



MODULE SPECIFICATION

Part 1: Information			
Module Title	Biomedical Skills		
Module Code	USSKA5-30-1	Level	Level 4
For implementation from	2020-21		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Health & Applied Sciences	Field	Applied Sciences
Department	HAS Dept of Applied Sciences		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Overview: Pre-requisites: students must have passed USSKA5-30-1 Biomedical Skills.</p> <p>Educational Aims: This is a module about developing skills and so a variety of teaching and learning approaches will be employed that include lectures, tutorials, laboratory work and computer practical tutorials.</p> <p>Outline Syllabus: Part I (Problem solving skills): Covers the development of problem solving numeric and data analysis skills.</p> <p>Part II (Laboratory skills)</p> <p>Part III (Study skills)</p> <p>Part IV (Organic chemistry, Pharmacology): Fundamental organic chemistry to support basic/pure chemistry/underpin to prepare for Level 2. Basic principles of organic chemistry and pharmacology.</p> <p>Teaching and Learning Methods: Scheduled learning includes online lectures, tutorials, practical computer classes and laboratory workshops.</p>

STUDENT AND ACADEMIC SERVICES

Independent learning includes hours engaged with essential reading, assignment preparation and completion, etc.

Part I (Problem solving skills):

The module will be delivered using a mixture of whole group lecturals and small tutorial group sessions. Support for student learning in Part I will be given through weekly lecturals/tutorials which will be integrated with the online self-assessment tests and online video support to ensure focussed help can be given to those students who need help in the particular areas. This introduces students to the concept of using technology to enhance learning (TEL). Resources for Part I also include direct tutorial material, and references to published material, software, internet and intranet resources. The development of numeric and data analysis skills will be further supported through timetabled PAL (Peer Assisted Learning) sessions, in which second year students (who are on the same degree course as those first year students taking this module) provide guidance.

Part II (Laboratory skills):

Will be taught through a combination of lectures, which will include short audio/visual presentations, tutorials, which will require preparation and follow-up work to be done by the student and laboratory practicals where students will get valuable hands on experience of analytical methods.

Part III (Study skills):

Will be taught through a combination of lectures/tutorials, to develop the students' skills in communicating scientific information, and computer-based workshops to develop IT and data analysis. These areas of development will be further supported by UWE's dedicated online study skills resources. Student learning will be further supported through the University's E-Learning Environment, Blackboard.

Part IV (Organic chemistry, Pharmacology):

This will comprise a lecture and a workshop session. The pharmacology content to introduce routes of administration, and approaches for drug discovery.

Independent learning will take the following forms with an approximate indication of time required for each:

Essential reading to support acquisition of knowledge and completion of problem solving skills exercises relating to lectures and practical classes – 130 hours

Preparation and submission of coursework 1 – 12 hours

Preparation and submission of coursework 2 – 12 hours

Revision and preparation for exams, including support tutorials – 70 hours.

Part 3: Assessment

The Assessment Strategy has been designed to support and enhance the development of both subject-based and generic key skills, whilst ensuring that the modules Learning Outcomes are attained.

The coursework comprises two elements. The first is the Integrated assignment which will provide an opportunity for students to demonstrate their ability to apply the principles of the course to unseen problems and evidence their skills in approaching it appropriately.

The second element is a portfolio. Students will be given instruction on the content of this portfolio which will contain examples of both study skills and laboratory skills such as: laboratory workbook; ECDL Level 1 certificate; evidence of referencing; examples of poster presentation; a skills evaluation; reflection and action plan.

Component A comprises two online examinations. These will assess Parts I and II, respectively, and are an effective vehicle for assessing a student's knowledge and understanding of many aspects of this material.

STUDENT AND ACADEMIC SERVICES

Formative feedback is available to students throughout the module through group discussions particularly in tutor group sessions. Students are provided with formative feed-forward for their exam through a revision and exam preparation session prior to the exam and through support materials supplied through Blackboard.

First Sit Components	Final Assessment	Element weighting	Description
In-class test - Component A	✓	50 %	In-class online tests
Portfolio - Component B		50 %	Portfolio
Resit Components	Final Assessment	Element weighting	Description
Examination (Online) - Component A	✓	50 %	Online Examination (24 hours)
Portfolio - Component B		50 %	Portfolio

Part 4: Teaching and Learning Methods

Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:	
	Module Learning Outcomes	Reference
	Perform basic scientific calculations relevant to healthcare and the biomedical sciences	MO1
	Use statistical methods to describe datasets using a variety of techniques	MO2
	Estimate the uncertainties in the results of scientific measurements	MO3
	Present, analyse and interpret laboratory and field data using appropriate mathematical, statistical and communication skills	MO4
	Apply a basic knowledge of nuclear and atomic physics to describe the basis of instruments, equipment and procedures in nuclear medicine	MO5
	Describe the functions of the components of basic analytical instruments and operate analytical instruments at a basic level	MO6
	Recognise and describe a range of routine analytical techniques available for the chemical analysis of biological molecules	MO7
	Understand the kinetics of bacterial growth and death; aseptic techniques	MO8
	Describe strategies for destruction of microbes (disinfection, sterilisation)	MO9
	Understand key concepts in organic chemistry and pharmacology	MO10
	Record experimental data in an appropriate manner, use it for the calculation of concentrations and other parameters of simple test samples and in the calibration of instruments	MO11
Understand the need for developing key graduate skills in addition to subject based proficiency	MO12	
Contact Hours	Independent Study Hours:	
	Independent study/self-guided study	225
	Total Independent Study Hours:	225

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	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	75
	Total Scheduled Learning and Teaching Hours:	75
	Hours to be allocated	300
	Allocated Hours	300
Reading List	<p><i>The reading list for this module can be accessed via the following link:</i></p> <p>https://uwe.rl.talis.com/modules/usska5-30-1.html</p>	

Part 5: Contributes Towards

This module contributes towards the following programmes of study: