



UNIVERSITY OF
WOLVERHAMPTON
KNOWLEDGE ▪ INNOVATION ▪ ENTERPRISE

School of Applied Sciences

Course Guide

for

**BSc (Hons) Healthcare Science (Cardiac Physiology)
BSc (Hons) Healthcare Science (Respiratory and Sleep
Physiology)**

2012-2013

SCHOOL OF APPLIED SCIENCES COURSE GUIDE

BSc (Hons) Healthcare Science (Cardiac Physiology)

BSc (Hons) Healthcare Science (Respiratory and Sleep Physiology)

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About this guide

This Course Guide will help you plan your Healthcare Science course. It tells you which modules you must study and pass. The Guide also offers you brief descriptions of each module, including general information about assessment tasks, and an overview of how the Course can be used for future career choices.

You should read this Course Guide in conjunction with the Undergraduate Student Handbook (<http://www.wlv.ac.uk/ugguide>) and the University's Principles and Regulations (<http://www.wlv.ac.uk/polsregs>). Together these documents should provide you with all the basic information that we think you will need for your period of study here.

You are encouraged to read this Guide through now. It will be a considerable advantage to you to be familiar from the outset with the various aspects of your studies that are described. It may be that the relevance of some of the sections will not be immediately obvious. Keep it somewhere accessible, so that you can refer to it as needed. The answers to many of the questions that you will want to ask are contained in it.

Obviously even in a document like this we have not covered every query and problem that you might have about the course. If you find that there is something you need to know, please check on [SAS Student Support Portal in WOLF](#) or contact the SAS Student Support Office (details below). You can also consult the University's [Student Services Gateway](#) as appropriate. We are pleased to hear your views and welcome suggestions for ways of improving the operation of the Course.

Please enter the contact details for your Personal Tutor for your future reference:	----- <i>The name of your Personal Tutor will be given to you at the beginning of your course and can be checked via e:Vision</i>
Your School Student Support Office is:	Student Support Office Room: MA104 Tel : 01902 322129 Email: sasstudentsupport@wlv.ac.uk
Your local <i>HERE 2 HELP</i> is:	Ground floor MD Building, City Campus (South) Tel: 01902 322487 Fax:01902 322185

Please note that in order to develop and improve the Course, it may be necessary on occasions to amend or revise the details given in this Course Guide.

Equality & Special Needs Adviser:

If you have a problem regarding equality of treatment, or a disability, or special needs related to your mobility, health or studies you must arrange to meet the School's Equality & Special Needs Adviser (Dr Nick Musgrove) as soon as possible to discuss your requirements. Discussions are confidential.

Dr Nick Musgrove
Room MA123b
01902 322191
email N.J.Musgrove@wlv.ac.uk

For contacting academic staff, we operate an electronic booking system, 'SAMS', you will be fully introduced to this during Welcome Week, and it can be accessed at the following address: <http://sams.wlv.ac.uk>

Please note that in order to develop and improve the Course, it may be necessary on occasions to amend or revise the details given in this Course Guide.

Welcome

On behalf of the Course Management Team I should like to extend to you a very warm welcome and we would like to take this opportunity to wish you every success in your studies at the University of Wolverhampton, and trust that your time at the University of Wolverhampton will prove to be enjoyable, stimulating and rewarding.

The BSc (Hons) Healthcare Science is one of many courses run by the School of Applied Sciences which has itself established an excellent reputation for the quality of its courses, for an innovative approach to teaching and learning, and for the friendliness of its staff.

We believe it is important that you are encouraged to make your own contribution to the effective operation and development of your chosen course. We are, therefore, keen to hear your views and would welcome any suggestions that you may have about ways of improving any aspect of your course and/or the student experience here at the University. In practice, you will have the opportunity to do this through our 'student voice' processes, such as student forums.

Remember that the outcome of your studies could affect the whole of your future career and therefore study should certainly be your first priority. In resolving to work hard however, do not forget to have time for recreation and social activities. Do take full advantage of the [University facilities](#) at your disposal.

Dr. Ruth Shiner
Head of Department of Biomedical Science and Physiology

Attendance

The University recognises that you have made a significant investment in both time and money in choosing to study for a degree. Staff are committed to helping you fulfil your potential. Your attendance at, and participation, in classes is a key factor in ensuring that you do so.

Attendance will help you to:

- Understand the subject area you are studying;
- Acquire and develop the skills and knowledge needed to ensure success;
- Prepare for and undertake assessments;
- Learn from and with your fellow students;
- Receive feedback from teaching;
- Participate in practical and group work;
- Develop your communication skills.

If you are unable to attend a class please let your tutor know that you are unable to do so. He/she will then be able to give you advice on what was covered in the class, and what you need to do to catch up. Please do remember how important attendance is to your success.

The University considers this to be so important that it reserves the right to review the position of students who fail to attend.

The Wolverhampton Graduate

By the end of your course, the university expects you to be a Wolverhampton Graduate who is knowledgeable and enterprising, digitally literate and a global citizen.

Digitally Literate

Our graduates will be confident users of advanced technologies; they will lead others, challenging convention by exploiting the rich sources of connectivity digital working allows.

Knowledgeable and Enterprising

Our graduates will know how to critique, analyse and then apply knowledge they acquire in an enterprising way.

Global citizens

Our graduates will bring an informed understanding of their place and ethical responsibilities in the world.

Further information can be found on the University student webpage for [Graduate Attributes](#)

About the Course

The BSc (Hons) Healthcare Science course is studied as a **Specialist** subject and this guide outlines the modules which are available, teaching and learning styles and assessment tasks. If there is anything you need to discuss further, please contact Dr. Ruth Shiner, Head of Department of Biomedical Science and Physiology.

The degree programme aims to combine and integrate both academic and work-based training in order to provide you with the practical skills and underpinning knowledge to fulfil the role as a Healthcare Science Practitioner in Cardiac Physiology or Respiratory and Sleep Physiology. A knowledge of the normal structure and function of the human body will be developed so that you can appreciate the clinical abnormalities that occur as a result of disease. You will consider the diagnostic tests used within the profession and be able to understand how test results are used to plan subsequent treatment. The course will provide you with a wider appreciation of a number of specialisms in physiological sciences through broad experiential components in cardiovascular, respiratory and sleep physiology in order to develop a more holistic view of the areas contributing to high-quality care. You will develop competency in a range of techniques outlined in the Healthcare Science Practitioner Training Manual for Cardiac Physiology or Respiratory and Sleep Physiology through integrated workbased placements in local hospitals. The encouragement of good professional practice will be paramount at all stages of workbased training and you will be encouraged to develop research skills which can be used to improve practice in your chosen specialism. Successful completion of the course will enable you to gain employment within a hospital to undertake physiological measurements in cardiac physiology or respiratory and sleep physiology on patients as part of their patient care pathway.

Through your course of study you will have the opportunity to:

- develop competence in the physiological practical techniques employed within your chosen specialism of physiological sciences and be able to explain the rationale for the investigation and treatment of disease, modification of the investigations, and interpret test results so that you are able to effectively contribute to the patient care pathway.
- develop an awareness of the requirements for good professional practice in physiological sciences, including safe and ethical working practices, the importance of good communication in a therapeutic relationship and how research can be used to advance evidence based practice in your chosen specialism.

These are achieved through the study of:

- the anatomical structure and development of the human body to develop an understanding of the integrated function and control of the component parts of the major systems, enabling an appreciation of normal human function to be shown.
- cell structure and function at the molecular level, enabling an appreciation of the interplay of complex molecular events that help to maintain cell homeostasis.
- disease processes to enable appreciation of the use of pharmacological and interventional treatments against them.
- the basic principles of physics and signal processing and be able to apply these to the recording, storage and analysis of information in the concept of physiological sciences.

Final and Intermediate Awards

In order to be awarded your BSc (Hons) Healthcare Science (Named Specialism) degree you are required to successfully complete all 360 credits that make up your programme of study. If you successfully complete all level four and five credits along with a minimum of 60 credits at level six you are eligible for a BSc Healthcare Science award, without the specialism being included within the degree title. Students who gain 240 credits at levels four and five (or above) are eligible for the award of Dip HE in Healthcare Science. Students who successfully complete 120 credits at level four or above are eligible for a Cert HE in Healthcare Science.

Academic Regulations

This course adheres to the University's academic regulations. A full version of these regulations can be found on the University web page [for Policies and Regulations](#). These regulations govern your course and will be binding on you. It is, therefore, important that you read and become familiar with them.

Course information

Attendance Policy

The School of Applied Science expects students to attend all classes. We know from experience that students whose attendance is good generally do very well on their course, while those students whose attendance is poor are very likely to fail.

Many science modules include practicals and workshops, and these generally require students to attend and complete all sessions. It is not possible to pass these modules without attending.

Attendance lists will regularly be taken in both lectures and practical classes, and students who are absent will be contacted and asked to explain their absence.

If you cannot your classes for genuine reasons (e.g. illness) you need to let staff know as soon as possible. A part-time job is not a valid reason for missing classes. If you have a part-time job, you must fit your job around your University course, not your course around your job.

Blended Learning

The University of Wolverhampton has adopted a blended learning approach to its learning and teaching which is outlined in its Blended Learning Strategy (University of Wolverhampton, 2008). The University defines Blended Learning as the use of technologies to extend and enhance the student learning opportunities through the provision of tasks and materials which enrich, and are aligned with, face-to-face learning. Your programme of study has been designed to include the six entitlements for Blended Learning as outlined below:

You are entitled to :	
1. have access where possible to an electronic copy of all lecturer-produced course documents e.g. module guides, assessment briefs, presentations, handouts, and reading lists	You will receive the full provision of module related documents in electronic format. This will include module guides, assessment guidance, practical schedules, lecture notes or presentations, and tutorial exercises.
2. formative assessment opportunities on line with appropriate meaningful electronic assessment feedback	You can expect to receive regular formative assessment with feedback so that you can gain an appreciation of how your studies are progressing. You will be provided with practice test and examination papers which you can complete and receive feedback on in preparation for summative assessments. You are also able to submit a draft copy of your Honours Project for feedback before final submission.
3. have opportunities to collaborate face to face and on line with others in their learning cohort	You will have the opportunity to learn from each other collaboratively in many modules through the sharing of experiences from the workplace. You will have the opportunity to extend discussions whilst away from University via fora on WOLF. You are also able to collaborate through WOLF forums and by email when working on group based tasks, particularly when you are undertaking work based training and are away from the university.
4. have the opportunity to participate in electronic Personal Development Planning (ePDP)	You will initiate construction of your electronic personal development plan as part of 4BM003 Study and Professional Skills module. You then have the option of using electronic personal development plans to incorporate other aspects of your education and training. You will also be required to complete the on-line Healthcare Science Practitioner Training Manual as you progress through your work based training.
5. submit all appropriate assessments online	Where it is appropriate you will have the opportunity to submit all appropriate summative assessments electronically.
6. opportunities to engage in interactive learning during all face to face sessions	All face to face learning in the university is interactive with you being encouraged to ask questions during lectures and tutorials. You will be encouraged to engage in face to face discussion whilst at University with your Supervisor and peers during tutorials and problem based learning exercises.

Distinctive Features of the Course

This course has been constructed to comply with the requirements for the NHS Modernising Scientific Careers initiative which seeks to introduce more structured career pathways for individuals who are employed within NHS scientific careers. The education

and training delivered as part of this course follows the requirements laid down by the NHS for entry into the profession of a Healthcare Science Practitioner. The academic component of the course delivers the scientific underpinning knowledge required in both generic healthcare science and in more specific aspects of physiological sciences. There is also a schedule of work based training integrated within the course which utilises placements offered within local NHS trusts. This aims to provide experiential learning during the first year of study in Cardiac Physiology and Respiratory and Sleep Physiology to develop a holistic view of the areas contributing to high-quality care in physiological sciences. Subsequently you will then specialise in developing competency in clinical techniques in Cardiac Physiology or Respiratory and Sleep Physiology as specified within the practitioner training manual for that specialism.

Course Structures for the BSc (Hons) Healthcare Science Specialist Degrees

Course Structure of the BSc (Hons) Healthcare Science (Cardiac Physiology)

Level 4 (formerly level 1)

Semester 1			Semester 2		
C	4PY013 Molecular Basis of Life				20 credits
C	4BM003 Study and Professional Skills				20 credits
C	4BM004 Human Structure and Function	20 credits	C	4BM005 Microbes and Immunity	20 credits
C	4BM0014 Introduction to the Practice of Cardiovascular, Respiratory and Sleep Science	20 credits	C	4BM009 Introduction to Cardiovascular, Respiratory and Sleep Science II	20 credits

Level 5 (formerly level 2)

Semester 1			Semester 2		
C	5BM014 Workbased Placement and Partners				20 credits
C	5BM021 Research Methods and Professional Practice				20 credits
C	5BM017 Applications of Cardiac Physiology I	20 credits	C	5BM034 Applications of Cardiac Physiology II	20 credits
C	5BM019 Pathophysiology	20 credits	C	5BM020 Clinical Instrumentation	20 credits

Level 6 (formerly level 3)

Semester 1			Semester 2		
C	6BM014 Honours Research Project				40 credits
C	6BM019 Cardiac Physiology in Practice				40 credits
C	6BM026 Recent Developments in Cardiac Physiology	20 credits	C	6BM013 Workbased Placement	20 credits

Course Structure of the BSc (Hons) Clinical Physiology (Respiratory and Sleep Physiology) Degree

Level 4 (formerly level 1)

Semester 1			Semester 2		
C	4PY013 Molecular Basis of Life				20 credits
C	4BM003 Study and Professional Skills				20 credits
C	4BM004 Human Structure and Function	20 credits	C	4BM005 Microbes and Immunity	20 credits
C	4BM0014 Introduction to the Practice of Cardiovascular, Respiratory and Sleep Science	20 credits	C	4BM009 Introduction to Cardiovascular, Respiratory and Sleep Science II	20 credits

Level 5 (formerly level 2)

Semester 1			Semester 2		
C	5BM014 Workbased Placement and Partners				20 credits
C	5BM021 Research Methods and Professional Practice				20 credits
C	5BM018 Introduction To The Applications of Respiratory Physiology	20 credits	C	5BM035 Further Applications of Respiratory Physiology	20 credits
C	5BM019 Pathophysiology	20 credits	C	5BM020 Clinical Instrumentation	20 credits

Level 6 (formerly level 3)

Semester 1			Semester 2		
C	6BM014 Honours Research Project				40 credits
C	6BM020 Respiratory Physiology in Practice				40 credits
C	6BM027 Recent Developments in Respiratory and Sleep Physiology	20 credits	C	6BM013 Workbased Placement	20 credits

Timetables

Year One academic timetable (full-time) for both specialist routes:

Semester 1

	Monday	Tuesday	Wednesday	Thursday	Friday
am	4BM0014 Introduction to the Practice of Cardiovascular, Respiratory and Sleep Science	4BM003 Study and Professional Skills			
pm	4BM004 Human Structure and Function	4PY013 Molecular Basis of Life			

Semester 2

	Monday	Tuesday	Wednesday	Thursday	Friday
am	4BM009 Introduction to Cardiovascular, Respiratory and Sleep Science II				
pm	4BM005 Microbes and Immunity	4PY013 Molecular Basis of Life			

You should also expect to spend around 6 hours per week completing private study for each module.

**Year Two academic timetable (full-time) for BSc (Hons) Healthcare Science
(Respiratory and Sleep Physiology)**

Semester 1

	Monday	Tuesday	Wednesday	Thursday	Friday
am					
pm	5BM018 Introduction To The Applications of Respiratory Physiology	5BM019 Pathophysiology	5BM021 Research Methods and Professional Practice		

Semester 2

	Monday	Tuesday	Wednesday	Thursday	Friday
am					
pm	5BM035 Further Applications of Respiratory Physiology	5BM020 Clinical Instrumentation	5BM021 Research Methods and Professional Practice		

N.B. 5BM014 Workbased Placement and Partners: This module will be completed during your work placement at level 5.

You should also expect to spend around 6 hours per week completing private study for each module.

Year Two academic timetable (full-time) for BSc (Hons) Healthcare Science (Cardiac Physiology)

Semester 1

	Monday	Tuesday	Wednesday	Thursday	Friday
am					
pm	5BM017 Applications of Cardiac Physiology I	5BM019 Pathophysiology	5BM021 Research Methods and Professional Practice		

Semester 2

	Monday	Tuesday	Wednesday	Thursday	Friday
am					
pm	5BM034 Applications of Cardiac Physiology II	5BM020 Clinical Instrumentation	5BM021 Research Methods and Professional Practice		

N.B. 5BM014 Workbased Placement and Partners: This module will be completed during your work placement at level 5.

You should also expect to spend around 6 hours per week completing private study for each module.

University Academic Calendar 2012/13

[University Academic Calendar.](#)

Module Descriptions

Level Four

4BM003 Study and Professional Skills

Credit value	20
Pre-requisites	None
Co-requisites	None
Prohibited combinations	None
Module Leader	Dr James Vickers
Telephone	1136
Email	J.Vickers@wlv.ac.uk
Staff Room Number	MA208b

Module description

The module aims to:

introduce, reinforce and expand the study and key skills necessary for the successful study of disciplines in Health Care Science. Computer packages for word processing, electronic mail, document production, spreadsheets, databases, data analysis, information retrieval and scientific writing skills will be introduced. This module will also provide an awareness of professional accreditation and registration of various Health Care Science Professional Disciplines. The role of the relevant professional body will be described.

On completion of the module, the student is expected to be able to:

- be aware of professional accreditation and registration of the Health Care Science Professional Disciplines applicable to your degree course.
- know the role of the Health Professions Council- Standards of Proficiency- Standards of conduct, performance and ethics in the workplace.
- to use computer packages for word processing, electronic mail and document production, spreadsheets, databases, data analysis, statistical manipulation, and present data graphically and retrieve information.
- to communicate in writing and develop effective study skills.

Assessment

Description		Weighting or Pass/Fail
1	Portfolio	100%

4BM004 Human Structure and Function

Credit value	20
Pre-requisites	None
Co-requisites	None
Prohibited combinations	None
Module Leader	Dr Ruth Shiner
Telephone	1124
Email	R.A.Shiner@wlv.ac.uk
Staff Room Number	MA207b

Module description

The module aims to:

develop a knowledge of the way that the human body is structured through the subject of anatomy and the way in which the systems of the body function through the subject of physiology. It also aims to achieve an understanding of how human structure changes throughout the life of the individual and how malfunction of the body systems can lead to disease.

On completion of the module, the student is expected to be able to:

- demonstrate a knowledge of the chemical, cellular and tissue levels of organisation of the body
- demonstrate a knowledge of the normal anatomy, physiology and pathology of body systems
- demonstrate a knowledge of the processes of embryonic development and of ageing

Assessment

Description		Weighting or Pass/Fail
1	Phase test: Phase test will involve the completion of an on-line multiple choice test of 30 randomly generated questions to be answered in one hour.	50%
2	Examination: Examination will involve the completion of an on-line multiple choice test of 30 randomly generated questions to be answered in one hour	50%

4BM005 Microbes and Immunity

Credit value	20
Pre-requisites	None
Co-requisites	None
Prohibited combinations	None
Module Leader	Dr Martin Khechara
Telephone	3538
Email	MPKhechara@wlv.ac.uk
Staff Room Number	MA209

Module description**The module aims to:**

introduce you to the world of microorganisms. This includes the structure and function of organisms from each kingdom, their uses in the environment, laboratory or industry and gives you a broad introduction to the field microbiology in general. Additionally, it also aims to highlight the impact of microorganisms on the human host that can lead to disease and show you how these aetiological agents can be controlled through chemical means or public health measures. Finally, the module will provide you with an introduction to the immune system in relation to its function in the disease process.

On completion of the module, the student is expected to be able to:

- identify the main structural features of the principle types of microorganisms and describe the difference between common pathogenic and non pathogenic organisms in relation to their intrinsic and extrinsic properties that contribute to disease.
- carry out simple microbiological techniques for the analysis of and identification of common pathogens while working to a high standard of asepsis.
- describe the molecular and cellular components of the immune system and explain their basic structure and morphology in relation to function.
- describe the immune mechanisms that are relevant in a variety of diseases.

Assessment

Description		Weighting or Pass/Fail
1	Coursework: A coursework submission consisting of a variety of data interpretation and research based problems based on activities undertaken in the practical sessions that will be submitted after the final session	40%
2	Examination: A multiple choice style test that will cover aspects of microbiology and immunology learned on the module	60%

4BM009 Introduction to Cardiovascular, Respiratory and Sleep Science II

Credit value	20
Pre-requisites	4BM014 Introduction to Cardiovascular, Respiratory and Sleep Science I.
Co-requisites	None
Prohibited combinations	None
Module Leader	Dr Jenny Tonkinson-Hoare
Telephone	2157
Email	jennytonkinson@wlv.ac.uk
Staff Room Number	MA208b

Module description

The module aims to:

The overall aim of this module is to ensure that the student understands the breadth of the application of science across Cardiovascular and Respiratory/Sleep Science and is able to work safely within these environments

On completion of the module, the student is expected to be able to:

- describe the role of Cardiology, Respiratory and Sleep science in relevant patient pathways.
- extend broad basic and clinical sciences knowledge and apply that knowledge with respect to Cardiology, Respiratory and Sleep science.
- understand the application of safe and effective clinical practice in physiological measurement.
- understand the basic principles underpinning the routine investigations and procedures carried out in the diagnosis and treatment of cardiovascular and respiratory disease.

Assessment

Description		Weighting or Pass/Fail
1	Coursework	50%
2	Examination	50%

4BM0014 Introduction to the Practice of Cardiovascular, Respiratory and Sleep Science

Credit value	20
Pre-requisites	None
Co-requisites	None
Prohibited combinations	None
Module Leader	Jacqueline Laverty
Telephone	3537
Email	jackielaverty@wlv.av.uk
Staff Room Number	MA209

Module description

The module aims to:

introduce the student to the application of science within the healthcare environment and to ensure that they are able to work safely within this environment.

On completion of the module, the student is expected to be able to:

- demonstrate a basic understanding of the anatomy and physiology of the body systems related to cardiology, vascular, respiratory and sleep science
- understand the application of safe and effective clinical practice in physiological measurement
- demonstrate an understanding of the importance of effective multidisciplinary team working in the investigation and treatment of patients together with an understanding of the importance of patient centred care and the range of needs of people with disabilities

Assessment

Description		Weighting or Pass/Fail
1	Coursework: 1000 word assignment considering the underlying principles associated with an area of clinical practice	50%
2	Examination: Written examination of two hours duration assessing all learning outcomes of the module	50%

4PY013 Molecular Basis of Life

Credit value	20
Pre-requisites	None
Co-requisites	None
Prohibited combinations	None
Module Leader	Dr Daron Fincham
Telephone	2130
Email	D.Fincham@wlv.ac.uk
Staff Room Number	MA

Module description

The module aims to:

provide study of cell biology, biochemistry and genetics through investigation of cell structure and organelles, enzyme action and metabolism and gene structure, function and expression.

On completion of the module, the student is expected to be able to:

- Identify the structure and function of the major macromolecules, cellular processes and metabolism.
- Perform basic laboratory techniques that support practical investigations in molecular biology.

Assessment

Description		Weighting or Pass/Fail
1	Practical	40%
2	Examination	60%

Level Five

5BM014 Workbased Placement and Partners

Credit value	20
Pre-requisites	None
Co-requisites	None
Prohibited combinations	None
Module Leader	Dr Jan Martin
Telephone	1154
Email	J.Martin@wlv.ac.uk
Staff Room Number	MA206

Module description

The module aims to:

The overall aim of this module is that the student understands and gains experience of the importance of patient centred care, evidence based practice, clinical audit and multidisciplinary team working. A further aim of the module is to enable the student to understand and gain practical experience of working within one or more areas of Healthcare Science. Students would be expected to perform and demonstrate quality control compliance using a range of relevant methods and techniques

On completion of the module, the student is expected to be able to:

- demonstrate understanding and experience of the importance of patient centred care, the value of multidisciplinary team working including the use of evidence based laboratory medicine and clinical audit.
- demonstrate a professional approach as evidenced by working within a professional code of conduct.
- demonstrate the ability to perform an appropriate range of healthcare science techniques
- contribute to the writing of reports on test results
- understand the roles of different partners in the investigation and management of disease

Assessment

Description		Weighting or Pass/Fail
1	Professional Conduct	20%
2	Clinical Practice	80%

5BM017 Applications of Cardiac Physiology I

Credit value	20
Pre-requisites	4BM014 Introduction to the Practice of Cardiovascular, Respiratory and Sleep Science 4BM009 Introduction to Cardiovascular, Respiratory and Sleep Science II.
Co-requisites	None
Prohibited combinations	None
Module Leader	Jenny Tonkinson-Hoare
Telephone	2157
Email	jennytonkinson@wlv.ac.uk
Staff Room Number	MA208b

Module description

The module aims to:

The overall aim of this module is to ensure that the student understands the breadth of the application of science within Cardiac Physiology and building on previous learning develops and applies knowledge and understanding in Cardiac Physiology.

On completion of the module, the student is expected to be able to:

- Understand the normal physiological variability in humans, the concept of “normal” and the calculation and how to utilise normal ranges to define normal and abnormal test results across a range of relevant cardiac investigations.
- Understand the need for calibration and quality assurance for all measurements undertaken in Cardiac Physiology and know the abbreviations and units used.
- Understand the clinical framework for, and basic principles of:
 - Clinical Electrocardiography
 - The normal Electrocardiogram from birth to old age
 - Common arrhythmias and life threatening arrhythmias.
 - Development of a framework for interpretation of Electrocardiograms
 - Procedure limitation.
- Appreciate the need for effective communication skills and respect for the rights, dignity and privacy of patients and understand the implications of working in multidisciplinary teams.

Assessment

Description		Weighting or Pass/Fail
1	Coursework	50%
2	Examination	50%

5BM018 Introduction To The Applications of Respiratory Physiology

Credit value	20
Pre-requisites	4BM014 Introduction to the Practice of Cardiovascular, Respiratory and Sleep Science 4BM009 Introduction to Cardiovascular, Respiratory and Sleep Science II.
Co-requisites	None
Prohibited combinations	None
Module Leader	Jackie Laverty
Telephone	3537
Email	jackielaverty@wlv.ac.uk
Staff Room Number	MA209

Module description

The module aims to:

The overall aim of this module is to ensure that the student begins to understand the breadth of the application of science within Respiratory and Sleep Sciences and building on previous learning develops and applies knowledge and understanding in Respiratory and Sleep Sciences

On completion of the module, the student is expected to be able to:

- demonstrate an understanding of basic respiratory physiology recording techniques, their application in a clinical setting and interpretation of data obtained
- describe the pathophysiology and pharmacology associated with basic respiratory abnormalities and how they subsequently influence the respiratory function, showing an awareness of specific respiratory conditions encompassing pathophysiology, assessment and clinical intervention regimes.
- demonstrate an appreciation of a variety of specialist lung function investigations

Assessment

Description		Weighting or Pass/Fail
1	Coursework: 1000 word assignment considering an area of respiratory physiology investigation as outlined in the module content.	50%
2	Examination: Written examination of two hours duration assessing all learning outcomes of the module	50%

5BM019 Pathophysiology

Credit value	20
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Pre-requisites	4BM009 Introduction To Cardiovascular, Respiratory and Sleep Science 4BM004 Human Structure and Function
Co-requisites	None
Prohibited combinations	None
Module Leader	Dr Janine Fletcher
Telephone	2183
Email	J.X.Fletcher@wlv.ac.uk
Staff Room Number	MA208b

Module description

The module aims to:

This module aims to develop your knowledge and understanding of the pathophysiology of common cardiovascular and respiratory conditions.

On completion of the module, the student is expected to be able to:

- describe the major abnormalities of physiological control mechanisms in diseases of the cardiac, vascular and respiratory systems.
- show that they understand the cellular, tissue and systems responses to diseases of the cardiac, vascular and respiratory systems.
- define and explain the basis of common infections of the cardiac, vascular and respiratory systems.
- discuss the epidemiology, public health and psychosocial aspects of common diseases of the cardiac, vascular and respiratory systems.

Assessment

Description	Weighting or Pass/Fail
1 Coursework: Coursework based on a presented case study that encompasses aetiology, pathophysiology and diagnosis of the condition. You will be required to produce a 2000 word report analysing the presenting symptoms, provide a detailed explanation of the pathophysiology and discuss the expected outcome of the condition	50%
2 Examination: Written examination of three hours duration assessing all learning outcomes of the module	50%

5BM020 Clinical Instrumentation

Credit value	20
Pre-requisites	4BM014 Introduction to the Practice of Cardiovascular, Respiratory and Sleep Science 4BM009 Introduction to Cardiovascular, Respiratory and Sleep Science II.
Co-requisites	None
Prohibited combinations	None
Module Leader	Dr Ruth Shiner
Telephone	1124
Email	R.A.Shiner@wlv.ac.uk
Staff Room Number	MA207b

Module description

The module aims to:

The overall aim of this module is to ensure that the student understands the underpinning principles and properties of the measurement techniques that underpin investigations in Cardiology, Vascular, Respiratory and Sleep Science.

On completion of the module, the student is expected to be able to:

- describe using the correct terminology the basic measurement equipment and techniques used within Cardiology, Vascular, Respiratory and Sleep Science.
- describe and explain the principles of operation and roles of each modality in the patient pathway including the main clinical applications.
- describe and explain the professional considerations associated with each modality including possible health effects, and the quality assurance and legislative frameworks.
- critically evaluate the risks and benefits of each modality.

Assessment

Description		Weighting or Pass/Fail
1	Coursework: 2000 word essay considering the underlying physical principles associated with a particular physiological test	50%
2	Examination: Written examination of two hours duration	50%

5BM021 Research Methods and Professional Practice

Credit value	20
Pre-requisites	4BM003 Study and Professional Skills
Co-requisites	None
Prohibited combinations	None
Module Leader	Prof Paul Nelson
Telephone	1152
Email	P.N.Nelson@wlv.ac.uk
Staff Room Number	MA208

Module description**The module aims to:**

cover the basics of research methods and details of professional practice within the NHS

On completion of the module, the student is expected to be able to:

- possess knowledge and understanding of the principle elements of clinical research (such as experimental design, regulations, ethics, statistics, meta-analysis) that ultimately contribute to scientific knowledge and clinical benefit to the patient)
- possess knowledge and understand in searching and retrieving information plus disseminating and exploiting research
- possess knowledge and understanding of the principles of improvement, leadership and management that improves the quality of patient care
- possess knowledge and understanding in issues of consent, confidentiality, safety, infection control and critical incident reporting.

Assessment

Description		Weighting or Pass/Fail
1	Portfolio: Portfolio of principles of experimental design, regulations, statistics, ethics, meta-analysis, retrieving and disseminating research	50%
2	Portfolio: portfolio of principles of improvement, leadership, management, consent, confidentiality, safety, infection control, critical incidents	50%

5BM034 Applications of Cardiac Physiology II

Credit value	20
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Pre-requisites	4BM014 Introduction to the Practice of Cardiovascular, Respiratory and Sleep Science 4BM009 Introduction to Cardiovascular, Respiratory and Sleep Science II.
Co-requisites	None
Prohibited combinations	None
Module Leader	Jenny Tonkinson-Hoare
Telephone	2157
Email	jennytonkinson@wlv.ac.uk
Staff Room Number	MA208b

Module description

The module aims to:

The overall aim of this module is to ensure that the student understands the breadth of the application of science within Cardiac Physiology and building on previous learning develops and applies knowledge and understanding in Cardiac Physiology.

On completion of the module, the student is expected to be able to:

- Understand the normal physiological variability in humans, the concept of 'normal' and the calculation and how to utilise normal ranges to define normal and abnormal test results across a range of relevant cardiac investigations.
- Understand the need for calibration and quality assurance for all measurements undertaken in Cardiac Physiology and know the abbreviations and units used.
- Understand the clinical framework for, and basic principles of:
 - Blood pressure measurement.
 - Ambulatory blood pressure monitoring.
 - Ambulatory electrocardiography.
 - Stress test procedures.
 - Procedure limitation.
- Appreciate the need for effective communication skills and respect for the rights, dignity and privacy of patients and understand the implications of working in multidisciplinary teams.

Assessment

Description	Weighting or Pass/Fail
1 Coursework	50%
2 Examination	50%

5BM035 Further Applications of Respiratory Physiology

Credit value	20
Pre-requisites	4BM014 Introduction to the Practice of Cardiovascular, Respiratory and Sleep Science 4BM009 Introduction to Cardiovascular, Respiratory and Sleep Science II.
Co-requisites	None
Prohibited combinations	None
Module Leader	Jackie Laverty
Telephone	3537
Email	jackielaverty@wlv.ac.uk
Staff Room Number	MA209

Module description

The module aims to:

The overall aim of this module is to ensure that the student furthers their understanding of the breadth of the application of science within Respiratory and Sleep Sciences and building on previous learning develops and applies knowledge and understanding in Respiratory and Sleep Sciences

On completion of the module, the student is expected to be able to:

- further demonstrate an understanding of respiratory physiology recording techniques, their application in a clinical setting and interpretation of data obtained
- describe the pathophysiology and pharmacology associated with basic respiratory abnormalities and how they subsequently influence the respiratory function, showing an awareness of specific respiratory conditions encompassing pathophysiology, assessment and clinical intervention regimes.
- demonstrate an appreciation of a variety of specialist lung function investigations

Assessment

Description		Weighting or Pass/Fail
1	Coursework: 1000 word assignment considering an area of respiratory physiology investigation as outlined in the module content.	50%
2	Examination: Written examination of two hours duration assessing all learning outcomes of the module	50%

Level Six

6BM013 Workbased Placement

Credit value	20
Pre-requisites	5BM014 Workbased Placement and Partners
Co-requisites	None
Prohibited combinations	None
Module Leader	Dr Jan Martin
Telephone	1154
Email	J.Martin@wlv.ac.uk
Staff Room Number	MA206

Module description

The module aims to:

The aim of this module is to enable the student to understand and gain further practical experience of working in healthcare science and to perform and demonstrate quality control compliance using a range of core and specialised methods and techniques

On completion of the module, the student is expected to be able to:

- demonstrate the ability to perform a range of core and specialised methods and techniques and comply with required quality standards and be able to evaluate the performance of one or more methods including internal quality control and external quality assessment data and to recommend corrective action where appropriate.
- demonstrate the ability to validate results from a range of procedures to inform repeat analysis, need for additional investigations, or reporting and perform an audit of the effectiveness of one or more methods, including the introduction of new methods, and evaluate the outcome in the context of the clinical application.
- demonstrate the ability to draft routine reports for validation, prioritise reports and identify cases for referral to appropriate senior colleague and to prepare and make an oral presentation to peers using modern software and to draw conclusions from data and discuss these with the audience.
- provide evidence of attending a range of meetings and other activities outside the laboratory including those that involve patients and other healthcare professionals

Assessment

Description		Weighting or Pass/Fail
1	Clinical Practice: Completion of appropriate sections of the Training Manual	50%
2	Portfolio: A portfolio which includes:- • draft routine reports for validation, • how to prioritise reports • identification of cases for referral to appropriate senior colleague • a copy of an oral presentation to peers • reflection on discussion of oral presentation with the audience. • evidence of attending a range of meetings • reflective reports for each meeting and other activities including those that involve patients and other healthcare professionals and an evidence based review.	50%

6BM014 Honours Research Project

Credit value	40
Pre-requisites	Students must study 100 credits of BM coded modules at level 4 and at level 5 relevant to their programme of study, or equivalent
Co-requisites	None
Prohibited combinations	None

Module Leader	Dr Janine Fletcher
Telephone	2183
Email	J.X.Fletcher@wlv.ac.uk
Staff Room Number	MA208b

Module description

The module aims to:

Allow you to undertake a research project, in an area relevant to your discipline, from conception to completion.

On completion of the module, the student is expected to be able to:

- propose a research question and design a protocol to test your question.
- gather, process and analyse the relevant literature and produce a systematic review
- complete a program of practical work/data collection, ensuring that Health and Safety and ethical implications are considered.
- demonstrate that you can calculate, interpret and present a critical evaluation and analyses of the data with reference to current publications.

Assessment

Description		Weighting or Pass/Fail
1	Presentation: You will produce and present a scientific poster summarising your Project in a designated poster session. During this session you will be given an opportunity to defend your research Project with your Supervisor and second assessor.	20%
2	Report	80%

6BM019 Cardiac Physiology in Practice

Credit value	40
Pre-requisites	5BM017 Applications of Cardiac Physiology I. 5BM034 Applications of Cardiac Physiology II
Co-requisites	None
Prohibited combinations	None
Module Leader	Jenny Tonkinson-Hoare
Telephone	2157
Email	jennytonkinson@wlv.ac.uk
Staff Room Number	MA208b

Module description

The module aims to:

The overall aim of this module is to ensure that the student begins to gain wider knowledge of investigations undertaken in a Cardiology Department particularly provocative electrocardiography, pacing and diagnostic cardiac catheterisation in adults and children. This module will also build on earlier work to develop the themes of public health and epidemiology of cardiovascular disease, risk factors, risk assessment, primary prevention including behavioural change management.

On completion of the module, the student is expected to be able to:

- Understand the physiology, pathophysiology, pharmacology, practice and principles related to provocative electrocardiography, pacing, diagnostic cardiac catheterisation and invasive pressure measurement and cardiac interventions.
- Understand the principles and application of management of bradycardia.
- Understand the differences between children and adults with respect to cardiac physiology investigations.
- Demonstrate an understanding of the importance of patient-centred care and the range of needs of people with disabilities within this care pathway and demonstrate an understanding and experience of the value of clinical audit in optimising services.

Assessment

Description		Weighting or Pass/Fail
1	Coursework	50%
2	Examination	50%

6BM020 Respiratory Physiology in Practice

Credit value	40
Pre-requisites	4BM014 Introduction to the Practice of Cardiovascular, Respiratory and Sleep Science 4BM009 Introduction to Cardiovascular, Respiratory and Sleep Science II. 5BM018 Introduction To The Applications of Respiratory Physiology 5BM035 Further Applications of Respiratory Physiology
Co-requisites	None
Prohibited combinations	None
Module Leader	Jackie Laverty
Telephone	3537
Email	jackielaverty@wlv.ac.uk
Staff Room Number	MA209

Module description

The module aims to:

The overall aim of this module is to ensure that the student develops knowledge and understanding of a wider range of investigations utilised within Respiratory and Sleep Sciences and their application in relevant care pathways

On completion of the module, the student is expected to be able to:

- review and develop understanding of basic respiratory and sleep physiology investigations in a range of patient groups
- demonstrate an understanding of the underpinning basic and clinical scientific principles with respect to blood gas analysis, respiratory sleep studies and challenge testing.
- demonstrate an understanding of the importance of patient centred care pathways and demonstrate an awareness of the importance of clinical audit in the optimisation of service provision catering for the needs of people with a range of disabilities.

Assessment

Description		Weighting or Pass/Fail
1	Coursework: 2000 word assignment considering an area of respiratory physiology as outlined in the module content.	50%
2	Examination: Written examination of three hours duration assessing all learning outcomes of the module	50%

6BM026 Recent Developments in Cardiac Physiology

Credit value	20
Pre-requisites	5BM017 Applications of Cardiac Physiology I 5BM034 Applications of Cardiac Physiology II
Co-requisites	None
Prohibited combinations	
Module Leader	Ruth Shiner
Telephone	1124
Email	R.A.Shiner@wlv.ac.uk
Staff Room Number	MA207b

Module description

The module aims to:

consider recent developments in Cardiac Physiology associated with the specialist theory curriculum at level 6. It will cultivate an awareness of research findings, clinical developments, and current guidelines associated with practice as a Healthcare Science Practitioner in Cardiac Physiology.

On completion of the module, the student is expected to be able to:

- Develop an awareness of recent developments in the discipline of Cardiac Physiology
- Assess the impact of key research studies in contributing to the knowledge base within the discipline
- Critically evaluate the impact that new findings have on the patient journey and the role of the Healthcare Science Practitioner in Cardiac Physiology

Assessment

Description		Weighting or Pass/Fail
1	A seen examination of three hours duration where students are required to answer three out of five questions relating to recent advances in Cardiac Physiology and their impact on professional practice. Students are permitted to bring a list of references into the examination which must be submitted at the end of the examination.	100%

6BM027 Recent Developments in Respiratory and Sleep Physiology

Credit value	20
Pre-requisites	5BM018 Introduction To The Applications of Respiratory Physiology 5BM035 Further Applications of Respiratory Physiology
Co-requisites	None
Prohibited combinations	
Module Leader	Ruth Shiner
Telephone	1124
Email	R.A.Shiner@wlv.ac.uk
Staff Room Number	MA207b

Module description**The module aims to:**

consider recent developments in Respiratory and Sleep Physiology associated with the specialist theory curriculum at level 6. It will cultivate an awareness of research findings, clinical developments, and current guidelines associated with practice as a Healthcare Science Practitioner in Respiratory and Sleep Physiology.

On completion of the module, the student is expected to be able to:

- Develop an awareness of recent developments in the discipline of Respiratory and Sleep Physiology
- Assess the impact of key research studies in contributing to the knowledge base within the discipline
- Critically evaluate the impact that new findings have on the patient journey and the role of the Healthcare Science Practitioner in Respiratory and Sleep Physiology

Assessment

Description		Weighting or Pass/Fail
1	A seen examination of three hours duration where students are required to answer three out of five questions relating to recent advances in Respiratory and Sleep Physiology and their impact on professional practice. Students are permitted to bring a list of references into the examination which must be submitted at the end of the examination.	100%

Clinical Practice

Clinical Practice is structured within the course to foster the development of skills alongside academic knowledge. Clinical Practice is completed in line with requirements by the Department of Health for accredited courses.

Students are required to complete workbased training in each of the three years of the course. Workbased training is delivered as follows:

Year One:

- Students are required to complete 10 weeks of workbased training during their first year of study i.e. 50 days in total.
- Scheduled sessions in semester one will be spent in the University Physiology Skills Lab to introduce basic techniques. This will also include vascular science demonstrations.
- Students will be required to complete a 4-5 week placement in each of cardiac physiology and respiratory and sleep physiology during January and May i.e. two placements each of 20-25 days.
- At the end of year one students have to choose one specialism in which to complete the remainder of their clinical practice.

Year Two:

- Students are required to complete 15 weeks of workbased training during their second year of study i.e. 75 days in total.
- Students spend five weeks in placement in a hospital department of their chosen specialism during August and September prior to start of year two i.e. a total of 25 days.
- Students are also required to complete two days per week during semesters one and two of year two i.e. a total of 50 days.

Year Three:

- Students are required to complete 25 weeks of workbased training during their third year of study i.e. 125 days in total.
- Students spend ten weeks in placement in a hospital department of their chosen specialism during June and July prior to start of year three i.e. a total of 50 days.
- Students are also required to spend three days per week during semesters one and two of year three i.e. a total of 75 days.
- Students will also complete their research project during this time in the workplace.

Since the requirements for workbased training is determined by professional requirements any student who is absent for any part of the designated time will be required to make up this time at a later stage.

You will obtain clinical experience in both Cardiac Physiology and Respiratory and Sleep Physiology during year one. These four week placements may take place in different hospital departments. Following this you will be required to select one specialism in which to complete the remainder of your training. It is envisaged that your workbased training in years two and three will be in the same hospital department. Students will be consulted on their preference for their final specialism but first choice can not be guaranteed. In addition, students will be consulted on the location of placements but first choice of placement can not be guaranteed. The course team will make every effort to provide placements at locations which are geographically convenient to all students. Students should note that they are responsible for covering any transport and accommodation costs whilst completing workbased placements.

An outline of the timing of workbased training is shown on the following page.

Schematic representation outlining the approximate timing of workbased training through the three years of study.

Uni Week	w /c		Year One	Year Two	Year Three
3	17 Sept	Welcome Week		Two Days	Three Days
4	24 Sept	S1 1		Two Days	Three Days
5	1 Oct	S1 2		Two Days	Three Days
6	8 Oct	S1 3		Two Days	Three Days
7	15 Oct	S1 4		Two Days	Three Days
8	22 Oct	S1 5		Two Days	Three Days
9	29 Oct	S1 6		Two Days	Three Days
10	5 Nov	S1 7		Two Days	Three Days
11	12 Nov	S1 8		Two Days	Three Days
12	19 Nov	S1 9		Two Days	Three Days
13	26 Nov	S1 10		Two Days	Three Days
14	3 Dec	S1 11		Two Days	Three Days
15	10 Dec	S1 12		Two Days	Three Days
16	17 Dec	S1 Assess 13		Two Days	Three Days
17	24 Dec	Christmas Holidays			
18	31 Dec	Christmas Holidays	Two/Three Days		
19	7 Jan	Christmas Holidays	Five Days		
20	14 Jan	Year Assess	Five Days		
21	21 Jan	S1 14 (feedback)	Five Days		
22	28 Jan	S2 1	Two/Three Days	Two Days	Three Days
23	4 Feb	S2 2		Two Days	Three Days
24	11 Feb	S2 3		Two Days	Three Days
25	18 Feb	S2 4		Two Days	Three Days
26	25 Feb	S2 5		Two Days	Three Days
27	4 Mar	S2 6		Two Days	Three Days
28	11 Mar	S2 7		Two Days	Three Days
29	18 Mar	S2 8		Two Days	Three Days
30	25 Mar	Easter Holidays			
31	1 Apr	Easter Holidays			
32	8 Apr	S2 9		Two Days	Three Days
33	15 Apr	S2 10		Two Days	Three Days
34	22 Apr	S2 11		Two Days	
35	29 Apr	Assess Year			
36	6 May	S2 12			
37	13 May	S2 Assess 13	Five Days		
38	20 May		Five Days		
39	27 May		Five Days		
40	3 Jun		Five Days	Five Days	
41	10 Jun			Five Days	
42	17 Jun			Five Days	
43	24 Jun			Five Days	
44	1 Jul	S2 14 (revision)		Five Days	
45	8 July	Resit week		Five Days	
46	15 July			Five Days	
47	22 July			Five Days	
48	29 July			Five Days	
49	5 Aug			Five Days	
50	12 Aug		Five Days		
51	19 Aug		Five Days		
52	26 Aug		Five Days		
			Five Days		
			Five Days		

N.B. This timetable is subject to change.

Dedicated practitioner lecturers are key to the delivery of teaching in the particular specialisms of the course. They ensure that the delivery of specialised material is contextualised to effectively support and prepare students for the specialist clinical modules and clinical practice. These staff have a key role to play in the liaison with practitioners who will act as mentors and assessors.

A University Internal Verifier will liaise with you and your work-based supervisor in the workplace. The Internal Verifier will be a Practitioner lecturer in physiological sciences or an appropriate Practitioner supported by the Lead Internal Verifier for that discipline. All departments will initially be audited to evaluate its suitability as a clinical training department at the commencement of your training. The audit is undertaken by an Internal Verifier. It will record the clinical area staff profile, the availability and qualifications of assessors, the availability of teaching and learning resources, current workload and opportunities for student experience, research and other activities which may influence practice, and an action plan for future developments.

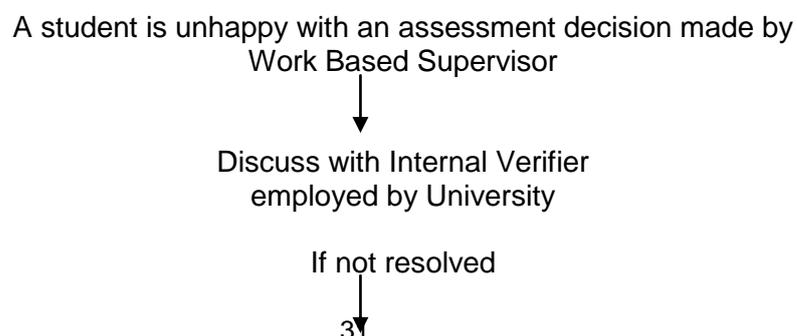
The acquisition of clinical skills will be fostered by a work-based supervisor who will provide formative opportunities for practice. Your work-based supervisor will advise and support you to:

- Assist in the development of safe practices
- Provide formative opportunities for skill acquisition
- Identify assessment opportunities
- Identify and organise training opportunities not available in your department
- Foster theoretical underpinning of practical competence outcomes.

You will be required to follow the Healthcare Science Practitioner Training Programme Training Manual for Cardiovascular, Respiratory and Sleep Physiology for testing clinical competence at pre-determined stages which you are required to complete during your training. This staging ensures that you become adept at basic techniques before developing competence in more advanced techniques. The assessment of this will involve demonstration of practical competence, together with question and answer sessions to test your knowledge and comprehension. Your work-based supervisor will establish that the designated outcomes have been achieved and will document that process. Approximately twice each year you will be visited by your Internal Verifier who will review your progress with the Training Manual. They may wish to observe you carrying out a particular procedure whilst being assessed by your work-based supervisor. This is to ensure that all work-based supervisors are conforming to accredited requirements. A report will be produced relating to their visit and a copy will be sent to you and your work-based supervisor.

If assessment of a particular practical technique is failed then you will be referred for that component of the practice assessment. Where it is likely that a student will be referred in practice the Internal Verifier must be informed at the earliest opportunity. Students referred in practice will normally be allowed one further attempt to pass the outstanding outcomes. Further attempts may be organised following review with the Internal Verifier and Lead Verifier. An appeals process is in place if you disagree with an assessment decision made within your workplace.

The appeals process is outlined as:



Internal Verifier discusses issue
with University Lead Verifier &
Personal Tutor

If not resolved



Issue discussed with
Professional External Examiner

It is important that any appeals are raised as soon as possible after the initial event.

In addition to the Training Manual you will complete a University generated Personal Development Portfolio (PDP) which will demonstrate your understanding of the relationship between theory and practice and the application of skills in reflection, interpretation and critical analysis. You will add to your Portfolio each year and credits will be awarded for its satisfactory completion as part of practice based modules. Structured University based tutorials relating to its completion will form part of your timetabled academic study. Your Portfolio will be assembled electronically through Pebblepad to form a Personal Development Portfolio (PDP) which will be a record of your professional development during your studies. It is hoped that you will continue with this following graduation to provide an ongoing record of your continuing professional development within your professional practice.

Health & Safety issues

All students are required to have a Criminal Records Bureau (CRB) check prior to admission onto the course. They are also required to declare any health issues at the start of the course. Self-declarations that no changes have occurred to CRB or health status will be required at the commencement of each academic year. Students are also required to note that proof of certain vaccinations will also be required prior to commencing workbased training.

Health and Safety in your training environment is of the utmost importance. Your training department will be required to adhere to NHS Trust policies relating to Health and Safety. An audit will be undertaken of all workbased placements by an Internal Verifier before your commencement of work-based training. This will include assessment of suitability of clinical areas in terms of Health and Safety and standards of clinical practice, including infection control, adverse incident reporting and clinical risk management. You are also encouraged to evaluate your own clinical practice environment and action will be taken if conditions are reported as being unsuitable for any reason. Audit by the Internal Verifier will ensure adequate clinical practice areas, until such time that formal accreditation of training departments is introduced as part of the statutory regulation of practice.

An awareness of Health and Safety issues will also be developed as part of studies towards the Professional Practice modules.

Course Management

Course Tutor	Dr Ruth Shiner Head of Department of Biomedical Science and Physiology Tel: 1124 R.A.Shiner@wlv.ac.uk
Course Tutor	Dr Janine Fletcher Senior Lecturer Tel: 2183 J.X.Fletcher@wlv.ac.uk
Lead Verifier Cardiology	Mrs Jenny Tonkinson-Hoare Practitioner Lecturer in Cardiology Tel: 2702 jennytonkinson@wlv.ac.uk
Lead Verifier Respiratory Physiology	Mrs Jackie Laverty Practitioner Lecturer in Respiratory Physiology Tel: 3537 jackielaverty@wlv.ac.uk
Personal Tutoring	

The BSc (Hons) Healthcare Science course is under the overall management of the Course Leader and is managed on a day to day basis by a team of personal tutors. When you commence your course you will be assigned a personal tutor who will be responsible for academic counselling and pastoral care. Your personal tutor will be the first point of contact in the event of difficulties whilst in the University. You will meet with your personal tutor at the beginning of each academic year and you are advised to keep in touch with them at least at three monthly intervals. You are specifically required to contact them if you have any problems that need to be raised.

For contacting your tutor and other academic staff, we operate an electronic booking system, 'SAMS', you will be fully introduced to this during Welcome Week, and it can be accessed at the following address: <http://sams.wlv.ac.uk>

During work based training you will be managed according to the policies of your hospital department. You will be assigned a work-based supervisor responsible for advice, support and formative training in practice skills. You will also be visited at least twice per year by an allocated verifier who has the responsibility to ensuring that all is well. Please feel free to contact them, or the lead verifier for your discipline, at any time if you have any problems relating to your practice.

Course Committee

The BSc (Hons) Healthcare Science Course Committee is composed of the Course Leader and associated Personal Tutors. It also includes an elected student representative from each year of the course in each discipline, representatives from Clinical Assessors in Hospital Clinical Physiology Departments, the University Lead Verifiers and representatives from the supporting departments and relevant service sections within the University. The Course Committee meets whenever necessary, but on at least one occasion per semester. Dr Ruth Shiner, Head of Department of Biomedical Science and Physiology chairs the committee. The main function of the Committee is to discuss issues and to identify and resolve problems that affect the operation of the Course. It is at the same time another line of communication between the students and the staff. The role of the student representative is a vital one. The work is interesting, not too onerous and gives you a useful insight into how things work. Training is available to student representatives through the Student Union. The role involves attendance at the Course Committees to which the representative relays the views of the students. At the end of the year a report is produced for inclusion in the Course Annual Report. In addition the same representatives attend informal

meetings of the Course Team to ensure a smoother day to day running of the Course and may be asked to contribute to student meetings within the School of Applied Sciences as a whole. Student representatives are also called upon to meet external examiners who quality assure the course on behalf of the University and Accrediting Bodies. Do give careful consideration to the possibility of standing for election as a student representative. Details of student representatives are given to each student cohort upon their election at the beginning of each academic year.

Staff Involved with the Programme

Directory of staff teaching on BSc Healthcare Science Programme 2012-13

Name	Title	Room	Tel	e-mail@wlv.ac.uk
Dr Steve Anderson	L/SL in Human and Clinical Physiology	MA122b	1127	steve.anderson
Dr Paul Barrow	L/SL in Physiology & Pharmacology	MA209b	2702	P.A.Barrow
Miss Donna Brown	Demonstrator in Biomedical Science	MA118a	1089	D.Brown
Dr Iain Coleman	Principal Lecturer [Teaching and Learning]/Pharmacology	MA122c	1139	I.P.L.Coleman
Dr Gillian Condé	SL in Applied Human Physiology	MA209	1153	G.L.Conde
Dr Simon Dunmore	SL in Clinical Biochemistry	MA209b	1128	S.Dunmore
Dr Janine Fletcher	L/SL in Human and Clinical Physiology	MA208b	2183	J.X.Fletcher
Dr Peter Griffiths	SL in Anatomy & Developmental Physiology	MA209b	1172	P.J.Griffiths
Dr Martin Khechara	Lecturer in Microbiology	MA209	3538	MPKhechara
Ms Jackie Laverty	Lecturer Practitioner In Respiratory Physiology	MA209	3537	jackielaverty
Dr Jan Martin	Principal Lecturer Departmental Placement Manager	MA206	1154	J.Martin
Mr Tom Masters	Demonstrator	MA118a	1089	Tom.Masters
Dr Paul Nelson	Reader in Biomedical Science/Immunology	MA208	1152	P.N.Nelson
Dr Iain Nicholl	L/SL in Clinical Biochemistry & Genetics	MA208	1134	I.Nicholl
Dr Petula Nurse	Principal Lecturer Departmental Student Manager	MA206	1180	P.Nurse
Dr Elizabeth O'Gara	Lecturer in Biomedical Science	MA208b	1394	E.O'Gara
Dr Shantha Perera	L/SL in Immunology & Medical Microbiology	MA209b	1140	S.A.Perera
Dr Ruth Shiner	Head of Department of Biomedical Science and Physiology	MA207b	1124	R.A.Shiner
Mrs Sara Smith	Senior Lecturer in Cellular Pathology	MA209	1149	S.Smith2
Mrs Jenny Tonkinson-Hoare	Lecturer Practitioner in Cardiology	MA208b	2702	jennytonkinson
Dr James Vickers	L/SL in Haematology and Serology	MA208b	1136	J.Vickers
Mr Adam Watts	Demonstrator in Pharmacology	MA118a	1126	A.S.Watts

Where to get help with your course

If you find that there is something you need to know, please check on [SAS Student Support Portal in WOLF](#) or contact the SAS Student Support Office in room MA104, Tel: 01902 322129 or Email: sasstudentsupport@wlv.ac.uk.

Student Support

If you encounter any issues (personal or academic) the following diagram directs you to the appropriate department or staff member.



Employability & Your Personal Development Portfolio (PDP)

What is 'Employability'?

'Employability' is concerned with the development of skills aimed at enhancing your employment prospects throughout your time here at the University of Wolverhampton. Developing specialist subject and academic knowledge is important for employers but they also want to employ individuals who are able to:

- Communicate effectively,
- Work in a team and have good interpersonal skills.
- Solve problems
- Work on their own using their own initiative and are able to adapt to changing situations
- Be self-confident

How Will You Develop Your Employment Skills?

At the School of Applied Sciences we aim to provide you with the opportunity to develop these through the modules you will be studying and the workbased placements that you complete. The assessments you do for your modules are designed to help you develop Subject specific skills through the research you undertake for the assignments. In addition, they are also designed to help you develop other key skills such as your written communication skills. Where you have formal presentations, this will build your self-confidence in addition to helping you develop your skills of verbal communication. Working as part of a team will develop vital group-work skills. Attending your classes regularly will further ensure that you have the opportunity to develop other skills.

Throughout your time at the University, you will develop and be able to demonstrate a number of skills, some of which are listed below:

- Working as part of a group
- Demonstrating teamwork skills and leadership skills
- Effective communication
- Written (via reports etc.)
- Oral (through formal presentations)
- Problem-solving
- IT skills (which include use of basic packages for word processing, spreadsheets, use of email etc.)
- Time management
- Attending classes on time
- Handing in your assignments by the deadline date

You will also be undertaking work-based training as part of your course. The experience you gain within a work environment is a very worthwhile one and also helps you to develop key skills alongside the practical skills specified by your profession.

This course has been constructed to comply with the requirements for the NHS Modernising Scientific Careers initiative which seeks to introduce more structured career pathways for individuals who are employed within NHS scientific careers. The education and training delivered as part of this course follows the requirements laid down by the NHS for entry into the profession of a Healthcare Science Practitioner. The academic component of the course delivers the scientific underpinning knowledge required in both generic healthcare science and in more specific aspects of physiological sciences. There is also a schedule of workbased training integrated within the course which utilises placements offered within local NHS trusts. This aims to provide experiential learning during the first year of study in Cardiac Physiology and Respiratory and Sleep Physiology to develop a holistic view of the areas contributing to high-quality care in physiological sciences. Subsequently you will then specialise in developing competency in clinical techniques in either Cardiac Physiology or

Respiratory and Sleep Physiology as specified within the practitioner training manual for that specialism.

Career opportunities and Future Study

The completion of the accredited BSc (Hons) Healthcare Science award thoroughly prepares a student for a career as a Healthcare Science Practitioner. Upon graduation an individual is suitable for employment in Cardiac Physiology or Respiratory and Sleep Physiology Departments within NHS Trust Hospital departments, Private Hospitals, Private Medical Service Providers and the Armed Forces. Alternatively graduates can enter employment within sales and development for related medical manufacturers such as pacemaker companies, echocardiography industries, spirometry manufacturers and other equipment manufacturers. Following suitable practical experience and assessor training practitioners can take on training responsibilities themselves in the workplace as work-based supervisors. Management opportunities also exist in overseeing the day to day operation of hospital departments or sections. Practitioners can also have roles working for professional regulatory bodies and in education as lecturers and verifiers of clinical practice.

Graduates are able to progress through the Modernising Scientific Careers structure. Opportunities exist for practitioners to enter Healthcare Scientist Training programmes where more advanced clinical training is completed alongside postgraduate study. Further training and development opportunities exist in specialist areas of practice to undertake Higher Specialist Scientific Training in order to progress to consultant level practitioner and completion of Doctorate study.

School of Applied Sciences - Student Charter

The University is a community of learning; each and every member, be they staff or students, have responsibilities to that community as well as to themselves. All students of the university have the right to study in an environment that promotes success. This means that no one should be distracted by the inconsiderate behaviour of others; for example by people who arrive late, or talk in lectures or the learning centre.

In order to help you achieve your objectives with us, we will strive to provide:

- Effective impartial advice and guidance
- An effective introduction to the University, the School of Applied Sciences and your chosen course
- A welcoming environment with quiet places to study
- Appropriate resources including books and computing resources
- Qualified and professional tutors and staff
- Stimulating and well planned learning opportunities
- Well-defined and appropriate programmes of study
- Opportunities to plan and review progress with tutors and student support workers
- Access to learning support
- Access to confidential counselling and careers advice

We will aim to ensure that

- Timely and appropriate feedback will be provided on assessments
- You have a personal tutor
- You can book an appointment with your tutor using the on-line booking system
- You will have access to the information you need to progress on your course e.g. each module you study will be accompanied by a module guide, similarly your award/pathway will have a guide or handbook

The University expects and needs you to:

- Make regular use of the electronic systems provided for your use e.g. E-Mail, E-Vision, Wolf and the student appointments system. If you do not make use of these resources you cannot perform well.
- Attend regularly and punctually, this means for example, that you should not enter a teaching room after the session has started or miss appointments you have made to see staff.
- Given in all your assessments on time (or they will not be marked)
- Show courtesy and respect to staff and other students, this means for example, that cell phones should be turned off in all teaching sessions.
- Ensure that you understand the requirements of your award/pathway
- Ensure that you are aware of the requirements of each module you are studying and are aware which sessions to attend and what the assessment procedures are
- Respect and abide by University Regulations, e.g. Equal Opportunities Policy, ID Cards, quiet areas
- Bring all the personal equipment that you require to classes/workshops
- Show consideration to others by listening attentively and participating in class activities
- Keep your tutor informed if you have personal problems that affect your work; if these problems make it necessary to seek extensions, to do so before the deadline
- Identify for yourself what constitutes academic misconduct such as plagiarism and make every effort to avoid it.
- Use the student support office (Room MA104) to get quick answers to your queries without hunting for a lecturer.

- Seek approval for and confirm any change of programme within the deadlines
- Inform the University when your address or other contact details change
- Follow Health and Safety guidelines in laboratory and fieldwork settings.
- Behave appropriately as an ambassador for the University when working off campus

Accreditation of Prior Learning (APL)

Accreditation of prior learning (APL) can be awarded to students who have related undergraduate studies where a grade of B or 60% has been demonstrated in that area and all learning outcomes have been demonstrated. APL can be granted at levels four and five but not at level six. If you wish to be considered for APL please speak to your personal tutor supplying evidence from your previous studies.

Academic Regulations

This course adheres to the University's academic regulations for students undertaking an undergraduate degree, commencing after October 2002. A full version of these regulations can be found on the University web site: <http://www.wlv.ac.uk/polsregs>
These regulations govern your course and will be binding on you. It is, therefore, important that you read and become familiar with them.

The BSc (Hons) Healthcare Science award does not allow compensation for any module due to its professional requirements.

Learning, Teaching & Assessment: What Can You Expect?

Learning & Teaching Resources

There is a wide range of resources available for your learning, including on-line materials for each module (on WOLF), web-based information and, importantly, the online resources provided by the Learning Centres. Module information will direct you to specific information sources, but there is an expectation, particularly at Level 6, that you will research your own sources in order to enhance your achievement of the learning outcomes for the programme.

Assessment

Types of assessment

The tutor, as part of the introduction to the module, will outline the assessment tasks. A more detailed briefing for each assignment will be available via the WOLF topic that supports the module. There is a wide range of assessment (further details can be found in the Undergraduate Student Guide), including:

- Written assignments
- Laboratory reports
- Reports
- Time Constrained Assignments
- Examinations (open book or closed book)

Marking of Assessments

The marking and grading of your work, be it for example an assignment or an exam is a comprehensive exercise involving first-marking by tutors, moderation by the tutors in the module team and the submission of assessments to independent external examiners who monitor and advise, thereby ensuring quality and standards.

The normal return period for feedback on your marked (summative) work is three weeks after the date of submission. You will receive a grade achieved and comments on whether and how you have achieved the learning outcomes.

Assessment grades follow the '16 point Grade Point Scale' format. Grades range from A16 to F0. For the majority of modules the average achievement level will be in the C category which is 'average-good'; grades above this are 'above average-very good to outstanding', and grades below are from 'satisfactory' down to 'uncompensatable fail'. Thus, an 'upper' C grade (e.g. C10) is comfortably a 'good' grade within the A to F distribution. Descriptions of what is required for each grade at a particular level of study is given at the end of this section.

What Should You Avoid? What Should You Seek to Achieve?

- Remember that you are writing for another reader or readers. Do not assume that the reader will fill the gaps in your work.
- Use the introduction to establish what you are doing in your assignment.
- Use examples to support your analysis.
- Be objective and aim for reasoned argument. Phrases such as 'in my opinion' or 'in my view' are of little value because they are subjective. Do not use them. You should aim to support your points with evidence and reasoned analysis.
- Always acknowledge the use of someone else's work, using the appropriate system of referencing. Also, it is a very serious offence to use someone else's work, especially word-for-word or paraphrased contents of other's work. Please see the section below on Academic Misconduct
- Always keep copies of the sources or keep a note of each source as you use it, so that you can reference it in your bibliography at the end of your assignment.
- Plan your work in advance so as to meet the hand-in (submission) date. Writing up your research is often more time-consuming than you expect.

- Get help from tutors and mentors if you are unsure.
- Above all, do not 'suffer in silence'; the Course Leader, Student Advisor and tutors will be able to provide guidance so please use them.

Why are ethical considerations important when researching for assignments?

Research is an essential and vital part of teaching and learning. Much is literature-based, using books, journals, periodicals and web-based material. However, some research may involve interaction with organisations and people. You should ensure that you do **NOT** conduct research that could be intrusive or sensitive or could cause psychological harm or suffering to others.

For all modules that bring you into contact with organisations and people you will be required to follow appropriate ethical approval procedures. These will be explained to you by relevant module leaders. Where individuals or organisations have agreed to provide information to you, you may be required to produce evidence that permission has been given for access or contact.

What Feedback Can You Expect?

What can you expect from your tutors whilst you are preparing your work?

- Normally tutors will advise you, as a group, on the assessment at or near the start of the module.
- Thereafter, you may consult your tutors by having a quick chat after a teaching session or arranging an appointment through SAMS; <http://sams.wlv.ac.uk>

What should you not expect from your tutors?

- It is not the role of a tutor to read drafts of your work and correct them with a view to your obtaining a 'good mark'. An assignment should reflect your effort and input, and the role of the tutor is to guide and advise. It is then your responsibility to assess this advice and guidance and use it accordingly. Tutors provide this in good faith, but its use - or lack of it - by you is not an automatic route to a good or a poor grade. Other factors, particularly those pertaining to your skills and efforts, will play a vital role in your achievement.
- You will not normally receive written feedback on formal University exams. However, should you wish to discuss your performance, you can make an appointment with the relevant module leader.

After completion of the assignment

- The main feedback is through a copy (to you) of the assessment feedback sheet by email from tutors/administrative support staff.
- In some modules, additional feedback may be available through distribution of an "outline answer", highlighting key points for guidance.

Feedback on Academic Work

All academic staff have the requirement to provide feedback on assessed work within a three week period following submission. Provisional grades for all items of assessment will be entered onto E:vision to enable your grade to be seen. In addition written feedback on coursework will be returned in person or electronically within this three week period. Students will be given the opportunity to examine their original scripts if required at a convenient opportunity. The original scripts will be initially retained by the tutor as they are required for external moderation and confirmation of grades by the external examiner. Once work has been approved by the external examiners students can arrange to collect the work in person from the tutor.

How You Can Comment on Learning & Teaching And Assessment

We greatly value your feedback; students' views are collectively influential in how we deliver L&T and are gathered through staff-student meetings and via questionnaires, particularly the Course

Evaluation Questionnaire that you will be asked to complete towards the end of the academic year. Such feedback is analysed for annual monitoring of modules, subjects and courses.

Level 4

Grade (Performance) Descriptors

A Work of an outstanding, excellent standard.	B Work of a very good standard. Above average	C Work of a competent average standard. Good.	D Work of a satisfactory standard.	E Work of an unsatisfactory standard.
Identification and full understanding of issues in the assessment. Full answers to all questions/task. Excellent examples used to illustrate response. Evidence of independent thinking. Attempts to relate appropriate theory and other relevant issues.	Very good understanding of the issues. Engages directly with the question. All main points and important issues of the question/task covered.	Generally sound understanding of basic theory and concepts. Content relevant to the question/task. Competently deals with main issues.	Some evidence of understanding of basic concepts/issues. Content in the main relevant but limited or little application of theory.	Superficial treatment of issues. Content not relevant to topic set. Material merely repeats taught input. Lacks understanding of basic theory/concepts. Possible use of extensive quoted passages.
Excellent identification and summary of major points, including all aspects of the issue. Demonstrates mature use of material, including looking for meanings and relating theoretical framework/models	Very good identification and summary of major points, covering most aspects of the issue. Independent thinking evidenced through use of material with some application of theory to the topic/issues	Competent identification and summary of major points, including main aspects of the issue. Sound use of material relevant to the topic/issues.	Material is relevant but largely repeats taught input without any further development. Work tends to be uncritical in the material used and generally overly descriptive	No evidence of independent thinking. Wholly Descriptive. No evidence of application of theory.
Evidence of wide reading with research sources clearly and properly referenced. Excellent application of researched material to the topic/issues.	Evidence of reading around the topic beyond basic texts. Uses a good range of sources well referenced.	Evidence of reading of recommended texts. Solid attempt at referencing.	Limited reading only. Some attempt at referencing. Sources usually given but not systematically or consistently.	No/too little evidence of reading.
Coherent argument excellently supported with appropriate evidence/material. Work has a professional appearance with excellent layout and well-organised material.	Researched materials used very well to support argument. Very good structure with logical sequence of material and clear layout.	Competently structured, with a relatively easy to follow argument. Clear linkage between ideas within paragraphs. Assertions supported by appropriate material. Reasonably well organised material	Some assertions made but not substantiated by evidence. Presentation adequate but could be improved upon in terms of organisation and lay out.	Poor structure, little or no linkage of ideas, lacks logical sequence. Assertions lack substantiation. Poorly presented.
Excellent fluid writing style, virtually free from grammatical and spelling errors. Format wholly appropriate for task and audience.	Generally good use of grammar, punctuation and spelling. Ideas clearly explained. Appropriate style/format used.	Grammatically competent but some minor spelling errors or clumsiness in expression.	Errors in grammar, punctuation and/or spelling. Clumsiness of expression but does not prevent argument emerging.	Serious errors frequently enough to impede/prevent understanding by reader.

Level 5

Grade (Performance) Descriptors.

A14- A16 Work of an excellent standard.	B11- B13 Work of a very good standard.	C8- C10 Work of a competent standard.	D5- D7 Work of a satisfactory standard.	E4 Work of an unsatisfactory standard.
Full answer to the question and content wholly relevant. Excellent understanding of relevant theory, concepts and models. Application of appropriate theory to examples/practice.	Answers most if not all aspects of the question. Content mainly relevant. Very good understanding of relevant theory and concepts and application of theoretical models. Evidence of a developing appreciation of contextual issues.	Main issues addressed and solid attempt to answer question. Some relevant content applied. Sound knowledge and understanding of relevant theory and concepts and identification of main issues	Satisfactory attempt to address question/issues with some content relevant to assignment topic. Material largely repeats taught input and lacks development or personal interpretation. Some general understanding of topic theory and concepts	Questions not answered. Content not relevant. Little or no evidence of understanding of relevant theory. Very repetitive of taught input – no development or application. The use of extensive quoted passages evident.
Evidence of independent thinking and some analysis of issues. Critical use of theory excellently applied to assignment issues. Clear synthesis of ideas	Some analysis of ideas and evidence of some synthesis of ideas. Application of theory to practice and examples given where appropriate. Ability to compare and contrast issues, ideas, theories, models, and to analyse more complex ideas	Some (if limited) attempt to apply theory to practice. Limited critical appraisal demonstrated. Tends to be descriptive.	Largely descriptive and lacking in critical thought and application of theory	Little or no critical thinking. Wholly descriptive- no attempt at analysis or evaluation. Little or no evidence of application of theory.
Wide range of reading evidenced. Understanding of studied materials demonstrated. All citations correctly made and complete list of references/ bibliography. Excellent management and appropriate use of information.	Clear evidence of appropriate reading indicating independent research. Use of a range of sources. Referencing generally correct. Accurate reference list /bibliography. Very good management and appropriate use of information	Evidence of reading Competent range of source materials used. Referencing generally competent with list of references provided. Materials used quite effectively	Some evidence of reading from set list, however, materials not used effectively to support work. Some attempt at referencing source material using Harvard Referencing standard but limited list of references	Little evidence of reading. Inaccurate references/lacks referencing. No list of references/bibliography.
Excellently structured, well-organised material. Logical progression of argument and sequencing of ideas. Full supporting evidence for all assertions. Excellent layout incorporating relevant presentation of data such as charts, graphs etc, where appropriate.	Very good layout incorporating relevant presentation of data such as charts, graphs etc., where appropriate. Effective use of materials. All parts clearly linked and contributing to argument. Appropriate evidence/material to support assertions.	Clear layout, good presentation and some attempt at useful presentation of data via charts, etc. Competent structure but lapses in coherence. Most arguments supported by evidence/ references. Word-processed with few errors.	Layout could be improved upon. Lacks coherent structure with little linkage of ideas. Tends to be repetitive in places with some assertions made but not supported by appropriate evidence.	Poor structure. Little or no linkage of ideas. Assertions, where present, are not supported. Illogical structure or sequencing of ideas. Badly laid out.
Excellent grammar, punctuation and spelling throughout. Wholly appropriate style for task and audience. Excellent presentation, the approach is clear, fluent and precise.	Generally accurate grammar, punctuation and spelling. Clear in meaning and generally fluent. Appropriate style for purpose and recipient.	Whilst generally competent, some lapses in grammar, spelling or punctuation. Meanings always clear but not always explained in a clear and concise way.	Several errors in grammar, punctuations and /or spelling. Lacks fluency. Awkward or clumsy phrasing/language meaning not always clear Careless mistakes.	Serious and frequent errors in grammar, punctuation and /or spelling. Unclear in terms of meaning, hindering understanding by reader.

Level 6

Grade (Performance) Descriptors.

A14- A16 Work of an excellent standard.	B11- B13 Work of a very good standard.	C8- C10 Work of a competent standard.	D5- D7 Work of a satisfactory standard.	E4 Work of an unsatisfactory standard.
Excellent links between a range of different ideas and theories. Places issues in a wider context. Evidence of excellent understanding and a range of relevant theories and demonstrates a facility to apply these appropriately. Original insight, independent, imaginative and creative ideas, excellently argued and supported.	Very good links between theory and practice. Highly competent coverage of main assignment issues. Full understanding of issues. Very good level of understanding of appropriate theory and concepts.	Identifies main issues and relevant theory. Competent application of relevant theory and links to practice.	Few links between theory and practice. Answers question in a very basic way. Describes relevant theory accurately, and some relevant ideas offered.	Inadequate and /or inappropriate content. Questions not answered, issues not addressed; insufficient evidence of understanding of relevant theory and concepts; only partial understanding shown. Very limited application of theory. The use of extensive quoted passages.
Develops lateral and creative connections between seemingly disparate ideas. Critical approach to use of ideas in literature and from research. Excellent understanding of how ideas could be useful for a wider audience. Confidence and sophistication in handling theoretical concepts.	Very good ability to analyse complex ideas. Recognition areas of controversy and very good synthesises of ideas. Evaluation of theories well applied to assignment issues.	Some solid analysis and evaluation of issues. Ability to evaluate ideas from different viewpoints and clear understanding of implications of different theories	Mainly personal perspective reflected with little or no attempt to assess from other points of view. Some analysis (if a little superficial). A mainly descriptive approach and limited theoretical application.	Very limited or no critical appraisal of ideas and concepts. Mostly descriptive rather than analytical or evaluative.
Excellent range of reading – well beyond recommended reading list. Originality in sourcing materials and their use/application. Fluent and discriminating use of material, etc. Excellent appraisal of sources. All references complete and accurate	Evidence of wide reading – beyond recommended reading list. Interesting and unusual sources used Makes very good use of source material and establishes relevance to issues. References complete and accurate	Evidence of use of recommended reading list and other appropriate source material. Mainstream texts used. Referencing present and accurate	Uses some appropriate external sources but few from beyond the reading list. References present and accurate	Little evidence of reading. Little evidence of research. Incomplete and/or inaccurate referencing.
Work is of an excellent quality; logical, well sequenced, clear and concise with some flair/ originality. Demonstrates an ability to plan, set targets and implement. Uses evidence to support convincing, coherent arguments and recommendations. Excellent presentation with professional touches	Shows independent planning and execution of work. Can structure argument well and substantiate assertions Very good layout with effective structure and use of fonts, etc. Accurate word processing	Competent structure and sequencing of material. A solid, coherent effort with ideas and argument well supported. Well laid out in an appropriate format. Evidence of proof reading before submission.	Presentation adequate with some attempt at structure that allows the reader to follow the line of thinking. Reasonably coherent. Ideas not always wholly supported or substantiated however. Style and format limits general effectiveness.	Lacks coherence and/or theoretical underpinning. Not well organised, lacks structure. Badly laid out. Not proof read.
Clarity and precision of writing throughout. Excellent style and level of detail for audience. Accurate, succinct and fluent, persuasive in approach and typified by a sophisticated use of English.	Appropriate style used for purpose Generally no grammar or spelling errors; only very minor errors in English. Clear, fluent and persuasive writing style.	A competent attempt. Occasional errors in grammar spelling, punctuation, etc. but largely fluent, clear and correct. Appropriate style for purpose and audience.	Mostly clear in meaning if lacking in fluency. Some errors in grammar, spelling or punctuation.	Frequent lapses in grammar, punctuation and /or spelling. Meaning not always clear, often obscure. Clumsy expressions used. Inappropriate style.

Academic Misconduct

This can be defined as any of the following: -

Cheating is defined as any attempt to gain unfair advantage in an assessment by dishonest means, and includes e.g. all breaches of examination room rules, impersonating another candidate, falsifying data, and obtaining an examination paper in advance of its authorised release.

Plagiarism is the act of taking someone else's work and passing it off as your own. This includes incorporating either unattributed direct quotation(s) or substantial paraphrasing from the work of another/others. It is important to cite all sources whose work has been drawn on and reference them fully in accordance with the referencing standard used in each academic school.

Collusion is when two or more people combine to produce a piece of work for assessment that is passed off as the work of one student alone. The work may be so alike in content, wording and structure that the similarity goes beyond what might have been coincidence. For example - where one student has copied the work of another, or where a joint effort has taken place in producing what should have been an individual effort.

Penalties

Where an offence is admitted, or a panel decides that cheating, plagiarism or collusion has occurred, a penalty will be imposed. The severity of the penalty will vary according to the nature of the offence and the level of study. Penalties will range from failure of the assignment under investigation to a restriction of the award a student may ultimately achieve or a requirement to leave the University. Further information can be found on-line on the University web pages or from the Students' Union.

http://www.wlv.ac.uk/Docs/aca_acad_misc.doc

Fitness to Practice Suitability Panel

Fitness to practise has been defined as suitability to be registered with, or to be recommended for entry onto, a professional register without restrictions. The School recognises that academic success does not necessarily equate with the professional requirements for registration, and aims to assure itself that the student has the capability for safe and effective practise without supervision. The School of Applied Science's Suitability Panel acts as an integral part of the new University fitness to practise procedure to ensure that students are fit to practise within their chosen field. A student's fitness to practise is called into question when their behaviour or health raises a serious or persistent cause for concern about their ability or suitability to continue on a course. This includes, but is not limited to, the possibility that they could put patients, the public, themselves, other students or staff at risk, and the need to maintain trust in the profession. On receipt of information regarding any areas of concern, the Dean of School (or designated deputy) will instigate a preliminary investigation into the allegations of circumstances.

The student and will be informed of the investigation and may be suspended from the whole or any part of the course pending completion of an investigation. The student will be afforded an opportunity to state his/her case as part of such investigation. Reports of investigations relating to the case will be submitted to the Panel for consideration and possible action.

Disclaimer statement

This course guide was correct at the time of writing and whilst every effort has been made to ensure the accuracy of the information supplied herein. The University of Wolverhampton cannot be held responsible for any errors or omissions.

