



MODULE SPECIFICATION

Part 1: Information			
Module Title	Skills for Biosciences		
Module Code	USSKA6-30-1	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>Educational Aims: As biological scientists you need to be equipped with skills and knowledge that allow you to work in a safe, competent and confident manner. This module will introduce you to analytical techniques, data handling and statistical methods used within the research process. In this module you will be introduced to a range of practical and transferable skills including scientific writing, teamwork and research practices. Aspects of personal development will be discussed and employment/career options assessed. The skills you will learn within this module will form the basis for your work at level 2.</p> <p>Outline Syllabus: You will cover:</p> <p>The principles and application of different analytical techniques used to carry out work in a biological laboratory.</p> <p>How to determine which statistical analysis is needed to interpret data.</p> <p>The use of statistical methods to analyse and describe experimental data sets.</p> <p>An introduction to health and safety in the laboratory.</p>

STUDENT AND ACADEMIC SERVICES

An introduction to independent learning with reference to academic reading, searching of the literature, scientific writing, referencing and plagiarism.

Reflection upon your personal development and acquisition of graduate skills including teamwork, numeracy and academic integrity.

Teaching and Learning Methods: See assessment strategy

Part 3: Assessment

The assessment strategy for this module 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 literature review provides the opportunity for the student to complete an overview of their selected topic by reviewing and synthesising information from published research.

The poster assignment provides students with experience in presenting, interpreting and discussing data from the practical sessions. This assignment represents a scaffold which will be developed further at levels 2 (Research Skills) and 3 (Research experimental project/dissertation).

Component A is an online examination with a 24 hour window for completion. This method of assessment allows students to present their knowledge and understanding of the subject and to demonstrate their ability to undertake calculations, display data and interpret statistical tests.

Opportunities for formative assessment and feedback are built into the assignments and through review of past exam papers and scheduled revision sessions. All work is marked in line with the Faculty Generic Assessment Criteria and conforms to the University policies for the setting, collection, marking and return of student work. Assessments are described in the Module handbook that is supplied at the start of module.

First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		15 %	Essay – literature review (500 words)
Poster - Component B		45 %	Poster
Examination (Online) - Component A	✓	40 %	Online examination (24 hours)
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Examination (Online) - Component A	✓	40 %	Online examination (24 hours)
Poster - Component B		45 %	Poster

STUDENT AND ACADEMIC SERVICES

Part 4: Teaching and Learning Methods																	
Learning Outcomes	<p>On successful completion of this module students will achieve the following learning outcomes:</p> <table border="1"> <thead> <tr> <th style="text-align: left;">Module Learning Outcomes</th> <th style="text-align: left;">Reference</th> </tr> </thead> <tbody> <tr> <td>Demonstrate the ability to apply and interpret statistical methods to example data</td> <td>MO1</td> </tr> <tr> <td>Understand how different experimental techniques are used to carry out work in a biological laboratory</td> <td>MO2</td> </tr> <tr> <td>Understand the concepts of accuracy and precision, SI units, molar and % solutions, dilutions and pH</td> <td>MO3</td> </tr> <tr> <td>Carry out laboratory procedures safely to analyse sets of data</td> <td>MO4</td> </tr> <tr> <td>Begin to evaluate, manage and discuss information drawn from a variety of sources</td> <td>MO5</td> </tr> <tr> <td>Begin to develop the skills necessary for independent study</td> <td>MO6</td> </tr> </tbody> </table>	Module Learning Outcomes	Reference	Demonstrate the ability to apply and interpret statistical methods to example data	MO1	Understand how different experimental techniques are used to carry out work in a biological laboratory	MO2	Understand the concepts of accuracy and precision, SI units, molar and % solutions, dilutions and pH	MO3	Carry out laboratory procedures safely to analyse sets of data	MO4	Begin to evaluate, manage and discuss information drawn from a variety of sources	MO5	Begin to develop the skills necessary for independent study	MO6		
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Reading List	<p>The reading list for this module can be accessed via the following link:</p> <p>https://uwe.rl.talis.com/modules/usska6-30-1.html</p>																

Part 5: Contributes Towards

This module contributes towards the following programmes of study: