



UNIVERSITY OF
WOLVERHAMPTON
KNOWLEDGE ▪ INNOVATION ▪ ENTERPRISE

School of Applied Sciences

Course Guide

for

BSc (Hons) Clinical Physiology

2012-2013

**SCHOOL OF APPLIED SCIENCES
COURSE GUIDE
BSc (Hons) Clinical Physiology**

| | Page |
|--|---------------------------|
| <u>About this guide</u> | <u>3</u> |
| <u>Welcome</u> | <u>4</u> |
| <u>Attendance</u> | <u>5</u> |
| <u>The Wolverhampton Graduate</u> | <u>5</u> |
| <u>About the Course</u> | <u>6</u> |
| <u>Academic Regulations</u> | <u>7</u> |
| <u>Course information</u> | <u>7</u> |
| <u>Course Structure</u> | <u>10</u> |
| <u>University Academic Calendar 2012/13</u> | <u>12</u> |
| <u>Module Descriptions</u> | <u>13</u> |
| <u>Clinical Practice</u> | <u>30</u> |
| <u>Health and Safety Issues</u> | <u>31</u> |
| <u>Course Management</u> | <u>32</u> |
| <u>Staff Involved with the Programme</u> | <u>34</u> |
| <u>Where to Get Help with your Course</u> | <u>35</u> |
| <u>Employability & Your Personal Development Portfolio (PDP)</u> | <u>36</u> |
| <u>Career Opportunities and Future Study</u> | <u>37</u> |
| <u>School Charter for Students</u> | <u>38</u> |
| <u>Accreditation of Prior Learning (APL)</u> | <u>40</u> |
| <u>Block Release Timetables</u> | <u>41</u> |
| <u>Learning, Teaching & Assessment</u> | <u>44</u> |
| <u>Academic Misconduct</u> | <u>50</u> |

About this guide

This Course Guide will help you plan your Clinical Physiology 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) Clinical Physiology is one of many 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.

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) Clinical Physiology 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:

- allow students with differing academic backgrounds, experiences and abilities to enter at an appropriate level and achieve to the maximum of their ability.
- provide progressive, coherent and challenging learning opportunities underpinned by workbased training, research, scholarly activity and appropriate development.
- produce graduates who have an understanding of the aetiology of disease along with its presentation, diagnosis and treatment through the study of underlying scientific subjects.
- develop a thorough knowledge of the function of a specialist physiological system and its associated disease states, diagnostic techniques and treatments.
- provide opportunities for learning in the workplace in order for the student to become competent in the diagnostic procedures stipulated by professional body requirements and gain registration on the appropriate professional register.
- provide a sound educational foundation on which the graduate can build, by further study, at any stage of their future career.
- encourage students to take responsibility for their own learning, foster a spirit of enquiry, and develop attitudes and skills to underpin independent, life-long learning;

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

- demonstrate competence in the physiological practical techniques employed within a clinical physiology specialism and be able to explain the rationale for the investigation and treatment of disease, modification of the investigations, and interpret test results.
- be aware of professional and research issues in clinical physiology including safe and ethical working practices, the importance of communication in a therapeutic relationship and research methodology

These are achieved through the study of:

- the anatomical structure and development of the human body and an understanding of the integrated function and control of the component parts of the major systems.
- cell structure and function at the molecular level, and an appreciation of the interplay of complex molecular events that help to maintain cell homeostasis
- disease processes and the use of pharmacological and interventional treatments against them.
- the basic principles of physics and signal processing and how information can be recorded, stored and analysed in the concept of clinical physiology.

Final and Intermediate Awards

In order to be awarded your BSc (Hons) Clinical Physiology (Named Specialism) degree you are required to successfully complete all 360 credits that make up your programme of study, including passing your part one and part two specialist examinations. If you successfully complete all level one and two credits, including your part one examination, along with a minimum of 60 credits at level three you are eligible for a BSc Clinical Physiology (Named Specialism) award. Students who gain 240 credits at levels one and two (or above) along with the successful completion of their part one examination are eligible for the award of Dip HE in Clinical Physiology (Named Specialism). Students who successfully complete 120 credits at level one or above are eligible for a Cert HE in Clinical Physiology.

Course Delivery and Transport

Your programme of study is delivered at the City Campus in Wolverhampton. You should be aware that there is limited parking at all of the University's campuses and where possible you should travel by public transport.

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 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 workbased training and are away from the university. |
| 4. have the opportunity to participate in electronic Personal Development Planning (ePDP) | You have the option of using electronic personal development plans in the construction of your case study in the module 6BM007 Advanced Professional Practice and inclusion of this in their eportfolio which was initiated during level 4 studies. |
| 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. 5BM026 Developing Professional Practice and Research requires you to work in groups under the guidance of tutors to analyse practice related scenarios in problem based learning. The module 6BM007 Advanced Professional Practice is based around a series of student presentations where you are expected to deliver regular presentations on a case study patient with questions and discussion being provided from the audience. 6BM021 Critical Evaluation of Current Topics in Physiology requires you to interact in groups to research the evidence base of a current topic in physiology and deliver a seminar presentation to the class. |

Distinctive Features of the Course

The key distinctive feature of this course is that the academic components are delivered alongside a programme of workbased training within your own employment. Academic modules provide the underpinning knowledge to support the development of competency in technical skills in cardiac physiology, respiratory physiology or neurophysiology in the workplace. Students are required to complete their professional body Individual Record of Clinical Practice (IRCP) in the workplace and part one and two professional examinations as part of the assessment requirements of the course. The course is accredited by the Registration Council for Clinical Physiologists (RCCP) which allows a student to apply for registration with their respective professional body and gain employment as a Clinical Physiologist upon graduation.

Course Structure for the BSc (Hons) Clinical Physiology Specialist Degree

Course Structure of the BSc (Hons) Clinical Physiology (Cardiology) Degree

Please note that level four and five modules are no longer delivered on this programme but they are included for completeness of the course structure.

Level 4

Year One

You must study and pass 120 credits

- BM1005** Professional Studies in Healthcare Science (15 credits)
- BM1011** Introductory Physiology and Anatomy (15 credits)
- BM1012** Introduction to Cardiology (15 credits)
- BM1015** Disease Biology (30 credits)
- BM1016** Physics and Physiological Measurement (15 credits)
- BM1017** Introduction to Professional Practice and Communication (15 credits)
- BM1119** Human Physiology (15 credits)

Level 5

Year Two

You must study and pass 120 credits

- 5BM002** Applications of Cardiac Physiology (20 credits)
- 5BM022** Integrated Physiology for Clinical Physiologists (20 credits)
- 5BM023** Pathophysiology (20 credits)
- 5BM024** Pharmacology (20 credits)
- 5BM025** Physiological Measurement and Signal Processing (20 credits)
- 5BM026** Developing Professional Practice and Research (20 credits)

Level 6

Year Three

You must study and pass 60 credits

| Semester One | Semester Two |
|---|--|
| 6BM007 Advanced Professional Practice (20 credits) | 6BM021 Critical Evaluation of Current Topics in Physiology (20 credits) |
| 6BM002 Advanced Cardiac Physiology (20 credits) | |

Year Four

You must study and pass 60 credits

- 6BM003** Advanced Cardiac Investigations and Intervention (20 credits)
- 6BM014** Honours Research Project (40 credits)

Course Structure of the BSc (Hons) Clinical Physiology (Neurophysiology) Degree

Please note that level four and five modules are no longer delivered on this programme but they are included for completeness of the course structure.

Level 4

Year One

You must study and pass 120 credits

- BM1005** Professional Studies in Healthcare Science (15 credits)
- BM1011** Introductory Physiology and Anatomy (15 credits)
- BM1013** Introduction To Neurophysiology (15 credits)
- BM1015** Disease Biology (30 credits)
- BM1016** Physics and Physiological Measurement (15 credits)
- BM1017** Introduction to Professional Practice and Communication (15 credits)
- BM1119** Human Physiology (15 credits)

Level 5

Year Two

You must study and pass 120 credits

- 5BM030** Further Neurophysiology (20 credits)
- 5BM022** Integrated Physiology for Clinical Physiologists (20 credits)
- 5BM023** Pathophysiology (20 credits)
- 5BM024** Pharmacology (20 credits)
- 5BM025** Physiological Measurement and Signal Processing (20 credits)
- 5BM026** Developing Professional Practice and Research (20 credits)

Level 6

Year Three

You must study and pass 60 credits

| Semester One | Semester Two |
|--|---|
| 6BM007 Advanced Professional Practice (20 credits) | 6BM021 Critical Evaluation of Current Topics in Physiology (20 credits) |
| 6BM024 Applied Clinical Neurophysiology (20 credits) | |

Year Four

You must study and pass 60 credits

- 6BM025** Applied Neuroanatomy and Physiology (20 credits)
- 6BM014** Honours Research Project (40 credits)

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

Please note that level four and five modules are no longer delivered on this programme but they are included for completeness of the course structure.

Level 4

Year One
You must study and pass 120 credits

- BM1005** Professional Studies in Healthcare Science (15 credits)
- BM1011** Introductory Physiology and Anatomy (15 credits)
- BM1014** Introduction to Respiratory Physiology (15 credits)
- BM1015** Disease Biology (30 credits)
- BM1016** Physics and Physiological Measurement (15 credits)
- BM1017** Introduction to Professional Practice and Communication (15 credits)
- BM1119** Human Physiology (15 credits)

Level 5

Year Two
You must study and pass 120 credits

- 5BM003** Applications of Respiratory Physiology (20 credits)
- 5BM022** Integrated Physiology for Clinical Physiologists (20 credits)
- 5BM023** Pathophysiology (20 credits)
- 5BM024** Pharmacology (20 credits)
- 5BM025** Physiological Measurement and Signal Processing (20 credits)
- 5BM026** Developing Professional Practice and Research (20 credits)

Level 6

Year Three
You must study and pass 60 credits

| Semester One | Semester Two |
|--|--|
| 6BM007 Advanced Professional Practice (20 credits) | 6BM021 Critical Evaluation of Current Topics in Physiology (20 credits) |
| 6BM004 Advanced Respiratory Physiology (Sleep Focused) (20 credits) | or |
| 6BM005 Advanced Respiratory Physiology (Challenge /Exercise Focused) (20 credits) | |

Note: **6BM004** Advanced Respiratory Physiology (Sleep Focused) and **6BM005** Advanced Respiratory Physiology (Challenge /Exercise Focused) are delivered in alternate years where year three and year four students are taught together on the module being delivered. **6BM004** Advanced Respiratory Physiology (Sleep Focused) is available during the 2012/13 academic year

Year Four
You must study and pass 60 credits

- 6BM014** Honours Research Project (40 credits)
- 6BM004** Advanced Respiratory Physiology (Sleep Focused) (20 credits)
- or
- 6BM005** Advanced Respiratory Physiology (Challenge /Exercise Focused) (20 credits)

Note: **6BM004** Advanced Respiratory Physiology (Sleep Focused) and **6BM005** Advanced Respiratory Physiology (Challenge /Exercise Focused) are delivered in alternate years where year three and year four students are taught together on the module being delivered. **6BM004** Advanced Respiratory Physiology (Sleep Focused) is available during the 2012/13 academic year

University Academic Calendar 2012/13

[University Academic Calendar.](#)

Module Descriptions

Level Four

Please note that level four modules are no longer delivered on this programme but they are included for completeness of the module descriptors.

BM1005 Professional Studies in Healthcare Science

| | |
|-------------------------|--|
| Credit value | 15 |
| Pre-requisites | None |
| Co-requisites | None |
| Prohibited combinations | None |
| Module Leader | Dr Liz O’Gara |
| Telephone | 1394 |
| Email | E.OGara@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 healthcare science.

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

1. Be aware of professional issues relating to accreditation and State Registration of various Health Care Science Professional Disciplines.
2. Use computer packages for word processing, electronic mail and document production, spreadsheets, databases, data analysis, statistical manipulation, present data graphically, and retrieve information
3. Communicate in writing and develop effective study skills.

Assessment

| Description | Weighting or Pass/Fail |
|---|------------------------|
| 1 Completion of a Professional Requirements Portfolio | 100% |

BM1011 Introductory Physiology and Anatomy

| | |
|-------------------------|--|
| Credit value | 15 |
| Pre-requisites | None |
| Co-requisites | None |
| Prohibited combinations | None |
| Module Leader | Dr Peter Griffiths |
| Telephone | 1172 |
| Email | P.J.Griffiths@wlv.ac.uk |
| Staff Room Number | MA209b |

Module description

The module aims to:

Introduce students to the gross and cellular anatomy of the human body, the derivation of different organs of the body, and the functioning of the various organs and tissues studied.

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

1. Name the major organ systems, identify the organs in each system and recall the anatomical structure of each organ
2. Recognise similarities between organ systems derived from the same part of the embryo.
3. Be able to describe the major anatomical components of the human body in relation to their function.

4. Recognise and identify the structure of cells associated with different tissues.

Assessment

| Description | Weighting or Pass/Fail |
|-------------|---|
| 1 | Phase Test One and Two 50% and 50% |
| 2 | Within practical assessment of histology and anatomy Pass/Fail |

BM1012 Introduction To Cardiology

| | |
|-------------------------|--|
| Credit value | 15 |
| Pre-requisites | None |
| Co-requisites | Cardiology Clinical Placement |
| Prohibited combinations | None |
| Module Leader | Jenny Tonkinson-Hoare |
| Telephone | 2702 |
| Email | jennytonkinson@wlv.ac.uk |
| Staff Room Number | MA208b |

Module description

The module aims to:

Introduce the concept of diagnostic cardiology and cultivate an awareness of the safe practical applications of electrocardiography in the diagnosis of a variety of basic cardiac abnormalities. The understanding in the underlying physiological mechanisms associated with obtaining ECGs will be developed, along with the electrophysiological changes associated with basic pathological conditions.

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

1. Describe the anatomy of the heart and associated structures, including ultrastructure of cardiac myocytes
2. Relate the physiological and electrical events contributing to the cardiac cycle, including how these processes are regulated within the body
3. Demonstrate an appreciation of the fundamental scientific principles, practical applications and safety considerations associated with the recording of ECGs in a variety of patient groups
4. Show an awareness of the pathophysiology associated with basic cardiac abnormalities and how they subsequently influence the ECG
5. Record, analyse and interpret an ECG.
6. Demonstrate knowledge of Basic Life Support and its importance.

Assessment

| Description | Weighting or Pass/Fail |
|-------------|---|
| 1 | Coursework: i) Written Assignment relating to the electrophysiological generation of the ECG in a healthy individual ii) Data Interpretation Assignment analysing the underlying electrophysiology associated with particular ECG traces 30% and 20% |
| 2 | Examination 50% |

BM1013 Introduction To Neurophysiology

| | |
|-------------------------|------------------------------------|
| Credit value | 15 |
| Pre-requisites | None |
| Co-requisites | Neurophysiology Clinical Placement |
| Prohibited combinations | None |
| Module Leader | Dr Gillian Condé |

| | |
|-------------------|--|
| Telephone | 1153 |
| Email | G.L.Conde@wlv.ac.uk |
| Staff Room Number | MA209 |

Module description

The module aims to:

Provide the student with a background of the concepts of instrumentation used in clinical Neurophysiology at a block diagram level.

Provide an understanding of the methodology of recording practices in Electroencephalography (EEG) and Evoked Potentials (EP).

Support and develop the clinical practice modules by providing a description of normal EEG phenomena together with the effects of routing activation procedures.

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

1. Draw block diagram layouts of instrumentation used in Clinical Neurophysiology
2. Describe recording techniques in EEG and EP
3. Describe the normal EEG and the effect of activation techniques, drugs, and the level of awareness.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|--|------------------------|
| 1 | Coursework: Essay based on EEG recording techniques | 60% |
| 2 | Examination | 40% |

BM1014 Introduction To Respiratory Physiology

| | |
|-------------------------|--|
| Credit value | 15 |
| Pre-requisites | None |
| Co-requisites | Respiratory Physiology Clinical Placement |
| Prohibited combinations | None |
| Module Leader | Jackie Laverty |
| Telephone | 3537 |
| Email | jackielaverty@wlv.ac.uk |
| Staff Room Number | MA209 |

Module description

The module aims to:

Cultivate an awareness of the basic anatomy, physiology, pathophysiology and pharmacology of the respiratory system and to introduce basic methods of assessment of respiratory function and interpretation of results.

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

1. Describe the anatomy of the respiratory system including blood supply, innervation and immunological defence systems.
2. Describe the basic physiology and pharmacology of respiratory function, the control of respiration and transport of blood gases.
3. Show an appreciation for respiratory physiology recording techniques, their application in a clinical setting and interpretation of data.
4. Show an awareness of the pathophysiology associated with basic respiratory abnormalities and how they subsequently influence the respiratory function.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|--|------------------------|
| 1 | Coursework: i) Written Assignment relating the results of | 25% and 25% |

| | | |
|---|--|-----|
| | respiratory function investigation procedures in specified disease states to the anatomy and physiology of a healthy individual ii) Data Interpretation Assessment analysing lung function assessment data from patients with specific respiratory disorders, explaining the pathophysiology of those conditions. | |
| 2 | Examination | 50% |

BM1015 Disease Biology

| | |
|-------------------------|--|
| Credit value | 30 |
| Pre-requisites | None |
| Co-requisites | None |
| Prohibited combinations | None |
| Module Leader | Dr Iain Nicholl |
| Telephone | 1134 |
| Email | I.Nicholl@wlv.ac.uk |
| Staff Room Number | MA208 |

Module description

The module aims to:

Introduce fundamental concepts in biochemistry, and molecular and cellular biology, and encourage the application of this knowledge to an understanding of the biology of disease.

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

1. Describe the fundamental building blocks of life, and the molecular and cellular processes of metabolism.
2. Demonstrate an understanding of the principles of genetics and explain the basis of patterns of disease inheritance.
3. Explain the structure and function of the immune system and the body's response to microbial pathogens.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|--|------------------------------------|
| 1 | Phase tests One, Two and Three and Case Study Report | 20%, 20%, 20% and 40% respectively |

BM1016 Physics and Physiological Measurement

| | |
|-------------------------|--|
| Credit value | 15 |
| Pre-requisites | None |
| Co-requisites | Training Appointment in Clinical Physiology |
| Prohibited combinations | None |
| Module Leader | Dr Gillian Pearce |
| Telephone | 1141 |
| Email | G.Pearce@wlv.ac.uk |
| Staff Room Number | MA208 |

Module description

The module aims to:

Provide a background understanding of the basic principles of physics and their application to clinical physiology. It also aims to reinforce application of mathematical principles.

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

1. Provide a description of the structure of matter: being able to relate the components present in the atom, identify how atoms form molecules, and how these are arranged in gasses, liquids and solids.
2. Show a recognition of the concept of waves and identify how different wave forms contribute to physical processes
3. Demonstrate an awareness of the nature of electricity and appreciate the safety aspects which relate to its use
4. Appreciate the relationship between radiation and the atom, and how it can be safely applied to the field of medicine
5. Show an understanding of the principles of magnetism and how it contributes to medical instrumentation
6. Relate the laws of thermodynamics and show their application to physiology
7. Show a comprehension of the introductory techniques of signal processing
8. Demonstrate the application of basic mathematical techniques

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|---|------------------------|
| 1 | Coursework: Provide an overview of a clinical technique of choice illustrating the procedures with the underlying physical principles | 40% |
| | In Class Mathematics Test | 10% |
| 2 | Examination | 50% |

BM1017 Introduction to Professional Practice and Communication

| | |
|-------------------------|--|
| Credit value | 15 |
| Pre-requisites | None |
| Co-requisites | Training Appointment in Clinical Physiology |
| 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 module aims to develop an appreciation of the factors which influence practice within the National Health Service, encouraging trainee practitioners to develop safe and effective professional conduct.

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

1. Demonstrate that they can discuss the nature of interpersonal skills in professional practice and the importance of these in forming and maintaining professional relationships
2. Identify the advantages of personal development to include use of self, self awareness and reflective practice
3. Promote, monitor and maintain Health and Safety in the workplace
4. Contribute to the welfare of patients, ensuring compliance with legal and ethical requirements
5. Show an appreciation of the accountability of the Health Service and the need for clinical governance and audit to maintain quality of provision
6. Progress in their own professional practice in line with the appropriate professional body Record of Clinical Practice competencies for year one of workbased training.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|---|------------------------|
| 1 | Clinical Practice | Pass/Fail |
| 2 | Professional Practice Portfolio | 70% |
| 3 | Coursework: Electronic reflective diary over one day to indicate interaction with patients and colleagues | 30% |

BM1119 Human Physiology

| | |
|-------------------------|--|
| Credit value | 15 |
| Pre-requisites | None |
| Co-requisites | None |
| Prohibited combinations | None |
| Module Leader | Dr Paul Barrow |
| Telephone | 2702 |
| Email | P.A.Barrow@wlv.ac.uk |
| Staff Room Number | MA209b |

Module description**The module aims to:**

Provide a basic knowledge and understanding of human physiology incorporating the anatomy, physiology and pharmacology of the human body's systems. It also provides experience of basic laboratory techniques in human physiology. This module will provide the underpinning physiological knowledge required for further study of physiology, pharmacology and pathology.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|----------------------------------|------------------------|
| 1 | Examination and Practical Report | 80% and 20% |

Level 5

5BM002 Applications of Cardiac Physiology

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | BM1012 Introduction to Cardiology |
| Co-requisites | Cardiology Clinical Placement |
| Prohibited combinations | None |
| Module Leader | Mrs Jenny Tonkinson Hoare |
| Telephone | 2157 |
| Email | jennytonkinson@wlv.ac.uk |
| Staff Room Number | MA208b |

Module description

The module aims to:

This module enhances the appreciation of a clinical physiologist and the wide range of physiological influences that can have an adverse effect upon the cardiovascular system. A comprehension of the pathophysiology underlying common cardiac complaints will be developed to contextualise the clinical symptoms seen in patients during clinical practice. The principles associated with advanced electrocardiography, blood pressure measurement, ambulatory monitoring and exercise testing will be introduced to enable competent development of practical skills. The material presented in this module completes the theoretical knowledge requirements for undertaking the professional SCST part one examination.

On completion of the module, you will be expected to be able to:

1. Relate the contribution of cardiovascular function to whole body physiology, including the control of the circulation through the systems of the body
2. Show an appreciation of the underlying principles and applications associated with ambulatory monitoring, resting Blood Pressure measurement and Exercise testing.
3. Demonstrate a comprehension of a wide range of physiological abnormalities and disturbances, including the use of the electrocardiogram as a diagnostic tool in their detection.
4. Perform and interpret an electrocardiogram and non invasive blood pressure at rest.

Assessment

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

5BM003 Applications of Respiratory Physiology

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | BM1014 Introduction to Respiratory Physiology |
| Co-requisites | Respiratory Clinical Physiology Placement |
| 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 aim of this module is to reinforce understanding of the anatomy, physiology and pathophysiology of the respiratory system. Introducing examples of respiratory diseases, pathophysiology, assessment, diagnosis and therapeutic interventions

On completion of the module, you will be expected to be able to:

1. Demonstrate an understanding of basic respiratory physiology recording techniques, their application in a clinical setting and interpretation of data obtained
2. 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.
3. Demonstrate an appreciation of a variety of specialist lung function investigations

Assessment

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

5BM022 Integrated Physiology for Clinical Physiologists

| | |
|-------------------------|---|
| Credit value | 20 |
| Pre-requisites | BM1011 Introductory Anatomy and Physiology BM1119 Human Physiology |
| Co-requisites | None |
| Prohibited combinations | None |
| Module Leader | Dr Gillian Condé |
| Telephone | 1153 |
| Email | G.L.Conde@wlv.ac.uk |
| Staff Room Number | MA209 |

Module description

The module aims to:

Provide you with knowledge and the ability to comprehend the basic principles underlying human physiology.

On completion of the module, you will be expected to be able to:

1. Relate mechanisms of physiological control to the maintenance of homeostatic function.
2. Articulate the importance of molecular mechanisms in cellular physiology.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|-------------|------------------------|
| 1 | Portfolio | 40% |
| 2 | Examination | 60% |

5BM023 Pathophysiology (Block Release)

| | |
|-------------------------|---|
| Credit value | 20 |
| Pre-requisites | BM1011 Introductory Anatomy and Physiology BM1015 Disease Biology BM1119 Human Physiology Or equivalents |
| 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 biology of the main groups of human disease.

On completion of the module, you will be expected to be able to:

1. Demonstrate your knowledge of the basic principles of pathology.
2. Relate clinical presentation of named diseases to the biological principles of the disease process
3. Show that you understand the biology of the main groups of human disease with particular emphasis on pathophysiology.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|---|------------------------|
| 1 | 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 | 50% |

5BM024 Pharmacology

| | |
|-------------------------|---|
| Credit value | 20 |
| Pre-requisites | BM1011 Introductory Anatomy and Physiology BM1015 Disease Biology BM1119 Human Physiology Or equivalents |
| 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:

The module aims to develop your knowledge and understanding of current therapeutic practice for treating a wide range of pathophysiological conditions affecting the major body systems.

On completion of the module, you will be expected to be able to:

1. Demonstrate your knowledge on the administration routes of drugs, their absorption, distribution, excretion and metabolism.
2. Show that you have developed an awareness of the adverse reactions which occur with treatment and can relate these to their mode of action.
3. Demonstrate that you have learnt about non pharmacological treatment regimes for various named diseases

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|---|------------------------|
| 1 | Coursework based on a presented case study. You will be required to produce a 2000 word report detailing the proposed treatment regime, provide a comprehensive explanation of the mechanism of | 50% |

| | | |
|---|---|-----|
| | action of the treatment, discuss any likely adverse reactions associated with the treatment and suggest any expected outcomes of the treatment. | |
| 2 | Examination | 50% |

5BM025 Physiological Measurement and Signal Processing

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | BM1016 Physics and Physiological Measurement |
| Co-requisites | Training Appointment in Clinical Physiology |
| 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 module aims to develop a knowledge and critical understanding of principles associated with signal processing and how information can be recorded, stored, and interpreted in the concept of clinical physiology.

On completion of the module, you will be expected to be able to:

1. Demonstrate an appreciation of the principles of electronics
2. Recall how signals can be isolated, amplified and analysed to give useful information.
3. Demonstrate knowledge of methods used to store and process data
4. Describe application of physical principles to physiological instrumentation

Assessment

| Description | | Weighting or Pass/Fail |
|--------------------|--|-------------------------------|
| 1 | Coursework: Report outlining the physical and electronic principles involved in physiological tests unrelated to own specialist discipline with reference to visits undertaken | 50% |
| 2 | Examination | 50% |

5BM026 Developing Professional Practice and Research

| | |
|-------------------------|---|
| Credit value | 20 |
| Pre-requisites | BM1005 Professional Studies in Healthcare Science BM1017 Introduction to Professional Practice and Communication |
| 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:

This module offers further opportunities to students to develop themselves and their professional practice. It uses Problem Based Learning in order to enable them to focus on a range of communication issues, psychological and social issues, factors, forces and connected aspects of their

work. It also introduces the student to research methodology, good experimental design techniques and the factors that must be considered when formulating a hypothesis, generating a protocol, collecting and analysing data and presenting results.

On completion of the module, you will be expected to be able to:

1. Discuss a wide range of both psychological and social, factors and forces, which affect the individual, their health and the ways in which they access and use healthcare services.
2. Discuss and apply key theory on therapeutic relationships and communication
3. Demonstrate subject knowledge and understanding of research methodology
4. Demonstrate progress in your own professional practice in line with the appropriate professional body Record of Clinical Practice competencies for year two of workbased training.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|--|------------------------|
| 1 | Clinical Practice: You will demonstrate satisfactory progress with practical assessment within the workplace and successful completion of Part I examination. You will also construct a research proposal associated with your workbased practice. | 50% |
| 2 | Examination | 50% |

5BM030 Further Neurophysiology

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | BM1013 Introduction To Neurophysiology |
| Co-requisites | Neurophysiology Clinical Placement |
| Prohibited combinations | None |
| Module Leader | Dr Gillian Condé |
| Telephone | 1153 |
| Email | G.L.Conde@wlv.ac.uk |
| Staff Room Number | MA209 |

Module description

The module aims to:

- Provide you with a firm grounding of the practical effects of different types of stimuli used in clinical neurophysiology.
- Explore the sources and solutions to mains-borne artefact
- Expand on electroencephalography (EEG) recording practice issues into environments outside the dedicated EEG Laboratory (ITU, Operating Theatre), includes discussion of polygraphic techniques.
- Consider abnormal waveforms and their causative pathology in EEG & Evoked potentials.
- Detail cerebral anatomy and the physiology of cerebral circulation.

On completion of the module, you are expected to be able to:

1. Correlate stimuli characteristics with the effect on recorded waveforms.
2. Discuss the problems and special issues associated with making recordings in a non-dedicated environment.
3. Distinguish normal from abnormal waveforms and phenomena
4. EEG and review the current definition and classification of epilepsy.
5. Describe the detailed anatomy of the brain and its circulation.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|---|------------------------|
| 1 | Coursework: 2000 Word assignment/report, focussing on technical aspects of EEG recording in the ICU | 60% |
| 2 | Examination | 40% |

Level 6

6BM002 Advanced Cardiac Physiology

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | BM2047/5BM002 Applications of Cardiology. |
| Co-requisites | Cardiology Clinical Placement |
| Prohibited combinations | None |
| Module Leader | Jenny Tonkinson-Hoare |
| Telephone | 2702 |
| Email | jennytonkinson@wlv.ac.uk |
| Staff Room Number | MA208b |

Module description

The module aims to:

This module builds upon the developing knowledge and skill base of cardiac physiologists to consider the interpretation of abnormal physiological responses induced in exercise stress tests and head-up tilt testing. An introduction will be given to invasive techniques including cardiac catheterisation and pacing, considering the indications, equipment, techniques and analysis associated with such procedures.

On completion of the module, you will be expected to be able to:

1. Comprehend the pharmacology of commonly used drugs in cardiology, including their mechanism of action, therapeutic use and adverse effects.
2. Show an understanding of the physiological responses evoked in a normal subject during exercise and head up tilt table testing and be able to use this knowledge in the safe implementation and interpretation of exercise stress tests and head up tilt table tests in cardiac patients.
3. Recognise the requirements of cardiac catheterisation and its use in angiography and invasive pressure measurement.
4. Demonstrate an understanding of the use of cardiac pacing as a therapeutic tool in cardiology.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|--|------------------------|
| 1 | Coursework: Problem based case study incorporating patient history and test results. To include interpretation, explanation and subsequent recommended management. | 50% |
| 2 | Examination | 50% |

6BM003 Advanced Cardiac Investigations & Intervention

| | |
|-------------------------|---|
| Credit value | 20 |
| Pre-requisites | BM3033 Advanced Cardiological Techniques or 6BM002 Advanced Cardiac Physiology. |
| Co-requisites | Cardiology Clinical Placement |
| Prohibited combinations | None |
| Module Leader | Jenny Tonkinson-Hoare |
| Telephone | 2702 |
| Email | jennytonkinson@wlv.ac.uk |
| Staff Room Number | MA208b |

Module description

The module aims to:

The module will develop an appreciation of the more advanced invasive techniques in cardiology including those involved in haemodynamic measurement, cardiac intervention and surgical

procedures. The student will also be introduced to the use of imaging in cardiology and will develop an awareness of the use of echocardiography, electrophysiology and radio-isotope imaging.

On completion of the module, you will be expected to be able to:

1. Show a comprehension of the embryological development of the cardiovascular system and consequences associated with abnormal development. In addition the application of cardiological techniques to neonates and infants will be developed.
2. Demonstrate a knowledge of the underlying principles associated with haemodynamic measurement and the underlying calculations to determine physiological values
3. Show an understanding of the application of echocardiography, Doppler and radio-isotope imaging techniques and the interpretation of their results.
4. Explain the role of more complex electrophysiological interventions in cardiac patients and appreciate the interface between clinical physiology and cardiac surgical intervention

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|---|------------------------|
| 1 | Coursework: Written assignment relating to a chosen cardiac abnormality indicating the pathophysiology, diagnosis, surgical intervention and subsequent management of the patient. Students are required to include evidence from clinical trials to support their choice of treatment. | 50% |
| 2 | Examination | 50% |

6BM004 Advanced Respiratory Physiology (Sleep focused)

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | BM1014 BM2044 or 5BM003 ARTP Part One Examination |
| Co-requisites | Respiratory Physiology Clinical Placement |
| Prohibited combinations | None |
| Module Leader | Jackie Laverty |
| Telephone | 3537 |
| Email | jackielaverty@wlv.ac.uk |
| Staff Room Number | MA209 |

Module description

The module aims to:

Instil an understanding of advanced anatomy, physiology, pharmacology and pathophysiology of the respiratory system, with particular reference to the control of respiration and respiration during sleep. Introduce students to further examples of respiratory diseases, their pathophysiology, assessment, diagnosis and therapeutic interventions. To provide detailed training in aspects of physiological measurement.

On completion of the module, you will be expected to be able to:

1. Demonstrate an understanding of lung function physiology including an understanding of how respiration is controlled to maintain homeostasis in blood gas concentrations.
2. Demonstrate an understanding of the physiology and pathophysiology of sleep, with reference to practical and clinical examples
3. Show an understanding of a variety of assessment protocols, equipment, measurements and interpretation of results.

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 | 50% |

6BM005 Advanced Respiratory Physiology (Challenge/Exercise focused)

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | BM1014 BM2044 or 5BM003 ARTP Part One Examination |
| Co-requisites | Respiratory Physiology Clinical Placement |
| 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 module aims to instil an understanding of advanced anatomy, physiology, pharmacology and pathophysiology of the respiratory system, with particular reference to exercise physiology, pathophysiology and therapeutics. Introduce students to further examples of respiratory diseases, their pathophysiology, assessment, diagnosis and therapeutic interventions. To provide detailed training in aspects of physiological measurement.

On completion of the module, you will be expected to be able to:

1. You will be able to describe the physiology and pathophysiology of exercise, with reference to practical and clinical examples.
2. You will be able to demonstrate an understanding of a range of challenge tests.
3. You will be able to show an awareness and appreciation of a variety of assessment protocols, equipment, measurements and interpretation of results

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 | 50% |

6BM007 Advanced Professional Practice

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | BM026 Developing Professional Practice |
| Co-requisites | Training Appointment in Clinical Physiology |
| Prohibited combinations | None |
| Module Leader | Jackie Laverty |
| Telephone | 3537 |
| Email | jackielaverty@wlv.ac.uk |
| Staff Room Number | MA209 |

Module description

The module aims to:

This module will encourage the student to integrate theory with professional practice in following one patient case study through the extended patient care pathway whilst considering their own interactions through reflection.

On completion of the module, you will be expected to be able to:

1. Demonstrate the use of reflective practice as a tool to critically appraise the efficiency of professional practice
2. Demonstrate progression in their own professional practice in line with the appropriate professional body Record of Clinical Practice

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|--------------|------------------------|
| 1 | Presentation | 20% |
| 2 | Case Study | 80% |

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 | An agreed programme of modules in Clinical Physiology |
| Prohibited combinations | None |
| Module Leader | Dr Janine Fletcher/ Dr Elizabeth O’Gara |
| Telephone | 2183 |
| Email | J.X.Fletcher@wlv.ac.uk / E.OGara@wlv.ac.uk |
| Staff Room Number | MA208b |

Module description

The module aims to:

Undertake a research project, in an area relevant to your discipline, from conception to completion.

On completion of the module, you will be expected to be able to:

1. Propose a research question and design a protocol to test your question.
2. Gather, process and analyse the relevant literature and produce a systematic review
3. Complete a program of practical work/data collection, ensuring that Health and Safety and ethical implications are considered.
4. 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 | Project Report | 80% |

6BM021 Critical Evaluation of Current Topics in Physiology

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | None |
| Co-requisites | None |
| Prohibited combinations | 6PY003 Evidence Based Disease Management |
| Module Leader | Dr Paul Barrow |
| Telephone | 2702 |
| Email | P.A.Barrow@wlv.ac.uk |
| Staff Room Number | MA209b |

Module description

The module aims to:

The module introduces students to the concepts of evidence based practice, experimental and audit design, ethical implications, health and safety of practices, and reflective practice. Students then use these principles while evaluating current research in a specific area of physiology or applied physiology.

On completion of the module, you will be expected to be able to:

1. Demonstrate an understanding of the importance and relevance of experiment/audit design, ethical and health and safety implications in research.
2. Demonstrate the process of reflective practice assessment from recent internationally acclaimed standard research on a topic in physiology or applied physiology which is relevant to an area of clinical interest.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|--|------------------------|
| 2 | Presentation: A seminar-style presentation followed by questions from the floor. | 100% |

6BM024 Applied Clinical Neurophysiology

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | BM2042 Further Neurophysiology |
| Co-requisites | Neurophysiology Clinical Placement |
| Prohibited combinations | None |
| Module Leader | Dr Gill Condé |
| Telephone | 1153 |
| Email | G.L.Conde@wlv.ac.uk |
| Staff Room Number | MA209 |

Module description

The module aims to:

- Extend your knowledge of applied neuroanatomy in embryology and the control of consciousness
- Extend your knowledge of the functions of subcortical structures such as the basal ganglia.
- Use this understanding to enhance the investigation of sleep disorders, of long-term EEG monitoring and surgical treatment in epilepsy, and of disorders of movement as examples of more specialised techniques.

On completion of the module, you will be expected to be able to:

1. Demonstrate a detailed understanding of the relationship between the dysfunction of subcortical structures and neurological symptomology.
2. Evaluate the work-up, investigation and the procedure for the surgical treatment of epilepsy in the context of its efficacy.
3. Appraise the use of polysomnography as a method of investigating sleep disorders.

- Evaluate instrumentation factors in sensory and peripheral recordings.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|---|------------------------|
| 1 | Coursework: 2000 Word assignment/report, focussing on recording techniques in the investigation of sleep/sleep disorders. | 60% |
| 2 | Examination | 40% |

6BM025 Applied Neuroanatomy and Neurophysiology

| | |
|-------------------------|--|
| Credit value | 20 |
| Pre-requisites | BM3029 Applied Clinical Neurophysiology |
| Co-requisites | Neurophysiology Clinical Placement |
| Prohibited combinations | None |
| Module Leader | Dr Gillian Condé |
| Telephone | 1153 |
| Email | G.L.Conde@wlv.ac.uk |
| Staff Room Number | MA209 |

Module description

The module aims to:

- Extend your knowledge of applied neuroanatomy in the special senses pathways.
- Use this understanding to enhance the investigation of the use of evoked potentials as monitoring tools during surgical operations, and following major head trauma as examples of more specialised techniques..

On completion of the module, you will be expected to be able to:

- Theorise on the relationship between the dysfunction of special senses pathways/structures and sensory deficit.
- Evaluate the contribution of evoked potential techniques in the monitoring of sensory/motor function during surgery, and following major head trauma.
- Evaluate the diagnostic advantages of advanced nerve conduction techniques.
- Appraise the role of advanced imaging techniques in the diagnosis of neurological disease.

Assessment

| Description | | Weighting or Pass/Fail |
|-------------|---|------------------------|
| 1 | Coursework: 2000 Word assignment/report, focussing on the use of advanced NCS techniques. | 60% |
| 2 | Examination | 40% |

Clinical Practice

Clinical Practice is structured within the course to foster the development of skills alongside academic knowledge. The course provides approximately two thirds of practical experience to one third theory over the whole of the course. The level one and two specialist physiology modules underpin the Record of Clinical Practice competencies tested in Part I Clinical Practice examinations. Level three specialist modules address the more advanced practice outcomes tested in Part II Clinical Practice examinations.

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 professional bodies and clinical physiologists in practice who will act as mentors and assessors. They will contribute to identifying continuing professional development needs and the development of research and evidence based practice leading to service improvements.

You will obtain clinical experience primarily in your own host department. 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 Clinical Physiology or an appropriate Practitioner supported by the Lead Internal Verifier for that discipline. Your department will initially be audited to evaluate its suitability as a clinical training department at the commencement of your training. The audit is undertaken by your 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.

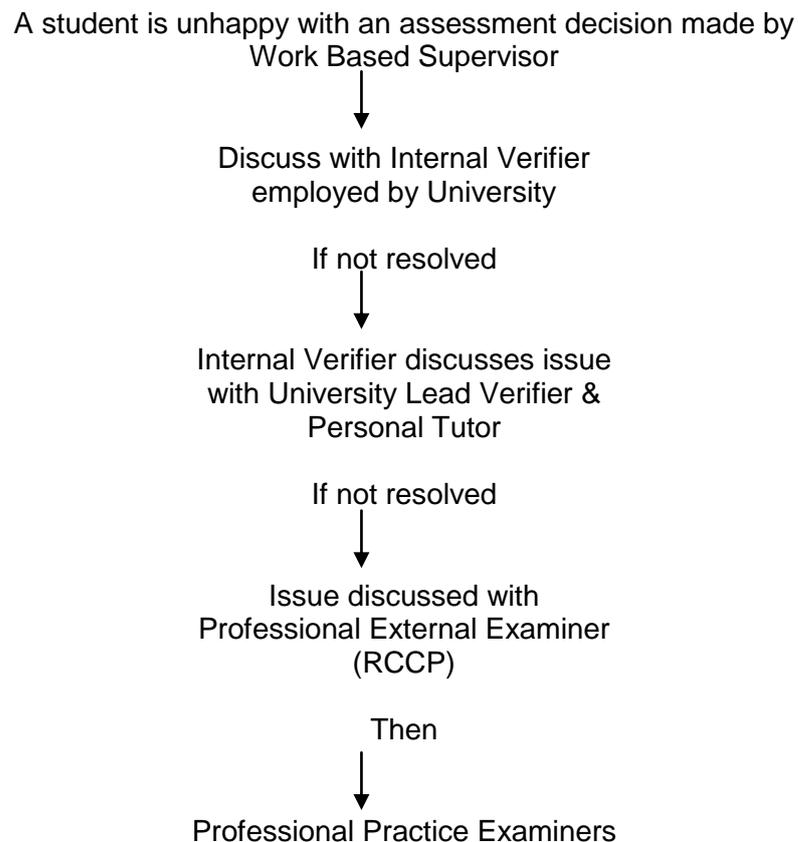
The acquisition of clinical skills will be fostered by a work-based supervisor who will provide formative opportunities for practice. Your work-based supervisor will advise and support you to:

- 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.

Each professional body within the Clinical Physiology subject area has a Record of Clinical Practice 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 Record of Clinical Practice. 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 Professional Body 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:



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

In addition to the Record of Clinical Practice you will complete a University generated Professional Practice Portfolio which will demonstrate your understanding of the relationship between theory and practice and the application of skills in reflection, interpretation and critical analysis. The Professional Practice Portfolio will be submitted each year and credits will be awarded for its satisfactory completion. Structured University based tutorials relating to its completion will form part of your timetabled academic study.

Health & Safety issues

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 your workplace by your Internal Verifier at the commencement of your 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 |
| Lead Verifier Neurophysiology | Mrs Amanda Davis Neurophysiology Practitioner University Hospital Birmingham Mandy.Davis@uhb.nhs.uk |

Personal Tutoring

The Clinical Physiology 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 cardiology and respiratory students formal individual tutorials will be scheduled during your specialist blocks

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://134.220.18.206/staffbooking/index.php>

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 Clinical Physiology 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 subject groups 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 BSc Clinical Physiology 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 Professional 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 Clinical Physiology Programmes 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 |
| Ms Susan Brock | Visiting Lecturer in Health | | | S.Brock |
| 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 Gillian Pearce | L/SL in Clinical Physiology & Anatomy | MA208 | 1141 | G.Pearce |
| Dr Shantha Perera | L/SL in Immunology & Medical Microbiology | MA209b | 1140 | S.A.Perera |
| Dr Ruth Shiner | Principal Lecturer 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. 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 Professional Body.

Career opportunities and Future Study

The completion of the RCCP accredited BSc (Hons) Clinical Physiology award thoroughly prepares a student for a career as a Clinical Physiologist and allows registration on the relevant Professional Register. Upon graduation an individual is suitable for employment in Cardiology, Clinical Neurophysiology or Respiratory 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, 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.

A syllabus of Postgraduate study in Clinical Physiology has recently been developed by the Professional Bodies so Masters and Professional Doctorate programmes of study are now emerging nationally. Continuing Professional Development courses do currently exist in the more complex areas of Clinical Physiology and it is likely that these will be accredited for use towards postgraduate qualifications. Postgraduate study is likely to be important for Clinical Physiologists in the future in line with the NHS Agenda for Change and Modernising Scientific Careers, incorporating the nine point Career Framework for Healthcare Scientists upon which career progression is likely to be based in the future.

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 2010. A full version of these regulations can be found on the University web site: <http://www.wlv.ac.uk/Default.aspx?page=6932>
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) Clinical Physiology award does not allow compensation for any specialist theory or practice module due to its professional requirements. Compensation is allowed for all other modules in the course in line with University Regulations.

Additional Information specific to your course

BSc (Hons) Clinical Physiology block timetable 2012-13

Listed below is the proposed block release timetable for module delivery of core and specialist modules during the 2012-13 academic year.

| Uni Week | w /c | Wolverhampton University based | | | Westminster Weeks. |
|----------|---------|--------------------------------|--------|--|--------------------|
| | | Block | Number | Modules | |
| 3 | 17 Sept | Block | 1 | | |
| 4 | 24 Sept | | | Year 3 & 4 Induction day Fri | |
| 5 | 1 Oct | | | | |
| 6 | 8 Oct | | | | |
| 7 | 15 Oct | | | | |
| 8 | 22 Oct | | | Year 4 Cardiol Specialist | |
| 9 | 29 Oct | Block | 2 | Year 3/4 Resp Year 3 Card Specialist Mon-Thurs | |
| 10 | 5 Nov | | | | |
| 11 | 12 Nov | | | | |
| 12 | 19 Nov | | | | |
| 13 | 26 Nov | | | | |
| 14 | 3 Dec | Block 3 | | Year 3/4 Resp & Year 3 Card Specialist Mon-Thurs | |
| 15 | 10 Dec | | | | |
| 16 | 17 Dec | Student Christmas Vacation | | | |
| 17 | 24 Dec | | | | |
| 18 | 31 Dec | | | | |
| 19 | 7 Jan | | | | |
| 20 | 14 Jan | | | Year 3/4 Respiratory Year 4 Cardiol Specialist | |
| 21 | 21 Jan | | | | |
| 22 | 28 Jan | Block | 4 | | |
| 23 | 4 Feb | | | | |
| 24 | 11 Feb | | | | |
| 25 | 18 Feb | | | | |
| 26 | 25 Feb | | | | |
| 27 | 4 Mar | | | | |
| 28 | 11 Mar | | | | |
| 29 | 18 Mar | | | Year 4 Cardiol Specialist | |
| 30 | 25 Mar | Student Easter Vacation | | | |
| 31 | 1 Apr | | | | |
| 32 | 8 Apr | | | Year 3 Cardiology | |
| 33 | 15 Apr | | | | |
| 34 | 22 Apr | | | | |
| 35 | 29 Apr | | | | |
| 36 | 6 May | | | | |
| 37 | 13 May | | | | |
| 38 | 20 May | | | | |
| 39 | 27 May | | | | |
| 40 | 3 Jun | | | | |
| 41 | 10 Jun | Block | 6 | | |
| 42 | 17 Jun | | | | |
| 43 | 24 Jun | | | | |
| 44 | 1 Jul | | | | |
| 45 | 8 July | | | | |
| 46 | 15 July | | | | |
| 47 | 22 July | | | | |
| 48 | 29 July | | | | |
| 49 | 5 Aug | | | | |
| 50 | 12 Aug | | | | |
| 51 | 19 Aug | | | | |
| 52 | 26 Aug | Block | 7 | | |
| | | | | | |

Week 4: 24th – 28th September 2012 – Year 3 & 4 Induction

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------|---------|-----------|----------|-----------|
| 9-1 | 9-1 | 9-1 | 9-1 | 10-1 |
| | | | | Induction |
| 2-6 | 2-6 | 2-6 | 2-6 | 2-5 |
| | | | | Induction |

Week 8: 22nd -26th October 2012 – Year 4 Cardiology Specialist

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------------------|--------------------|--------------------|--------------------|--------|
| 9-1 | 9-1 | 9-1 | 9-1 | 10-1 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | |
| 2-6 | 2-6 | 2-6 | 2-6 | 2-5 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | |

Week 9: 29th October – 2nd November 2012 – Year 3/4 Specialist Subject (Cardiology yr3 /Respiratory yrs 3&4)

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------------------|--------------------|--------------------|--------------------|--|
| 9-1 | 9-1 | 9-1 | 9-1 | 10-1 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | 6BM007 Advanced Professional Practice |
| 2-6 | 2-6 | 2-6 | 2-6 | 2-5 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | |

Week 14: 3rd -7th December 2012 – Year 3/4 Specialist Subject (Cardiology yr3 /Respiratory yrs 3&4)

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------------------|--------------------|--------------------|--------------------|--|
| 9-1 | 9-1 | 9-1 | 9-1 | 10-1 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | 6BM007 Advanced Professional Practice |
| 2-6 | 2-6 | 2-6 | 2-6 | 2-5 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | |

Week 20: 14th-18th January 2013 – Year 3 / 4 Respiratory and Year 4 Cardiology

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------------------|--------------------|--------------------|--------------------|--------|
| 9-1 | 9-1 | 9-1 | 9-1 | 10-1 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | |
| 2-6 | 2-6 | 2-6 | 2-6 | 2-5 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | |

Week 29: 18th – 22nd March 2013 – Year 4 Cardiology

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------------------|--------------------|--------------------|--------------------|--------|
| 9-1 | 9-1 | 9-1 | 9-1 | 10-1 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | |
| 2-6 | 2-6 | 2-6 | 2-6 | 2-5 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | |

Week 32: 8th -12th April 2013 – Year 3 Cardiology

| Monday | Tuesday | Wednesday | Thursday | Friday |
|--------------------|--------------------|--------------------|--------------------|---|
| 9-1 | 9-1 | 9-1 | 9-1 | 10-1 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | |
| 2-6 | 2-6 | 2-6 | 2-6 | 2-5 |
| Specialist Subject | Specialist Subject | Specialist Subject | Specialist Subject | 6BM021 Critical Evaluation of Current Topics In Physiology |

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 their employer 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. The employer will be kept informed at all stages of the process.

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.

