



ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Basic Data					
Module Title	Current Issues in Biomedical Research				
Module Code	USSKM7-30-M	Level	M	Version	1
UWE Credit Rating	30	ECTS Credit Rating	15	WBL module?	No
Owning Faculty	Health and Applied Sciences	Field	Biomedical Sciences		
Department	BBAS	Module Type	Standard		
Contributes towards	MSci Biomedical Science				
Pre-requisites	None	Co- requisites	None		
Excluded Combinations	None	Module Entry requirements	None		
First CAP Approval Date	May 2016	Valid from	September 2016		
Revision CAP Approval Date		Valid from			

Review Date	September 2022
-------------	----------------

Part 2: Learning and Teaching	
Learning Outcomes	<p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> <li>• Demonstrate a systematic understanding and critical awareness of key developments and new insights at the forefront of Biomedical Research (A1, B1)</li> <li>• Demonstrate a critical awareness of the philosophical and ethical issues involved in conducting Biomedical Research (A1, B1).</li> <li>• Recognise and apply subject-specific theories, paradigms, concepts and principles (B1).</li> <li>• Demonstrate a comprehensive understanding of techniques applicable to their own research or advanced research in Biomedical Science (A1, B2).</li> <li>• Use cognitive skills to interpret multiple lines of subject-specific evidence, formulate and test hypotheses, and make sound judgements even in the absence of complete data (B2).</li> <li>• Demonstrate originality in the application of knowledge, together with a practical understanding of how established techniques are used to interpret knowledge in Biomedical Science (A1, B2).</li> <li>• Demonstrate competence and progressive development in core and advanced experimental research skills in biomedicine (B2).</li> <li>• Evaluate critically and give a clear and accurate account of a currently researched area in Biomedical Science, marshal arguments in a mature way and engage in debate and dialogue using appropriate scientific language (A1).</li> </ul>
Syllabus Outline	<p>The subject content of the module is divided into two main themes:</p> <ul style="list-style-type: none"> <li>• <b>Key research areas in biomedicine:</b> infection &amp; immunity, vaccines, cancer,</li> </ul>

	<p>diabetes, dementia, neuroscience, genomic medicine, clinical research trials.</p> <ul style="list-style-type: none"> <li>• <b>Research Methods:</b> theoretical and hands-on practical skills sessions into state-of-the-art methodologies adopted in biomedical research.</li> </ul>
Contact Hours	<p>Scheduled contact time will comprise:</p> <ul style="list-style-type: none"> <li>• 11 x 2 hour lectures.</li> <li>• 11 x 1 hour tutorials.</li> <li>• 11 x 3 hour practical sessions.</li> <li>• 1 x 6 hour poster presentation session.</li> </ul> <p>Delivered as one day per week in Semester 1.</p>
Teaching and Learning Methods	<ul style="list-style-type: none"> <li>• Scheduled learning includes lectures, tutorials and practical sessions.</li> <li>• Lectures are delivered by research –active academic specialists, covering subject-specific knowledge of key impact research areas in biomedical science research.</li> <li>• Tutorial sessions will build upon the lecture material by engaging students in discussion and debate on specific research-related themes. Content will be based around peer-reviewed research publications, covering the latest developments in identified biomedical research areas. Through interactive debate, students will develop their ability to read, interpret and critically discuss research, and contemporary viewpoints surrounding research.</li> <li>• Practical sessions, on advanced and applied biomedical analytical and research methods, encourage experiential learning. Students are able to develop their practical competencies and data-handling abilities in a context specifically relevant to applied biomedical science research. Students' key skills will be assessed via a laboratory assignment.</li> <li>• Student lectures and independent learning will be supported through the University Online Learning Environment (OLE; Blackboard) through provision of/direction to appropriate peer-reviewed publications to guide independent study.</li> <li>• The module will be studied over a single semester. 72 hours of scheduled learning will be delivered. Students are expected to undertake 228 hours of independent learning. Weekly learning will comprising a 2 hour lecture, a 1 hour tutorial, and a 3 hour practical/skills session.</li> <li>• Each student will give a presentation to staff members and their peers, on a contemporary important area in biomedical research.</li> </ul>
Key Information Sets Information	<p>Key Information Sets (KIS) are produced at programme level for all programmes that this module contributes to, which is a requirement set by HESA/HEFCE. KIS are comparable sets of standardised information about undergraduate courses allowing prospective students to compare and contrast between programmes they are interested in applying for.</p> <p>Further detail on Key Information Sets and how the University is implementing its requirements can be found at <a href="https://share.uwe.ac.uk/sites/ar/kis/KIS%20Background%20Information/Forms/AllItems.aspx">https://share.uwe.ac.uk/sites/ar/kis/KIS%20Background%20Information/Forms/AllItems.aspx</a> This also contains further guidance on how to complete the information requested below.</p> <p>A KIS is required for every undergraduate programme (including integrated Masters and foundation degrees) so please fill this section if this module will contribute to an undergraduate programme.</p>

<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	72	228	0	300

The table below indicates as a percentage the total assessment of the module which constitutes a -

**Written Exam:** Unseen written exam, open book written exam, In-class test

**Coursework:** Written assignment or essay, report, dissertation, portfolio, project

**Practical Exam:** Oral Assessment and/or presentation, practical skills assessment, practical exam

Please note that this is the total of various types of assessment and will not necessarily reflect the component and module weightings in the Assessment section of this module description:

Total assessment of the module:	
Written exam assessment percentage	0%
Coursework assessment percentage	30%
Practical exam assessment percentage	70%
	100%

**Reading Strategy**

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.

This guidance will be available either in the module handbook, via the module information on Blackboard or through any other vehicle deemed appropriate by the module/programme leaders.

**Indicative Reading List**

Reading will focus on using scientific research literature available:

1. Through the main scientific databases searchable through the UWE library website, e.g. Science Direct, Web of Science PubMed.
2. Scientific Journals are mostly available online via the library website's ejournals A-Z link. Example Journals include: Nature Biotechnology, Science, PNAS, Current Opinion in Biotechnology, Journal of Experimental Medicine, Journal of Immunology. Much journal content is "discoverable" via various indexing and abstracting sources that the library subscribes to, and the full text of articles can be ordered via the Inter Library Loan service.

### Part 3: Assessment

Assessment Strategy	<ul style="list-style-type: none"> <li>• <b>Component A</b> is a single element consisting of a poster (+oral defence) presentation under controlled conditions. This component is designed to assess the student's ability to comprehend and present clearly a recently published research study in an area of biomedical science and to assess their knowledge of that area.</li> <li>• <b>Component B</b> comprises two elements:             <ul style="list-style-type: none"> <li>○ (1) a review of a contemporary topic in biomedical research – designed to assess students' ability to research the literature, interpret and write about biomedical research.</li> <li>○ (2) a laboratory write-up based around a series of linked practical technical exercises – designed to assess students' practical competencies, data-handling and aptitude for research.</li> </ul> </li> </ul>
---------------------	---

Identify final assessment component and element	<b>A1</b>	
% weighting between components A and B (Standard modules only)	<b>A:</b>	<b>B:</b>
	<b>40</b>	<b>60</b>
<b>First Sit</b>		
<b>Component A</b> (controlled conditions) <b>Description of each element</b>	<b>Element weighting</b> <i>(as % of component)</i>	
1. Poster presentation (20 minutes)	100	
2.(etc)		
<b>Component B</b> <b>Description of each element</b>	<b>Element weighting</b> <i>(as % of component)</i>	
1. Review of a contemporary topic (1500 words)	50	
2. Laboratory assignment/report (1000 words)	50	

<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> <i>(as % of component)</i>	
1. Poster presentation	100	
2.(etc)		
<b>Component B</b> <b>Description of each element</b>	<b>Element weighting</b> <i>(as % of component)</i>	
1. Review of a contemporary topic (1500 words)	50	
2. Laboratory assignment/report	50	
<p>If a student is permitted a retake of the module under the University Regulations and Procedures, the assessment will be that indicated by the Module Description at the time that retake commences.</p>		