



MODULE SPECIFICATION

Part 1: Information			
Module Title	Skills for Science		
Module Code	USSKCL-30-0	Level	0
For implementation from	September 2017		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Health & Applied Sciences	Field	Applied Sciences
Department	Department of Applied Sciences		
Contributes towards	All programmes		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>This module will cover the physical principles underlying various aspects of Science relevant to the students' future studies and the mathematical skills that are necessary to understand and solve problems that apply these physical principles</p> <ul style="list-style-type: none"> • Basic physical laws and principles will be reviewed as they are applied and used in various Applied Sciences such as Health and Life Sciences, Forensic Sciences and Environmental Sciences. • Mathematical methods and skills will be developed alongside with an emphasis on their relevance and usefulness for the understanding and application of the physical knowledge. <p>A variety of learning approaches will be used. Taught sessions will utilise TEL where possible, to support pedagogy of Inductive Learning where the students will engage in facilitated activities such as tutorials, debates, case studies, problem based learning etc.</p> <p>Tutorial and workshop sessions will provide opportunities for data handling and interpretation, problem solving and discussions with academic staff. Online and wiki facilitated group work will provide contexts and overviews of topics to guide student-centred learning. Wherever necessary, workshops are supplemented by audio-visual material (e.g. BoB/online video tutorials) showing specific examples relevant to supporting student case studies.</p> <p>Student independent learning (>70% of module allocated time) will be supported with interactive revision material, workbooks, wiki-facilitated tutor feedback and the University's E-Learning Environment (Blackboard).</p>

Scheduled learning includes lectures, tutor feedback via wikis, workshops, and tutorials.

Independent learning includes hours engaged with essential reading, assignment preparation and completion. Students will be encouraged to use a facilitated online collaborative working approach (such as a wiki) to support the group project working. These sessions constitute an average time per level as indicated in the table below.

All students will be encouraged to make full use of the print and electronic resources available to them through membership of the University. These include a range of electronic journals and a wide variety of resources available through web sites and information gateways. The University Library's web pages provide access to subject relevant resources and services, and to the library catalogue. Many resources can be accessed remotely. Students will be presented with opportunities within the curriculum to develop their information retrieval and evaluation skills in order to identify such resources effectively.

Part 3: Assessment

The Assessment Strategy has been designed to support and enhance the development of both subject-based learning and skills which will support progression onto the destination Programme, whilst ensuring that the Learning Outcomes of the module are attained, as described below.

The **Controlled Component [40%]** contains two elements.

Written exam (30% of the final module mark). The exam will be 2 hours duration which is consistent with the Department's assessment strategy for Level 0 modules. This assessment will provide students with an opportunity to demonstrate both their knowledge on a broad range of topics through a series of short answer questions, and more in-depth knowledge through a selection of medium length questions. This assessment will test a range of the learning outcomes and will provide a valuable learning experience through recalling and demonstrating knowledge which will be of benefit when progressing to UG Programmes in the Faculty.

In-class assessment (10% of the final module mark). The submission of in-class exercises completed during tutorials, in which students will be assessed upon their competence to complete the given tasks.




The **Coursework Component [60%]** comprises one element

Data interpretation exercise (60% of the final module mark). Students will be asked to interpret a simple set of experimental data using mathematical and statistical techniques taught in the module and showing their understanding of the physical meaning of the results. This assignment will include a 500 word theoretical explanation of the main physical principle applied in the described experiment, for which they will need to apply their skills of using a variety of sources from the library and combining information from these into a coherent text, with appropriate referencing.

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

All work is marked in line with the Department's Generic Assessment Criteria and conforms to university policies for the setting, collection, marking and return of student work. Where an individual piece of work has specific assessment criteria, this is supplied to the students when the work is set.

Identify final timetabled piece of assessment (component and element)	Component A2	
% weighting between components A and B (Standard modules only)	A:	B:
	40%	60%

First Sit																																				
Component A (controlled conditions) Description of each element	Element weighting (as % of component)																																			
1. In class assessment	25%																																			
2. Written examination (2hr)	75%																																			
Component B Description of each element	Element weighting (as % of component)																																			
1. Data interpretation exercise	100%																																			
Resit (further attendance at taught classes is not required)																																				
Component A (controlled conditions) Description of each element	Element weighting (as % of component)																																			
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Component B Description of each element	Element weighting (as % of component)																																			
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Part 4: Teaching and Learning Methods																																				
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> • Access library resources and other essential information support networks within (i.e. Blackboard, and MyUWE) and outside the University in order to facilitate research, problem solving and study skills (A2, B1). • Use appropriate software (for example excel) to process, display, interpret and communicate scientific data (B1). • Demonstrate an understanding of the physical processes underlying various areas in science (A1, A2,B1). • Demonstrate an understanding of the mathematical methods underlying various areas in science (A1, A2,B1). • Apply fundamental principles to more complex problems (A1, A2, B1). • Perform mathematical calculations in solving scientific problems (A1, A2, B1). 																																			
Key Information Sets Information (KIS)	<table border="1"> <thead> <tr> <th colspan="5">Key Information Set - Module data</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td colspan="4"><i>Number of credits for this module</i></td> <td style="text-align: center;">30</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <th>Hours to be allocated</th> <th>Scheduled learning and teaching study hours</th> <th>Independent study hours</th> <th>Placement study hours</th> <th>Allocated Hours</th> </tr> <tr> <td style="text-align: center;">300</td> <td style="text-align: center;">72</td> <td style="text-align: center;">228</td> <td style="text-align: center;">0</td> <td style="text-align: center;">300</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;"></td> </tr> </tbody> </table>	Key Information Set - Module data										<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	72	228	0	300					
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Contact Hours	The contact hours (72) are distributed as follows: 24 Lectures = 24 hours 48 Tutorials @ 1 hours/tutorial = 48 hours																				
Total Assessment	The table below indicates as a percentage the total assessment of the module which constitutes a; Written Exam: Unseen open book written exam Coursework: Written assignment: essay and report Practical Assessment: in class tests <table border="1" data-bbox="660 611 1323 846"> <tr> <td colspan="2">Total assessment of the module:</td> <td></td> <td></td> </tr> <tr> <td>Written exam assessment percentage</td> <td></td> <td>30%</td> <td></td> </tr> <tr> <td>Coursework assessment percentage</td> <td></td> <td>60%</td> <td></td> </tr> <tr> <td>Practical assessment percentage</td> <td></td> <td>10%</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>100%</td> </tr> </table>	Total assessment of the module:				Written exam assessment percentage		30%		Coursework assessment percentage		60%		Practical assessment percentage		10%					100%
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Reading List	https://uwe.rl.talis.com/lists/C3C0ECCA-E53C-FF96-B516-6EBE8D536CA6.html																				

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First CAP Approval Date	29/5/2014		
Revision CAP Approval Date	31/5/2017	Version	2
			RIA 12378