



## MODULE SPECIFICATION

Part 1: Information			
Module Title	Biomedical Skills		
Module Code	USSKA5-30-1	Level	1
For implementation from	September 2019		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Health and Applied Sciences	Field	Applied Sciences
Department	Applied Sciences		
Contributes towards	This module is compulsory on all variants of the following programmes: BSc (Hons) Biomedical Science		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	N/A		

Part 2: Description	
<p>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><b>Part I (Problem solving skills)</b> covers the development of problem solving numeric and data analysis skills. The module will be delivered using a mixture of whole group (lectorials) and small tutorial group sessions. Support for student learning in Part I will be given through weekly lectorials/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.</p> <p><b>Part II (Laboratory skills)</b> 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.</p> <p><b>Part III (Study skills)</b> 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.</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. 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

**Scheduled learning** includes lectures, tutorials, practical computer classes and laboratory workshops.

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

### Part 3: Assessment: Strategy and Details

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.

The controlled component is two written 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.

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.

Identify final timetabled piece of assessment (component and element)	Component A	
% weighting between components A and B (Standard modules only)	<b>A:</b>	<b>B:</b>
	<b>50%</b>	<b>50%</b>
<b>First Sit</b>		
<b>Component A</b> (controlled conditions) <b>Description of each element</b>	<b>Element weighting</b> <b>(as % of component)</b>	
1. In-class online tests	100	
<b>Component B</b> <b>Description of each element</b>	<b>Element weighting</b> <b>(as % of component)</b>	
1. Portfolio	100	
<b>Resit (further attendance at taught classes is not required)</b>		
<b>Component A</b> (controlled conditions) <b>Description of each element</b>	<b>Element weighting</b> <b>(as % of component)</b>	
1. Examination (3 hours), Assessment Period 3	100	
<b>Component B</b> <b>Description of each element</b>	<b>Element weighting</b> <b>(as % of component)</b>	
1. Portfolio	100	

<b>Part 4: Learning Outcomes &amp; KIS Data</b>																															
Learning Outcomes	<p>On successful completion of this module students will be able to (assessment intended for each learning outcome designated by [*] corresponding to assessment section):</p> <ul style="list-style-type: none"> <li>perform basic scientific calculations relevant to healthcare and the biomedical sciences [A, B]</li> <li>use statistical methods to describe datasets using a variety of techniques [A, B]</li> <li>estimate the uncertainties in the results of scientific measurements [A, B]</li> <li>present, analyse and interpret laboratory and field data using appropriate mathematical, statistical and communication skills [A, B]</li> <li>apply a basic knowledge of nuclear and atomic physics to describe the basis of instruments, equipment and procedures in nuclear medicine [A, B]</li> <li>describe the functions of the components of basic analytical instruments and operate analytical instruments at a basic level [B]</li> <li>recognise and describe a range of routine analytical techniques available for the chemical analysis of biological molecules [A, B]</li> <li>understand the kinetics of bacterial growth and death; aseptic techniques.[A]</li> <li>describe strategies for destruction of microbes (disinfection, sterilisation) [A]</li> <li>understand key concepts in organic chemistry and pharmacology [A]</li> <li>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 [B]</li> <li>understand the need for developing key graduate skills in addition to subject based proficiency [B]</li> </ul>																														
Key Information Sets Information (KIS)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5" style="text-align: left;"><b>Key Information Set - Module data</b></th> </tr> <tr> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> </thead> <tbody> <tr> <td colspan="3"><i>Number of credits for this module</i></td> <td style="text-align: center; border: 2px solid black;">30</td> <td></td> </tr> <tr> <td style="text-align: center;">Hours to be allocated</td> <td style="text-align: center;">Scheduled learning and teaching study hours</td> <td style="text-align: center;">Independent study hours</td> <td style="text-align: center;">Placement study hours</td> <td style="text-align: center;">Allocated Hours</td> </tr> <tr> <td style="text-align: center; color: red;">300</td> <td style="text-align: center; color: red;">75</td> <td style="text-align: center; color: red;">225</td> <td style="text-align: center; color: red;">0</td> <td style="text-align: center; color: red;">300</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;"></td> </tr> </tbody> </table>	<b>Key Information Set - Module data</b>										<i>Number of credits for this module</i>			30		Hours to be allocated	Scheduled learning and teaching study hours	Independent study hours	Placement study hours	Allocated Hours	300	75	225	0	300					
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Contact Hours	<p>The table below indicates as a percentage the total assessment of the module which constitutes a;</p> <p><b>Written Exam:</b> Unseen or open book written exam  <b>Coursework:</b> Written assignment or essay, report, dissertation, portfolio, project or in class test  <b>Practical Exam:</b> Oral Assessment and/or presentation, practical skills assessment, practical exam (i.e. an exam determining mastery of a technique)</p>																														

Total Assessment	Total assessment of the module:							
	Written exam assessment percentage				50%			
	Coursework assessment percentage				50%			
	Practical exam assessment percentage				0%			
					100%			
Reading List	<a href="https://blackboard.uwe.ac.uk/webapps/osc-BasicLT-&lt;br/&gt;bb_bb60/tool.jsp?course_id= 303354 1&amp;content_id= 6513124 1">https://blackboard.uwe.ac.uk/webapps/osc-BasicLT- bb_bb60/tool.jsp?course_id= 303354 1&amp;content_id= 6513124 1</a>							

## FOR OFFICE USE ONLY

First CAP Approval Date	28/3/2014		
Revision Approval Date <i>Update this row each time a change goes to CAP</i>	PER 28/11/2018 – see PER outcome report	Version	2