Module Descriptor

Title	Biomedical Science Quality Management		
Session	2026/27	**Status**	Published
Code	BIOL11026	**SCQF Level**	11
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Health and Life Sciences**		
Module Co-ordinator	Fraser Craig		

Summary of Module

This module provides an understanding of principles of quality assurance and management systems utilised within biomedical science laboratories or similar facilities.

Themes covered include quality controls and frameworks, audits, creation of standard operating procedures, calibration, validation, verification, batch acceptance, Internal and External Quality assurance schemes and reference materials etc. Areas also addressed are quality management aims, laboratory Information management systems, introduction to UKAS, laboratory accreditation, and relevant ISO. Broader themes of interlaboratory comparison, shared services and internal/external training will also be explored. Content may be modified in-line with changing regulatory guidance.

Module is run in both Campus and Distance Learning methods.

The distance learning version of the module is available only to HCPC-registered Biomedical Scientists enrolled on the IBMS accredited MSc Advanced Biomedical Science programme.

Students enrolled on the IBMS accredited MSc Advanced Biomedical Science programme are required to complete the class test under IBMS approved conditions.

This module will work to develop a number of the key “I am UWS” Graduate Attributes including being Work Ready (e.g. knowledgeable and motivated for the ever-changing work environment); Universal (e.g. analytical and collaborative); and Successful (e.g. autonomous and resilient).

Please contact the IBMS-accredited programme lead with any queries.

Module Delivery Method	On-Campus[1] ☒	Hybrid[2] ☐	Online[3] ☒	Work -Based Learning[4] ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☒ Lanarkshire ☐ London ☐ Paisley	☒ Online / Distance Learning ☐ Other (specify)	

Terms for Module Delivery	Term 1	☒	Term 2	☐	Term 3	☐
Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
L1	Demonstrate an extensive knowledge of key quality assurance and management concepts.
L2	Critically evaluate quality management strategies and their implementation.
L3	Critically apply techniques of quality management for continuous improvement.
L4	
L5	

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 11** Demonstrate a critical awareness of the principles of quality assurance and management and approaches to continuous improvement.
Practice: Applied Knowledge and Understanding	**SCQF 11** Apply informed approaches to establishing and developing quality management systems.
Generic Cognitive skills	**SCQF 11** Apply critical analysis and generate creative solutions to different quality management challenges.

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

Communication, ICT and Numeracy Skills	**SCQF 11** Critically evaluation of a wide range of numerical and graphical data report.
Autonomy, Accountability and Working with Others	**SCQF 11** Exercise substantial autonomy and initiative in professional activities.

Prerequisites	**Module Code**	**Module Title**
	Other	
Co-requisites	**Module Code**	**Module Title**

Learning and Teaching

In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

Students will have access to module content and resources via VLE. These may include prerecorded (mini) lecture content, written notes, links to external resources etc. ICT will be used to analyse and present data.

DL students will learn fully online at a self-determined time/pace (but will be expected to meet set summative coursework deadlines). These students will have directed learning tasks aided by asynchronous online sessions and asynchronous discussion forums

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	22
Tutorial / Synchronous Support Activity	6
Laboratory / Practical Demonstration / Workshop	8
Independent Study	164
n/a	
n/a	
TOTAL	200

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Essential:

Resources provided, or directed to, via VLE.

Recommended:

An introduction to biomedical science in professional and clinical practice. Pitt SJ & Cunningham JM. WileyBlackwell, 2013.

Biomedical Science Practice (Fundamentals of Biomedical Science). Ahmed N, Glencross H & Wang Q. OUP Oxford, 3rd Ed, 2022. Oakland, J.S., Oakland, R.J. and Turner, M.A. Total quality management and operational excellence: text with cases. Routledge, 2020.
(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements
In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are attending and participating in all timetabled programme activities including on-campus and online teaching sessions, asynchronous online learning activities, placement, work-based elements, course-related learning resources, and complete assessments and submit these on time. **For the purposes of this module, academic engagement equates to the following:** Attendance at synchronous sessions (lectures, tutorials and practicals), completion of asynchronous activities, and submission of assessments to meet the learning outcomes of the module. Attendance at synchronous sessions not required for NHS-based students undertaking distance learning version of module.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. In line with current legislation (Equality Act, 2010) and the UWS Equality, Diversity, and Human Rights Code, our modules are accessible and inclusive, with reasonable adjustment for different needs where appropriate. Module materials comply with University guidance on inclusive learning and teaching, and specialist assistive equipment, support provision and adjustment to assessment practice will be made in accordance with UWS policy and regulations. Where modules require practical and/or laboratory based learning or assessment required to meet accrediting body requirements the University will make reasonable adjustment such as adjustable height benches or assistance of a 'buddy' or helper.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	**Biological Sciences Health**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☐ **Yes** ☒ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Biology
Moderator	Gail McGarvie
External Examiner	A Khan
Accreditation Details	IBMS

Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	2

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Class test
Assessment 2
Review/ Article/ Critique/ Paper
Assessment 3
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Class test (written)	☒	☒	☐	☐	☐	30	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Review/ Article/ Critique/ Paper	☒	☒	☒	☐	☐	70	0

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
	☐	☐	☐	☐	☐		
Combined total for all components						100%	0 hours

Change Control

What	**When**	**Who**
Changed to reflect new EE	21/11/2024	Fraser Craig
Changed to reflect wording of IBMS/DIstance learning requirements and Class Test	29/01/2026	Fraser Craig
