online TEL units within each module comprising of Learning Packages and Activities.

Please see the Teaching Delivery Overview diagram overleaf for an illustrate example. There is also a detailed discussion of the TEL aspects of the course (with further details on the Learning Packages and Activities components) in **Appendix 1 – The Foundation Science Online TEL strategy**.

Various initiatives are in place to support students in making the choice of future programme that is right for them. Early in the academic year, incumbent programme leaders provide timetabled online career focused events in which they market their own programme to Foundation Science students, with students being encouraged to ask questions and engage with the staff. Throughout the year Foundation students are taught by members of their prospective teaching teaching-team, who contextualize material in the terms of undergraduate programmes.

Foundation Science teaching is a mix of scheduled and independent learning. Skills for independent and lifelong learning (e.g. critical thinking skills, group work and presentations, reading and note-taking) are incorporated into the modules The Physical World and Science & People.

Scheduled learning includes 10 days per year at the university in seminars, tutorials, demonstrations and practical classes; and synchronous online, collaborative group work which may be timetabled on a weekly basis and participation in asynchronous online activities. The latter are more akin to a discussion board where input is less regular and therefore more likely to be done at home where a specific task is not timetabled, but is moderated by an academic.

Independent learning includes hours engaged with essential reading, case study preparation, assignment preparation and completion and engagement with learning material on Blackboard.

Teaching Delivery Overview

Activity	Week	Week commencing
Block release	**7**	**08-Sep**
	8	**15-Sep**
Learning Package 1	**9**	**22-Sep**
	10	**29-Sep**
Learning Package 2	**11**	**06-Oct**
	12	**13-Oct**
Activities	**13**	**20-Oct**
	14	**27-Oct**
Learning Package 3	**15**	**03-Nov**
	16	**10-Nov**
Learning Package 4	**17**	**17-Nov**
	18	**24-Nov**
Activities	**19**	**01-Dec**
	20	**08-Dec**
Break	21 - 23	15-Dec
Learning Package 5	**24**	**05-Jan**
	25	**12-Jan**
Learning Package 6	**26**	**19-Jan**
	27	**26-Jan**
Activities	**28**	**02-Feb**
	29	**09-Feb**
Learning Package 7	**30**	**16-Feb**
	31	**23-Feb**
Learning Package 8	**32**	**02-Mar**
	33	**09-Mar**
Activities	**34**	**16-Mar**
	35	**23-Mar**
Learning Package 9	**36**	**30-Mar**
	37	**06-Apr**
Learning Package 10	**38**	**13-Apr**
	39	**20-Apr**
Revision	40 - 42	27-Apr
Block release	**43**	**11-May**
Completed / Revision	44 - 51	25-May
Resit Exams	**52**	**20-Jul**

Block releases

Learning packages

Activities

Part 4: Student Learning and Student Support

Description of the teaching resources provided for students

Student support is available through personal tutors, module leaders, the programme leader, student advisors, peer support both within year and across the total cohort, the Student Wellbeing Service, the Students' Union and UWE wide student facing facilities. A wide range of communication methods are utilized i.e. face to face, email, text, Skype and telephone.

The extensive library services support students throughout their UWE programmes. Services are very accessible to students with long opening hours on campus. Online 24 hour library support is available in the form of a chat service. In addition a name subject support librarian is available for students to gain 1:1 support with detailed work e.g. search strategies. In addition the library offers extensive access to online journals, databases, ebooks, and seminars (e.g. REFworks, Advanced literature searching).

More details on the TEL teaching resources provided for students may be found in in **Appendix 1 – The Foundation Science Online TEL strategy**.

Description of any Distinctive Features

The distance-learning aspect of the course allows it to attract students who are willing to engage with a three-year BSc, but struggle to facilitate on-site attendance over four years (including an on-site Foundation Year). Mature students, particularly those without the formal entry qualifications and looking to enter a science based career, are particularly relevant to this course. It also opens an avenue to the international market, for which the current on campus Foundation Science Year does not particularly cater for (due to full-time attendance being required).

This programme will increase the variety of the modes of study offered, specifically in the facility for students to study at their pace, and will enhance the numbers entering the full range of degrees in the Departments of Biological, Biomedical and Analytical Sciences and Psychology, as the programme is specifically designed for students to make direct entry onto those degrees. The students will also have had significant UWE-focused scientific, laboratory and study skills training during the programme, enhancing their learning capacity potential during the degree they progress onto.

Distinctive features which support student learning on the Foundation Science Online programme at UWE include:

- Primarily taught online through innovative technology and delivery methods.
- Flexible learning environment which allows students to develop their learning when convenient to their current work/life circumstances (addressing UWE's widening participation strategy and accessing the international market).
- Successful completion of the course provides direct confirmed access to a variety of Applied Sciences degrees at UWE.
- Strong emphasis on skill development, to facilitate students becoming ready-and-able graduates on completion of their chosen degree.
- Online materials will be accessible by smartphones and tablets.
- See also Appendix 1 – The Foundation Science Online TEL strategy.

Part 5: Assessment

Delete one of the following statements as appropriate

A: Approved to University Regulations and Procedures

A maximum of one module may be considered for condonation if, and only if, the decision is directly approved by the Programme Leader of the student's target BSc.

Assessment Strategy

Assessment strategy to enable the learning outcomes to be achieved and demonstrated:

Assessments throughout the programme enable students to acquire the necessary knowledge, understanding and skills outlined in the learning outcomes of the programme.

An "assessment for learning" strategy has been adopted, where assessment is used as a tool to enable students to reach learning outcomes, which they have not yet met. This often takes the form of formative and summative assessments which explicitly feed forward into future assignments. The assessment timings of programme (shown in Part 4: Teaching Delivery Overview, and discussed in Part 4/Appendix 1) have been specifically designed to facilitate this. Tasks are built upon, and the assessment journey is made clear to students through guidance documentation.

Further details on the embedding and implementation of TEL related assessments are given in Appendix 1 – The Foundation Science Online TEL strategy.

Assessment Map

The programme encompasses a range of **assessment methods** including essays, posters, presentations, written examinations etc. These are detailed in the following assessment map:

Assessment Map for Foundation Science Online

		Type of Assessment								
		Unseen Written Exam	Embedded Online Exams	Write-up on laboratory practicals	Problem solving exercise	Written Essay	Group work (utilising e.g. Wikis)	Science Communication Portfolio	Reflective Blog	IT and Study Skills Portfolio
Compulsory Modules Level 0	**USSKDM-30-0 (TPW)**	A (50)	A (50)						B P/F	B P/F
	USSKDK-30-0 (TCW)	A (20)	A (20)	B (30)	B (30)					
	USSKDL-30-0 (TLW)	A (20)	A (20)	B (30)		B (30)				
	USSKDJ-30-0 (SP)		A (50)			B P/F	A (50)	B P/F		

Part 6: Programme Structure

This structure diagram demonstrates the student journey from Entry through to Graduation for a typical **full time student**, including:

ENTRY

	Compulsory Modules	Optional Modules	Interim Awards
Year 0	USSKDM-30-0 The Physical World	None	None
	USSKDK-30-0 The Chemistry World		
	USSKDL-30-0 The Living World		
	USSKDJ-30-0 Science & People		

GRADUATION

Part 7: Entry Requirements

The University's Standard Entry Requirements apply with the following exception:

- There is an expectation that prospective students will have studied science beyond GCSE, however non-standard applicants are considered on a case by case basis by the programme leader.

Tariff points as appropriate for the year of entry - up to date requirements are available through the courses database (mapping to Foundation Science Year - 120 tariff points).

Part 8: Reference Points and Benchmarks

Description of ***how*** the following reference points and benchmarks have been used in the design of the programme:

As the Foundation Science Online is an access route into HE, the QAA UK Quality Code for HE does not apply to the course content. However, the programme has been designed to support students to progress on a variety of courses which adhere to the subject benchmarks in Biosciences, Biomedical Sciences, Earth sciences, Environmental Sciences and Environmental Studies, Forensic Science and Psychology.

The TEL aspects of the course were constructed with particular reference to the "Code of

Part 8: Reference Points and Benchmarks

practice for the assurance of academic quality and standards in higher education: Collaborative provision and flexible and distributed learning (including e-learning) – Amplified version October 2010". Similarly, the programme design also makes use of "BS8426: A code of practice for e-support in e-learning systems (BSI, 2003)." This is discussed in more detail in Appendix 1 – The Foundation Science Online TEL strategy.

University's Mission Statement

The programme aligns fully with the UWE Bristol Strategy 2020. Examples are given in this document of good practice in teaching and learning, and techniques to prepare graduates for employment or further study.

University's teaching and learning policies

In line with the University's teaching and learning policies, this programme takes a student centered approach to learning by allowing students to take control of aspects of their learning, and providing a learning environment that stimulates active participation and engagement in the learning process. The programme seeks to create an environment that will stimulate students to take responsibility for aspects of their learning, while lecturers take responsibility for facilitating that learning. Module learning outcomes have been designed to ensure that students meet the overall programme learning outcomes on completion of the programme. A variety of assessment methods are incorporated within the programme to cater for a diversity of student strengths and abilities. Although this document focuses on summative assessment, the course team recognises the importance of both summative and step by step formative assessment activity as an integral part of the learning and teaching process. All assessments will comply with the University Assessment Policy and Academic Regulations.

What methods have been used in the development of this programme to evaluate and improve the quality and standards of learning?

The learning outcomes and teaching expertise for the Foundation Science Online programme have been primarily mapped from the Foundation Science Year (FSY) which is delivered on-site. Programme Leaders from the Biological, Biomedical, Forensic, Environmental, Wildlife Ecology & Conservation Sciences, along with Psychology, agree that that the Foundation Science structure facilitates students to be well prepared for success on their programmes, noting many examples of outstanding success. This is further supported through student feedback (evidenced through the BSc programme SRSFs).

Foundation Science alumni appear to be particularly well prepared for success at Level 1 having adjusted to the HE culture and systems. They appear to be better prepared – emotionally and in terms of their external stability – for the adjustment to HE, engaging confidently in student representation. Success appears to be underpinned by the fact that Foundation Science provides a firm grounding across the sciences, which is then taught by academics who design and deliver the destination programmes.

The development and evaluation of the TEL aspects of the Foundation Science Online programme (which marks a significantly different delivery model for the FSY) are discussed in depth in **Appendix 1 – The Foundation Science Online TEL strategy.**

This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical 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 of individual modules can be found in module specifications, available on the University's website.

Foundation Science Online

Technology Enhanced Learning (TEL) Strategy

Strategy aims

- To provide an evidence base for the TEL strategy
- To provide a portfolio of expected or available TEL tools and approaches that engage the student at both the individual and group level, and complement their learning online and in class, where appropriate
- To outline the expectation of student effort and engagement with online knowledge exchange and learning facilitation, given the off-site based nature of the programme
- To be informed by the criteria, requirements, and minimum engagement of both the UWE e-learning policy and the HAS faculty TEL policy, as well as the QAA standard

1. Introduction

The nature of the Foundation Science Online degree necessitates prolonged periods of learning and application of knowledge away from the classroom setting, and face to face access to both academic staff and the student body registered on the programme. Therefore it becomes key to successful academic and experiential learning, that sufficient online resources be made available throughout the course, and that those resources target both effective dissemination of academic content as well as collegiate engagement.

The Higher Education Academy “Work-based learning: Illuminating the higher education landscape report - Final report” highlights an important issue in delivery of learning by non-traditional methods; that of costing and resourcing, and the impact that has on the provision of such modes. A study in 2003 on behalf of HEFCE looked at e-learning, distance learning, foundation degrees, workplace learning and accreditation of prior experiential learning. All these different forms of learning were identified as being more resource intensive than conventional approaches. Due to such labour intensive methods of learning being largely reliant on the enthusiastic individual to deliver, their implementation is often lacking. The Foundation Science Online is, in essence, a combination of all these learning methods, and as such is at risk of falling prey to this trend unless a framework of academic and technical staff is created and supported effectively by the necessary resources and technologies as well as by higher management.

To address this, this strategy intends to provide a structure for supporting e-learning development throughout the programme that adheres to the academic content programme specifications, and framework of the work based learning environment, while providing adequate support and guidance for staff involved. Innovative design and development of TEL is encouraged, particularly in the case of online tutorials that complement the work based learning undertaken in the laboratories, and also in designing group activities to encourage teamwork and interaction with fellow students.

This strategy makes particular reference to the “Code of practice for the assurance of academic quality and standards in higher education: Collaborative provision and flexible and distributed learning (including e-learning) – Amplified version October 2010”. Where appropriate, the strategy also aims to make use of “BS8426: A code of practice for e-support in e-learning systems (BSI, 2003).”

The QAA document mentioned above suggests the following when utilising an e-learning environment:
"Particularly in an e-learning environment, students may need time to understand and become familiar with technologies that are new to them. They may need some introductory support, possibly involving access to on-line learning environments prior to the start of the course so that equipment and technical access can be tested and new skills practised. Consideration might be given to the need to assign an identified contact prior to the commencement of study to enable the programme presenter to ensure that the student's induction and preparation have been adequate."

As part of the initial attendance block of these students on campus it will be necessary, given the likelihood of a range of IT competency among the student body, that an introductory session to the resources used on this programme be timetabled, and an academic be identified to act as this liaison for TEL.

The 2010 QAA also highlights the need for student responsibility in responding to online requests and participating in online activities. These expectations and guidelines should be laid out early on in the programme, again possibly during the initial campus visit. It is suggested that online participation be monitored and perhaps form part of the assessment strategy, if deemed appropriate by the individual module leaders.

1.1 TEL material production

Much of the e-learning/TEL strategy will be directed and informed by the individual needs of the modules that comprise this programme. The learning outcomes and work based competencies must map closely with one another, and with any online resources designed to complement that knowledge exchange and its application. In some cases it will be appropriate to use TEL in order to develop formative assessments that aid both the academic and the student in determining the student's ability to understand and use the material delivered. In others the primary use of TEL will come from the online delivery of lectures. It is expected that the minimum use of TEL within this programme (in addition to use of Blackboard that meets the HAS faculty TEL strategy requirements) would entail hosting of lectures online in one or more of the following formats, possibly in combination in some cases:

- Powerpoint presentation as downloadable file
- Powerpoint with audio enhancements where necessary
- Powerpoint with interactive enhancements
- Screencast of powerpoint with audio
- Mediasite live recording of lecture with audio and video in addition to screencast

In addition, academics responsible for delivery of online material are encouraged to develop online quizzes, tutorials, case studies and other suitable resources that complement the learning provided by other means. There are a number of faculty supported packages, software, and tools that can aid in creating these complementary resources, and this programme provides the opportunity for that collection of tools to grow over time depending on necessity and requirements of the course. It is expected that staff will be actively supported in engaging with e-learning materials and tools, and training will be provided wherever possible for those who wish to develop their skills.

1.2 TEL material delivery

The issue facing online learning is primarily that of delivering material in such a way as to duplicate the feeling of engagement that traditional “in class” teaching achieves by way of verbal explanation and interaction with the audience. The TEL strategy for this programme therefore suggests a delivery mechanism that limits downloading (as this introduces numerous copyright issues that off campus learning cannot exercise control), but that encourages the student to interact with the material as well as read through and/or watch recorded video and audio feeds. Lectures will likely be delivered in the same pattern as standard programmes at UWE, but this pattern and indeed the modality of the material will be determined largely by the module for which it is being delivered.

1.3 Online assessment

Blackboard contains several tools, including reflective arenas and limited quizzes, as well as an assessment tool, that may prove useful in identifying the appropriate platform for online assessment of either competency based or academic content based work.

The inclusion of formative assessment throughout provides a means of students to identify areas of strength and weakness, as well as giving academic staff an idea of student progression while undertaking their academic learning at home or during protected time in the workplace. Academic staff are encouraged to investigate effective methods for accomplishing this, though it is recognised and understood that this and other forms of assessment will be driven by the overall programme.

1.4 Social Aspects

From a student experience and engagement perspective, it is recognised that although part of the student body of UWE, the distance nature of the programme limits the potential for students to interact with their peers, and indeed their educators in person. Close lines of communication and discussion will therefore be essential, and developed online through the use of (for example) discussion boards. In the case of some modules these discussion boards may form the platform for including group activities that incorporate reflective exercises and problem/case based learning. This “networking” approach is designed to enrich the online interactions and promote a feel of belonging to the student body.

With the rise of social networking and media sites, Higher Education Insitutions (HEIs) have begun to explore more fully the power of learning constructed within defined social groups. As with most of UWE modules, Blackboard is recommended as the on-line platform to support module materials etc. This provides an intuitive means of engaging in online discussions in small or larger groups, and potentially as the basis for enquiry based learning elements of appropriate modules, designed to foster transferable teamwork skills essential to the application and implementation of collaborative approaches.

2. Experiential Overview

2.1 General structure

The Foundation Science Online programme will be split into units consisting of Learning Packages and Activities.

Each Learning Package unit will contain

- an interactive lecture and/or equivalent teaching aid,
- an interactive quiz,
- and (potentially) any further activities (such as a pdf of written questions etc.).

This will be the structure to present the taught elements of the programme. Reflective assignments/progression exercises will be encouraged within these units.

Each Activities unit will contain

- a short controlled formative assessment (e.g. an online quiz).

Every unit will also have synchronous group work/discussion. Asynchronous group work/discussion will be encouraged in all units.

2.2 Synchronous and Asynchronous group work/discussion

When it comes to online, collaborative work, there are two approaches which should both be considered, and where possible implemented.

- Synchronous group work is that which may be timetabled on a weekly basis where defined groups or the cohort as a whole log in to blackboard for a webinar or discussion where the academic responsible is present and facilitating the session.
- Asynchronous is more akin to a discussion board where input is less regular, and therefore more likely to be done at home or in a protected learning time in the work place where a specific task is not timetabled, and is moderated by an academic but one who does not actively engage except where prompted. This form of group discussion is more applicable to situations where a small group are working together on a piece of coursework/lab report etc that requires application of their knowledge and skills and where shared opinions, theories and skills help to inform group members and lead them towards a collective piece of work.

2.3 Formative Assessment

It is helpful to both student and academic, for the student to engage in regular formative assessment to ascertain how well they are doing, and whether there are areas of weakness that may need addressing, or indeed areas of strength that informs both of particular aptitudes that student may have. This is a particularly crucial area in distance learning where the opportunity for academic/student interaction at a one to one level or even with a class as whole (as in the case of a practical on campus where student questions and academic troubleshooting aid in progress of the class experience) is more difficult to arrange. Continuous formative assessment through the use of online quizzes (of both a narrative and visual nature) that address academic is essential for effective academic and experiential learning. These quizzes can, in time, also be used as a form of summative assessment through various strategies to be discussed separately.

2.4 Reflective assignments/progression exercises

Part of the student experience relates to how the student feels they are coping, what they have learned beyond the content delivered online or in person, and what they would change/add to in terms of their approach to skills and attitudes to both learning and practical application. Reflective accounts can be continually added to blogs (thereby falling more into the formative/capability/attitude field of assessment/assignment), one time essays/reports on a particular event, or form part of a larger body of work or portfolio to demonstrate having built on or acquired various transferable skills and work based attributes.

3. Engagement and accessibility

With all of the above, there are several key factors that must be considered when developing any form of technology enhanced learning material for a distance based learning. These factors can be thought of as guidelines, and will be referenced in the module specifications for this programme to indicate an intent to adhere to them wherever possible in the course of content and experiential development.

3.1 Wording and language use

In writing prose for announcements, introductions, briefs on an activity or other similar asynchronous online communications with the enrolled student body, every attempt should be made to use the active tense rather than passive tense. This gives students the sense that what is being written is being/has been done so for them instead of repeated from previous module/programme runs, and enhances their feeling of belonging. The same can easily be said for verbal/audio communication where hearing the voice of the academic, and in a more conversation/engaging way, gives the impression the academic is there for the student and actively interested in their education and overall academic wellbeing.

3.2 Awareness of level of engagement

There is the facility within Blackboard to monitor how frequently students enrolled on a course have visited Blackboard or specific features within. Within this facility is also the means to create early warnings for the academic when a student has not visited/logged on to Blackboard or participated in a particular activity/discussion for a fixed period of time. This enables academics not to keep track of their students *per se*, but to be made aware more easily of drop off of engagement past a certain point which may require contact be made directly with that student to address the reason behind, and, if appropriate, to facilitate bringing that student back into the cohort.

3.3 Navigation of course within Blackboard

With Blackboard as the platform and interface of the programme, it is imperative that students do not lose interest or become confused with the means of accessing their material or making contact online with their colleagues and educators. While a degree of customisation for individual modules is encouraged, there should remain a standardised approach to navigation within each module that students enrolled on several modules can find the same kinds of information through similarly placed menus, links, and using similar wording. “Learning materials” as the menu choice for accessing lectures and online quizzes for example, should be the standardised use for the course rather than some modules using “Academic content” and others using “Course material”. This can become confusing for students who are looking for the same type of content, but are attempting to navigate very different interfaces of Blackboard module runs. Colour coding of module interfaces is

therefore encouraged and should be agreed on by all module leaders as a team, so that these similarly laid out Blackboard menus and pages do not become dulled and make it more difficult for the student to know which learning material for which module they are attempting to access.

3.4 Structure

Within modules where lectures traditionally cover one topic over a two hour period “live”, engagement of the students present can off wax and wane with interest. Given timetable constraints of the traditional setting, it is not possible to separate a two lecture into chapters with sufficient breaks. Online however, and where appropriate for the content, academics delivering/creating learning material should consider an approach known as “chunking” where the material broken up into more manageable and engaging pieces. This might comprise related chunks of one topic within a lecture but that might be accessed at the student’s leisure, or it might involve making a particular chunk of material (or a short quiz, link to read through, video to watch etc) available only when the previous chunk has been attempted or completed. The same holds true for making available each “week’s” material only at the appropriate time so as to encourage a linear and logical approach to their learning, rather than providing all necessary asynchronous material for the course at once, and only making the synchronous activities accessible “live”.

3.5 Variety

Student engagement if often found to wane when the type of delivery remains unchanged over the period of the module run. It is important therefore that module leaders and the academic teams within a module consider variety in their teaching approach. The simplest example of this would be providing a quiz every week on the academic material covered. Though it could be argued that scheduling a weekly quiz is not providing variety, one might consider making one quiz MCQ and the following quiz short answer. In this way the student may be doing a quiz at the same time every week, but the means by which they answer the questions in those regular quizzes provides a stimulating variety for both knowledge transfer and interaction. Changing the order and type of other learning forms only serves to provide even more variety and should therefore be seriously considered. In addition to student engagement, it should also be noted that academics often deliver the same content in the same manner year after year and are therefore at risk of themselves becoming disengaged with the material and the manner by which they deliver it. Providing variety will therefore also improve staff engagement and interaction.

3.6 Accessibility

Aside from the obvious traditional accessibility issues that must be considered, such as screen readers, appropriate font size and type, and ensuring images online have appropriate titles in case of download failure “for example and image of a heart should have the web title of “heart image” when inserted into a web or blackboard page), there is also the issue of students knowing staff are there for them and there to listen. In this regard guidelines should be put in place that indicate to students that contact by specific means is encouraged, and that though asynchronous and therefore not appropriate to be dealt with/aided in real-time, they will be addressed within an agreed upon timeframe (such as 48 working hours). A variety of forms of contact should be made available, such as e-mail, discussion board “availability slots”, or private instant messaging during a “surgery session”.

References:

QAA Code of practice for the assurance of academic quality and standards in higher education

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