

Postgraduate Diploma/Masters in Veterinary Physiotherapy

STUDENT HANDBOOK



Veterinary Postgraduate Unit
Institute of Veterinary Science
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WELCOME FROM THE DIRECTOR OF VETERINARY POSTGRADUATE EDUCATION

As the Director of Veterinary Postgraduate Education at the University of Liverpool, I am very pleased to announce our provision of on-line modules for the PgDip/MSc in Veterinary Physiotherapy. To do so, we have an excellent team of administrative staff, fully supported by experienced academic staff and veterinarians in both the large and small animal practice. We aim to provide a stimulating and interactive program of modules and residential schools with fun, efficient and tailored education coordinated by veterinary physiotherapists and veterinarians, for graduates with a degree in human physiotherapy.

We have an emphasis on bringing together participants into a community of learning with an online or e-learning emphasis so that your 'notes', colleagues and mentors are portable and accessible wherever you are. We look forward to seeing you soon!

Catherine McGowan

Professor Catherine McGowan
Director of Veterinary Postgraduate Education

PURPOSE OF THE HANDBOOK

This handbook is applicable to anyone studying with us as part of their PgDip/MSc Veterinary Physiotherapy programme. It has been written to provide all the information you need to help you understand how your study is organised, where you can obtain further information and assistance, what you can expect from the unit, and also what we expect from you.

You should read it thoroughly during the early weeks of your programme. If you need to refer back to it at any point you will find a copy within your modules in VITAL.

KEY CONTACTS

Director

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Administrative/Support Team

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Introduction

**Professor Catherine McGowan BVSc MACVSc DEIM DECEIM PhD FHEA
MRCVSSenior Editor of Animal Physiotherapy: Assessment, treatment and
rehabilitation of animals**

Cathy graduated from the University of Sydney in 1991 and went on to do both her internship in equine medicine and surgery and PhD in equine exercise physiology at Sydney University. She then spent several years in private equine practice before starting a clinical academic career at the Royal Veterinary College, London in 1999. It was here she developed her interest in aged horses and endocrine disease, and started research into Equine Cushing's Syndrome and Equine Metabolic Syndrome which has continued through her various academic posts in Queensland Australia, Helsinki, Finland and now back in the UK at Liverpool.

Cathy has been involved in post graduate Master's level education since 1999 when she developed the Royal Veterinary College Masters and Post Graduate Diploma programs in Veterinary Physiotherapy which commenced in 2000. At the University of Queensland she developed an online distance education MSc program for physiotherapists, was involved in a coursework Masters degree for veterinary surgeons and was the tutor for the post Graduate Foundation in Veterinary Science (now Centre for Veterinary Education) Equine Internal Medicine distance education course for practising veterinarians for 5 years.

Programme Coordinator

**Suzanne Cottrill BA, BSc, MSc Vet
Physio, MCSP**
Veterinary Physiotherapy Programme
Coordinator
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Module Enrolments and Queries

Veterinary Postgraduate Unit
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Cathy is a Diplomate of the European College of Equine Internal Medicine and an RCVS recognised specialist in equine internal medicine and is currently Director of Veterinary Postgraduate Education at the University of Liverpool in the UK.

The modules are also supported by our team of administrative staff within the Veterinary Postgraduate Unit and teaching on individual modules will be supported by approved Veterinary Physiotherapists as well as Veterinarians from the School of Veterinary Science.

Suzanne Cottrill BA, BSc, MSc Vet Physio, MCSP, Cat A member of the Association of Chartered Physiotherapists in Animal Therapy (ACPAT)

Suzanne qualified in 2003 as a Physiotherapist and specialised in animal physiotherapy, gaining her Master's degree in 2007 from the Royal Veterinary College. She is qualified to work with all animals and mainly works with dogs, cats and horses but has treated a rabbit a couple of cows and even a chicken!

With an initial career in HR and sales of training courses Suzanne then worked for the NHS for 4 years after initial qualification. Her Masters research was published and she has written articles for small animal journals as well as spoken at special interest group conferences on small and large animal physiotherapy. With an accredited teaching qualification from the CSP Suzanne has been involved with student training since 2009 for both Liverpool University and UWE.

Suzanne has 2 dogs of her own, Jack Russell crosses, Max and Oscar as well as a young horse, Starsky (he came with that name), who she is training for dressage.

THE VETERINARY PHYSIOTHERAPY PROGRAMME

The University of Liverpool has developed the modular Veterinary Physiotherapy programme to enable qualified human physiotherapists to transfer their physiotherapy skills to the treatment of animal patients. The programme is recognised by the Association of Chartered Physiotherapist in Animal Therapy (ACPAT) as an upgrade route from Category B to A status

The 6 module Postgraduate Diploma in Veterinary Physiotherapy can be studied on a part time basis over 2 years (3 modules per year) or a 7 module Veterinary Physiotherapy MSc degree over a further (3rd) year.

All candidates will start in May, and candidates without any disruption to study will complete, the Diploma in Veterinary Physiotherapy at the end of the second year and the MSc in Veterinary Physiotherapy at the end of the third year. The maximum period of student registration under the current University of Liverpool Regulations is 4 years for the PgDip and 6 years for the MSc.

The modules are based on a blended learning approach, including distance education in an online forum, practical residential schools and clinical placements. This approach encourages communication and interaction between professional peers as well as teaching staff while maintaining flexibility, so that the programme is ideally suited to practising professionals on a part time basis.

Programme Structure

In order to be awarded the Postgraduate Diploma in Veterinary Physiotherapy, candidates must successfully complete the following six modules:

Year 1

- VETS771 Anatomy & Biomechanics for the Veterinary Physiotherapist
- VETS772 Principles of Veterinary Physiotherapy & Approach to the Animal Patient
- VETS773 Orthopaedics of the Common Domestic Species for the Veterinary Physiotherapist

Year 2

- VETS774 Veterinary Physiotherapy Practice
- VETS775 Neuromotor System in Performance and Disease
- VETS776 Advanced Veterinary Physiotherapy Practice

In order to be awarded the MSc in Veterinary Physiotherapy, candidates must also complete a Research Project in year three (subject to approval of research proposal)

- VETS777 Research Project (MSc)

Module Provision Timetable

Year of Study	Module Title	Credits	Semester	Practical Requirements
Year 1	VETS771 Anatomy & Biomechanics for the Veterinary Physiotherapist	20	May – Aug	5 day residential school
Year 1	VETS772 Principles of Veterinary Physiotherapy & Approach to the Animal Patient	20	Sep - Dec	5 day residential school
Year 1	VETS773 Orthopaedics of the Common Domestic Species for the Veterinary Physiotherapist	20	Jan - Apr	5 days informal placements in veterinary hospitals
Year 2	VETS774 Veterinary Physiotherapy Practice	20	May - Aug	10 days residential school
Year 2	VETS775 Neuromotor System in Performance and Disease	20	Sep- Dec	5 days informal placements in veterinary hospitals
Year 2	VETS776 Advanced Veterinary Physiotherapy Practice	20	Jan - May	20 days clinical placements (to start after the commencement of yr 2) Final Practical Exam
Year 3	VETS777 Research Project (MSc)	60	Sep - Sep	

Method of Teaching

Postgraduate Diploma modules are delivered as part of a fully-taught, structured e-learning programme, where students receive support and guidance from subject specialists. Candidates do not work in isolation but as part of a teaching group, with regular contact with fellow students and academics on-line via evening journal clubs and discussion boards. Candidates will be assessed on a continuing basis and assignments are submitted online.

The virtual learning environment also includes access to the University of Liverpool's online library.

In addition, candidates attend a total of 4 weeks or 20 days practical training at the University of Liverpool, Leahurst Campus; 20 practical days with a clinical educator and an additional 10 days in veterinary practices over the two-year programme. The 50 days practical training provides candidates with the opportunity to apply the knowledge and skills learned on the programme.

Some practical training may be completed abroad for candidates studying from Australia, Sweden, New Zealand, South Africa or the USA.

An overview of the content for each module is provided at the end of this document (Appendices 1 to 7).

Assessment

Assessment is on-going and throughout each module there are a number of assignments with set submission dates and feedback provided by module tutors. Assignments take various forms, including written reports, essays, short answer questions, assessed discussion boards and practical exams. Specific assessment requirements for each module are provided at the end of this document (appendices 1-7)

Practical Content

Residential Schools

Residential schools provide the opportunity for students to develop their practical skills under the guidance of Veterinary Physiotherapists and Veterinarians. Residential schools are integral to VETS771, 772 & 774. All residential schools will take place on the Leahurst Campus, Wirral (except for Australian and New Zealand students who will attend 2 of the 3 schools in Australia).

Veterinary Hospital Placements

Students are required to attend 2 x 5 day informal Veterinary Hospital Placements as part of VETS773 & 775

Veterinary Physiotherapy Clinical Placements

Students are required to complete a minimum of 20 days on Veterinary Physiotherapy Clinical Placement with an approved Liverpool Veterinary Physiotherapy Clinical Educator. Clinical Placements start after the completion of the first year and form part of the assessment for VETS776. Details of Approved Clinical Educators are available from the Veterinary Postgraduate Programme's Administrator Lucy Atkins - please e-mail atkinsl@liv.ac.uk

Final Practical Examination

At the end of VETS776, all students will participate in a one hour practical exam which will cover the material contained within VETS771-VETS776 inclusive. Students must pass the practical exam in order to pass the module.

Candidate Pre-Requisite Requirements

Prerequisites for this programme are eligibility for registration with the Health Professions Council (or equivalent Physiotherapists Registration Board for international delegates). In addition, one year's recent experience working as a physiotherapist

References from a veterinarian and a physiotherapist (human or animal) in support of the applicants' suitability for the programme.

If the applicant is from a country where English is not the first Language they will be required to show evident of attainment of English at a minimum IELTS score of 7 or equivalent.

This is an award in advanced physiotherapy practice so we do expect a reasonable knowledge base of your background physiotherapy degree as well as the life skills and practice skills you have developed while working in practice. It is also expected that participants will have appropriate safe handling skills of both large and small animals prior to starting the practical components.

All candidates wishing to use the programme as an upgrade route to Category "A" Status of ACPAT membership must be registered with ACPAT before commencing the modules.

Fees

Years 1 & 2: £4500 per year (this fee includes practical workshops at Leahurst and clinical educator placements)

Year 3 (Research Project): £1500

How to Apply

To request an application pack please contact the Veterinary Postgraduate Unit on cpdvets@liv.ac.uk or call us on +44 (0) 151 794 6016

COMMUNICATION

There are several ways in which we will communicate with students and it is important that you familiarise yourself with these areas so that you can check for messages and notices regularly. Failure to do so may mean that you miss important information regarding your study.

Email

All students are provided with a University email account and once your registration is complete, all University communications will be sent to this account. It is very important that you check this regularly, and also during any breaks in your study. To forward your University of Liverpool email onto another account, please review the following pages: <https://www.liverpool.ac.uk/csd/email/forwarding/>.

If you do email academic or administrative staff, please do so only from your University email account stating the module you are enrolled on and if possible, your student ID number. In a unit with approximately 700 students each semester, this will help us to identify you more easily and respond to your enquiry.

Please try to find information in this handbook, through your modules or through the Veterinary Postgraduate Unit web pages in the first instance; if you cannot find what you are looking for, let us know so that we can post that information for the benefit of other students.

VITAL

Virtual Interactive Teaching at Liverpool (VITAL) is the online teaching platform used to deliver our modules. VITAL supports learning and teaching activities across the Internet and the Veterinary Postgraduate Unit actively uses your modules in VITAL to deliver essential information to students.

This facility takes advantage of web technologies to enable quick and easy provision of module materials and other relevant information.

Students are expected to monitor information concerning their study on their module in VITAL regularly. Teaching specific information will be communicated via your module in VITAL and examples of the types of information that will be displayed there include: assessment feedback, journal club reminders and updates to module materials. Generic information about your study will also be communicated via your module in VITAL, and examples of the type of information that will be displayed there include: copies of this handbook, FAQs, regulations and guidance, useful web-links, and University documentation such as Extenuating Circumstances Guidelines.

Veterinary Postgraduate Unit Website

The Veterinary Postgraduate Unit's website is: <http://www.liv.ac.uk/cpdvets>

External Post

Sometimes we need to contact you via the external postal system (e.g. issuing certificates) so it is important that the unit is kept informed of any changes to your address.

Telephone Contact

All staff have a direct telephone number and many have voicemail. You can find the numbers within the 'Background & Contacts' section within this handbook.

STUDENT RESPONSIBILITIES

Time and Study Commitment

As a postgraduate student you are expected to be motivated and self-directed, and are responsible for organising your own time and making sure that assessment deadlines and other requirements are met. As a distance-learning student this is particularly important. Weekly time commitments may vary week to week, but you are expected to study a minimum of approximately 12.5 hours a week for a 20 credit module. If you are having difficulty in meeting any module requirements it is your responsibility to let the Assessment Administrator or your Module Coordinator know.

Online Communication

As an online programme, much of the communication is in written form, such as in group discussion boards, and we ask that you follow these guidelines in order to ensure that communication is effective and productive:

- Communication should be constructive, positive and respectful
- Don't attack or judge prematurely
- Write clearly and re-read messages before sending to avoid misinterpretation or misunderstanding
- Use appropriate grammar and punctuation
 - Don't use all capital letters, it can be considered SHOUTING
 - Don't use exclamation marks to emphasise frustration!!!!!!
 - Don't use red writing, this can be interpreted as being angry or annoyed
- Don't write impulsively or write anything that you would not say face-to-face

Computer Requirements

As an online programme you will be accessing a range of tools via the internet. Some basic requirements are required in order to be able to complete the modules. You will need to have access to a computer with the following minimum technical specification and accessories:

Windows

- 1.4GHz Intel® Pentium® 4 or faster processor (or equivalent) for Microsoft® Windows® XP, Windows 7 or Windows 8; 2GHz Pentium 4 or faster processor (or equivalent) for Windows Vista®
- Windows XP, Windows Vista, Windows 7
- 512MB of RAM (1GB recommended) for Windows XP, Windows 7; 1GB of RAM (2GB recommended) for Windows Vista
- Microsoft Internet Explorer 7, 8, 9, 10; Mozilla Firefox; Google Chrome
- Adobe® Flash® Player 10.3

Mac OS

- 1.83GHz Intel Core™ Duo or faster processor
- 512MB of RAM (1GB recommended)
- Mac OS X, 10.5, 10.6, 10.7.4, 10.8
- No Adobe Connect Add-in support for Mac OS X 10.5 (Leopard). Users on Leopard can attend meetings in the browser.
- Mozilla Firefox; Apple Safari; Google Chrome
- Adobe Flash Player 10.3

Graphics and Sound: Capable of viewing video/audio over the internet (try YouTube with your machine to see if you can play and hear a video).

Software: Internet Explorer 7 or greater, Microsoft Office 2007 or 2010, up-to-date Adobe Acrobat Reader and Adobe Flash Player (both Adobe products are available via a free download).

Webcam with Microphone: minimum pixel picture quality of 640x480

Broadband Internet connection: 1Mbps minimum internet connection speed. Wired internet connection recommended for online tutorials.

If you do not have the minimum specification outlined above or would like to ask a question about the technical requirements of joining our courses, please contact Computing Services Department on 0151 794 4567 or email helpdesk@liverpool.ac.uk and let them know what equipment you have, as there may be free* updates that can be applied to your computer to help make it compatible with our learning systems.

Feedback from Students to Staff

Student feedback is very important for the review and development of modules and the programme as a whole.

For modules running in autumn, students will be invited to complete module feedback surveys and for modules running in spring and summer students are invited to take part in the Postgraduate Taught Experience Survey (PTES), run in conjunction with the Higher Education Academy. The overall aim of these surveys is to identify where improvements can be made in order to enhance the quality of individual modules and the programme. A high response rate is vital to obtain useful results and participation is greatly appreciated.

Informal feedback is welcome at any time, via the discussion board, email or phone.

ASSESSMENT INFORMATION

Penalties for Word-counts

For assessments that have a recommended number of words, students should submit work that does not exceed this figure by plus 10%. Assessors may stop marking beyond the permitted word length. Unless stated otherwise in specific assessment guidelines, tables, diagrams, references and appendices are not included in the word count.

Failing Assessments

A student who fails the overall cumulative assessment for a module (the minimum pass mark is 50%) may be allowed to resubmit one or more items of assessment within 3 months of the module completion date. The Module Review Board will determine whether you are permitted the opportunity to re-sit failed assessments. The marks gained will be capped at 50% except where the re-sit is a consequence of approved mitigating circumstances – often referred to as a ‘first-sit’. The results of any resubmission attempts will be ratified at the next Module Review Board.

If resubmission is unsuccessful, or the student fails to resubmit in the invited period, the student will fail the module and be required to retake the module next time it runs. Module fees will apply. Failure of the same module more than once or several modules in succession will result in discussion as Module Review Board and may result in termination of studies.

Academic Integrity

By submitting your work you are agreeing to the University's [Academic Integrity Policy](#) that you have not plagiarised nor copied material, nor have you embellished, fabricated nor falsified any of the data nor have you colluded in producing the work nor submitted commissioned or procured work.

Case reports and essays are required to be submitted via Turnitin and are checked for academic integrity. It is critical that, in order to avoid the potential for inadvertent plagiarism, that all works are appropriately referenced. Please ensure that you check the "originality" score in Turnitin once you submit your work. It is your responsibility to highlight any potential issues arising from this score, particularly if you believe that there is a specific reason for the high score. In general scores above 25% will be critically examined.

If you are unsure of what the University considers plagiarism or how to reference material correctly, please visit our iLearn resource within your module in VITAL. Under the section on Information skills is a section on plagiarism and under the section on academic writing skills there is a section on quotes and paraphrasing and referencing.

A student cannot be assessed more than once on the same piece of work (i.e. case reports, essays etc. cannot be resubmitted even if it is a different module or a different topic).

Assessment Feedback

If you submit an assignment on time you can expect feedback within 2 weeks. However, if you submit later than the due date you may not receive feedback for up to a month afterwards. Feedback can be found in the "My Grades" section of the module in VITAL.

There are several examiners who mark the assessments, this is a necessity and dictated by the RCVS and University regulations. This inevitably leads to some differences of opinion on what constitutes the "correct" way to do/write anything!

On the positive side it means that your work is gradually assessed by examiners who are clinically active, research active and others whose busiest area is knowledge exchange. If you can assimilate all the pieces of advice it should help you with any future writing/research project and with the compilation of advisory reports to clients/insurance companies/colleagues etc.

Please be aware that the most critical marking and feedback is often the most valuable to you. Some comments will be made purely to give you the assessor's personal point of view. This may not always be the same as you or other assessors. It is important to be aware that you will not have your grade reduced as a result of personal opinions such as this but we consider it extremely valuable to you to have access to specialist opinion.

To see a high standard of writing we suggest reading case reports which have been published in The Veterinary Record or similar (something reasonably clinical) and use this as a sensible gold standard for writing.

Grading Rubrics

Specific grading rubrics will be used for all assessment and these will be available within the relevant assessment instructions page in VITAL.

Moderation

Any student who achieves a final borderline mark of 45-55% will be moderated by the module co-ordinator or designated module moderator (as per University of Liverpool Regulations). This means marks may be adjusted to ensure they are consistent and fair. Any moderated cases where there is variation of >10% will be flagged and discussed by both examiners. Where agreement is not easily reached these will be passed on to the external examiner to mediate the final grade.

Boards

A Module Review Board will be formed consisting of academics contributing to the assessment for the relevant module being examined, Module Coordinator or representative and the External Examiner. This will be held three times a year. Primary remit is to approve completed module marks giving the external examiner the opportunity to comment.

Students should be aware that all assessment grades are provisional pending ratification at the Module Review Board.

A separate Examination Board will be held to approve the final examinations and any final awards that have been achieved. The primary remit is to confirm final examination marks and recommend awards for each individual taking into consideration any extenuating circumstances.

STUDENT SUPPORT

If you are experiencing difficulties with any aspect of your study, you should contact your Module Coordinator in the first instance, who will be happy to discuss any issues. You can also contact members of the Administrative Team via their email address, which can be found at the start of this handbook.

Disability Support

The Disability Support Team is responsible for the co-ordination of support for disabled students and provides a specialist guidance and support service for all prospective and current students.

They provide support and advice to students with a wide range of impairments. This can include, but is not limited to:

- Visual impairment
- Hearing impairment
- Mobility impairment
- Medical conditions which may be long term or progressive (e.g. epilepsy, chronic fatigue syndrome)
- Mental Health difficulties
- Autistic spectrum disorder (ASD) e.g. Asperger's Syndrome.
- Specific Learning Difficulties (e.g. dyslexia, dyspraxia, dyscalculia)

Please visit the Disability Support Team's website (<http://www.liv.ac.uk/studentsupport/disability/>) for further information and guidance.

To speak with a member of the Team please telephone the Disability Support Team on (0151) 794 4714, 794 5117, 795 0323 or contact them by email: disteam@liv.ac.uk

Please Note: Any disclosure made must also be reported to Liz O'Sullivan (Examinations Officer) at the start of your module so that any individual support you may require be put into place for you as soon as possible.

PROCEDURES

Procedure for Handling Requests for Extensions

If a student has a valid reason for late submission, there will be no penalty for assessment submitted late but still within the module period provided there has been prior notification by email to the Assessment Administrator (eosulliv@liv.ac.uk).

An extension to the due date (without penalty) outside the module period may be granted by the Assessment Administrator or their designated nominee on medical or other exceptional grounds providing the student completes a request for extension form (accessed via the module in VITAL) normally giving at least 10 working days' notice.

Any assessment submitted late outside of the module period (without approval) will be subject to a penalty of 5% per working day (capped at 50% i.e. a student who would have otherwise passed, cannot fail solely on late submission as per University of Liverpool guidelines). Assessment which requires, in part, group interaction within a certain time frame may have marks deducted if the late submission falls outside of the interaction period.

Procedure for Handling Extenuating Circumstances Claims

If students are experiencing ANY difficulties which they feel are impacting on their studies they are strongly advised to speak to their Module Coordinator or the Assessment Administrator, who will advise whether to submit a written statement (with supporting written evidence) of extenuating circumstances (forms available to download from the modules in VITAL). Sometimes students do not want to reveal their circumstances, thinking they are not serious enough, or too embarrassing. However, students are advised that these are held in the strictest confidence, and it is preferable to allow an experienced neutral party (the Committee members) to decide on their significance in relation to your studies.

A statement can be submitted any time during your study, but ONLY up to three days after the date of an examination or a submissions date, unless stated otherwise. The Extenuating Circumstances Committee meets before each Board of Examiners meeting. Extenuating circumstances can ONLY be taken into account if the Committee accepts them.

Deadline dates for submission of extenuating circumstances will be posted on the module in VITAL and also sent out via email prior to the final PgDip exam.

Where a student is aware of a pre-existing extenuating circumstance that may adversely affect their performance in a practical exam, the professional requirement is that they should not practise until well enough to do so. You should therefore not undertake the clinical assessment and you should present your evidence of extenuating circumstances as outlined above. Attending a clinical assessment is a declaration that you are fit to sit that assessment and therefore a retrospective application for consideration of extenuating circumstances maybe considered under fitness to practise procedures.

For the most up to date procedures, please visit the link below:

<https://www.liverpool.ac.uk/student-administration/exams/extenuating-circumstances/>

Procedure for Handling Module Deferrals

A student who has a suitable reason is able to defer any module once, within a period of up to 2 years, without incurring any further charges. If a module is deferred more than once, a fee of 50% of the module cost will need to be paid to re-commence the module. It is the responsibility of the participant to re-book, within the booking deadline, onto the module that they wish to defer onto. If deferral is within a 2 year time period, completed assessment will be carried over. If the time period is greater than 2 years, any completed assessment will have to be resubmitted and 50% of the module cost will need to be paid to re-commence the module.

Procedure for Suspending your Studies

You may find it necessary at some point during your programme to suspend your studies. This of course may be for a variety of reasons, which can be personal, financial or academic.

The University has a number of support services available for you if you need guidance or advice. In all cases, we advise you to discuss any possibility of suspension with the Programme Administrator (charlie.russell@liv.ac.uk).

If you do decide to suspend your studies, you will need to complete a Suspension of Studies Form and have this approved by the Institute. For the most up to date procedures and a copy of the form, please visit: <https://www.liverpool.ac.uk/student-administration/student-administration-centre/student-record/suspensions/>

Procedure for Handling Assessment Appeals

The University is committed to ensuring that it provides for its students a high quality educational experience, supported by appropriate academic services. It recognises, however, that there might be occasions when students will feel that they have cause to appeal against an academic decision made by a Module Review Board or Board of Examiners in relation to their studies.

The Assessment Appeals Procedure outlines the details of appeal considerations and, in the event of an appeal being unsuccessful, students' rights to further appeal. For the most up to date procedures, timescales and links to the policy, please visit:

<https://www.liverpool.ac.uk/student-administration/student-administration-centre/policies-procedures/appeals/>

UNIVERSITY STUDENT HANDBOOK

Although aimed predominately at students studying on-campus, the [handbook for Postgraduate Taught Students](#) has been written to provide all the information you need to help you through your University career and seeks to ensure that you know all there is to know about our services and facilities; where to find them and when to use them. It also sets out the rules, regulations and policies to be followed as a member of the University community and tells you about other sources of information likely to be useful to you throughout your studies.

APPENDIX 1

VETS771 Anatomy & Biomechanics for the Veterinary Physiotherapist

Value: 20 credits

Notional Study Hours: 200

Aims of Module

The aim of this module is to develop in depth knowledge of the musculoskeletal anatomy and biomechanics of the common domestic species for qualified physiotherapists including a critical awareness of comparative aspects between these species and humans and how this may affect the type of locomotion or performance expected.

Learning Outcomes

At the end of this module, candidates will be able to:

1. demonstrate a comprehensive understanding of the appropriate anatomical vocabulary for describing the arrangement and orientation of a particular structure;
2. demonstrate comprehensive knowledge of the anatomy of the domestic species and critically evaluate the similarities and differences in the arrangement of muscles, bones, tendons, joints, nerves and major blood vessels between common domestic species and humans;
3. demonstrate an in depth understanding of the structure and mechanical properties of muscle, tendon, bone and cartilage evaluating the response of these structures to the mechanical environment, exercise, fatigue, ageing and injury;
4. demonstrate an in depth understanding of the biomechanics of locomotion of the horse and dog, including sports specific locomotion and factors affecting locomotion including the rider, training aids and farriery;
5. critical evaluation of the scientific literature relating to the area of study.

Module Structure

1. Anatomy of the thoracic limb

- Osteology, synovial structures and muscular arrangement of the equine and canine thoracic limb, including the thoracic limb stay apparatus in horses and use of appropriate anatomical terminology to describe and orientate a specimen
- Major nerves and blood vessels of the thoracic limb
- Cutaneous sensation and muscle function related to each major nerve in the thoracic limb.
- Normal range of motion of the joints of the thoracic limb, and structures that constrain the range of movement of a joint in a particular plane
- The role of the main thoracic limb muscle groups in locomotion including the specialised structures of the equine thoracic limb and the effect on individual joint movement and locomotion elicited by damage to a specific element of the musculoskeletal system
- The underlying anatomical structures that correspond to topographical features of the thoracic limb on the living animal

2. Anatomy of the pelvic limb

- Osteology, synovial structures and muscular arrangement of the common domestic species pelvic limb, including the thoracic limb stay apparatus in horses and use of appropriate anatomical terminology to describe and orientate a specimen
- Major nerves and blood vessels of the pelvic limb
- Cutaneous sensation and muscle function related to each major nerve in the pelvic limb
- Normal range of motion of the joints of the pelvic limb, and structures that constrain the range of movement of a joint in a particular plane
- The role of the main pelvic limb muscle groups in locomotion including the specialised structures of the equine thoracic limb and the effect on individual joint movement and locomotion elicited by damage to a specific element of the musculoskeletal system
- The underlying anatomical structures that correspond to topographical features of the pelvic limb on the living animal

3. Anatomy of the teeth, spinal column and trunk

- Osseous, muscular and other soft tissue structures of the vertebral column vertebrae
- Function of the vertebral column including passive and active structures supporting the vertebral column and contribution to locomotion in the different mammalian species
- Thoracic and abdominal wall anatomy
- Dentition in the horse and dog

4. Musculoskeletal tissues

- Mechanical properties of muscle, bone, cartilage, tendon and ligament in relation to their function in locomotion including the shape of individual bones in relation to their loading pattern in vivo;
- Individual joint components and their contribution to joint stability, movement and resistance to mechanical damage; and
- Properties of muscle proteins, structure and function in contraction (sliding filament theory of muscle contraction), muscle fibre types to their role in high speed and economical locomotion and the relationship between muscle contraction velocity and force development in concentric and eccentric contractions.

5. Biomechanics of locomotion

- Common domestic species static and dynamic conformation
- Common domestic species gait
- Kinetics and kinematics, stress and strain
- Neuromotor control and joint stability in control of movement

6. Anatomy of the equine foot and farriery

- Equine hoof structure and growth
- Horse shoeing, effect on performance, limb biomechanics, conformation and soundness

Practical Component

There is an obligatory **5 day Residential School** at Leahurst

Assessment

- **Practical Test** - At the end of the residential school (5%)
- **Short Answer Questions** - At the end of study units 1-5 (45%)
- **Journal Critique** - You will be assigned a study unit and topic in which you will have to participate in journal club by providing a journal article and a summary of its applicability to practice/evidence based medicine (10%)
- **Discussions** - Discussions occur at anytime during the nominated week/study unit (10%)
- **Essay** - 2000 word essay due at the end of the module (30%)

APPENDIX 2

VETS772 Principles of Veterinary Physiotherapy & Approach to the Animal Patient

Value: 20 credits

Notional Study Hours: 200

Aims of Module

The aim of this module is to develop critical awareness of the legislation that frames animal therapy and develop a comprehensive understanding of the assessment and therapy of animals including emphasis on the importance of good verbal and written communication.

Learning Outcomes

At the end of this module, candidates should be able to:

1. demonstrate an in depth understanding of the legal, professional and ethical implications of veterinary physiotherapy practice;
2. demonstrate a systematic understanding of the importance of liaison with veterinarians, veterinary nurses and other paraprofessionals;
3. demonstrate the ability to communicate at many different levels and change the type of terminology used to accommodate different audiences;
4. demonstrate the ability to critically evaluate the scientific literature relating to their area of work, a comprehensive understanding of the research process and the implications for clinical practice;
5. demonstrate the ability to apply clinical reasoning to issues through independent thought and informed judgement;
6. demonstrate an in depth understanding of normal and problem behaviours of commonly treated domestic animals and a critical awareness of how animal behaviour is modified by pain;
7. demonstrate the ability to undertake a physiotherapy assessment of both large and small animals and to establish treatment goals based on the critical evaluation of assessment findings.

Module Structure

1. Law and professional ethics in the Veterinary and Physiotherapy Professions

Relevant legislation for the Veterinary Physiotherapist including professional, welfare, transport, medicines and performance animal regulations

2. Communication Skills

- Interaction with the members of the veterinary physiotherapy team
- Clinical record keeping and report writing

3. Evidence Based Practice

- Clinical reasoning
- Evidence based medicine

- Critical evaluation of the literature
- Keeping up to date in clinical professional physiotherapy practice

4. Physiotherapy assessment of the animal Patient

- Safe handling and approach to the animal patient
- Normal and problem behaviours in animals
- Behaviour and pain in animals
- History taking and signalment
- Assessment of static and dynamic conformation
- Palpation of soft tissues and determination of normal and abnormal findings
- Range of motion of joints (spinal and peripheral)
- Reflexes and stretching

Practical Component

There is an obligatory **5 day Residential School** at Leahurst

Assessment

- **Practical Test** - At the end of the residential school (10%)
- **Short Answer Questions** - At the end of study units 1-4 (20%)
- **Journal Critique** - You will be assigned a study unit and topic in which you will have to participate in journal club by providing a journal article and a summary of its applicability to practice/evidence based medicine (10%)
- **Discussions** - Discussions occur at anytime during the nominated week/study unit (10%)
- **Case based Essays** – 2 x 1500 word case based essays due at the end of the module (50%)

APPENDIX 3

VETS773 Orthopaedics of the Common Domestic Species for the Veterinary Physiotherapist

Value: 20 credits

Notional Study Hours: 200

Aims of Module

The aim of this module is to develop an in depth understanding of a range of orthopaedic and musculoskeletal conditions that affect the common domestic species.

Learning Outcomes

By the end of this module, candidates will be able to:

1. demonstrate a comprehensive understanding of the musculoskeletal demands of working pets and athletic animals;
2. demonstrate an in depth understanding of the veterinary approach of diagnosing lameness in animals;
3. demonstrate a systematic understanding of problems associated with osseous, joint, tendon and ligament structures due to developmental disorders, injury/trauma and degenerative disorders and identify appropriate physiotherapy rehabilitation options;
4. demonstrate a comprehensive understanding of degenerative joint disease, conservative and surgical treatment approaches and rehabilitation;
5. demonstrate a systematic understanding of fracture biomechanics, healing and repair in the evaluation of management strategies including post-operative care and management of patients with fracture complications;
6. undertake critical evaluation of the scientific literature relating to the area of study.

Module Structure

1. Canine Orthopaedics

Approach to orthopaedic disorders

- The lame dog
- Components of the lameness examination
- Examination at rest and during movement
- Manipulative tests
- Diagnostic imaging

Orthopaedic diseases and disorders (developmental, injury/trauma, degenerative)

- Bone
- Tendon and ligaments
- Joints

Selected orthopaedic disorders

- Forelimb
- Hind limb

- The vertebral column/back
- Developmental disorders

Fractures

- Classification of fractures
- Fracture healing
- Fracture treatment
- Biomechanics of bone and fractures
- Biomechanics of fracture fixation
- Internal fracture fixation techniques
- External coaptation and bandaging
- Surgical management prior to and after maturity
- Post operative care

2. Equine orthopaedics

Common nomenclature, conformational and clinical terms and definitions

Approach to orthopaedic disorders

- The lame horse
- Components of the lameness examination
- Examination at rest and during movement
- Manipulative tests
- Diagnostic analgesia: Nerves and joints
- Diagnostic imaging

Orthopaedic diseases and disorders (developmental, injury/trauma, degenerative)

- Bone
- Tendon and ligaments
- Joints

Selected orthopaedic disorders

- Forelimb
- Hind limb
- The vertebral column/back
- Specific considerations in the foal

Practical Component

You are expected to arrange an informal 5 days of Veterinary Hospital Placements during the module. You may attend more than one Veterinary Hospital during this time. Placements will be assessed on a pass/fail basis.

Assessment

- **Veterinary Hospital Placement** - students are required to pass their Veterinary Hospital Placement (pass/fail)
- **Short Answer Questions** - At the end of study units 1-2 (30%)

- **Journal Critique** - You will be assigned a study unit and topic in which you will have to participate in journal club by providing a journal article and a summary of its applicability to practice/evidence based medicine (10%).
- **Discussions** - Discussions occur at anytime during the nominated week/study unit (10%)
- **Essays** - 2 x 1500 word essays due at the end of study units 1-2 (50%)

APPENDIX 4

VETS774 Veterinary Physiotherapy Practice

Value: 20 credits

Notional Study Hours: 200

Aims of Module

The aim of this module is to enable physiotherapists to critically evaluate and translate their knowledge and understanding of human physiotherapy practice to that of animal patients, facilitating an in depth understanding of the physiotherapist and their practice in context of the veterinary multidisciplinary team.

Learning Outcomes

By the end of this module, candidates will be able to:

1. demonstrate a critical awareness of the functional effects of primary dysfunction on the entire musculoskeletal system;
2. demonstrate an in depth understanding of the principles of clinical reasoning in the development of a problem list, short/long term treatment plans and goals appropriate to a condition, incorporating information from the veterinary and physiotherapy assessment;
3. demonstrate a comprehensive understanding of the theoretical basis of individual manual, physical, electro-, hydro- and exercise therapy techniques and critical awareness of the optimum time for their application as well as skills in their application to animals;
4. demonstrate critical evaluation of the scientific literature relating to the area of study.

Module Structure

1. Manual Therapies

The safe and effective application of a range of manual modalities (soft tissue massage, trigger point therapy, myofascial release) in the physiotherapy management of pain and musculoskeletal conditions in animals including theory and understanding of the different physiological effects, evaluation of effects and progression/regression of treatment, knowledge of safety precautions and contra-indications

2. Physical (Hot and Cold) Therapies

The safe and effective application of a hot and cold therapy in the physiotherapy management of pain and musculoskeletal conditions in animals including theory and understanding of the different physiological effects, evaluation of effects and progression/regression of treatment, knowledge of safety precautions and contra-indications

3. Electrotherapy

The safe and effective application of a range of electrotherapy modalities (ultrasound, laser, TENS, muscle stimulation) in the physiotherapy management of pain and musculoskeletal conditions in animals including theory and understanding of the different physiological

effects, evaluation of effects and progression/regression of treatment, knowledge of safety precautions and contra-indications

4. Hydrotherapy

The safe and effective application of hydrotherapy in the physiotherapy management of pain and musculoskeletal conditions in animals including theory and understanding of the different physiological effects, evaluation of effects and progression/regression of treatment, knowledge of safety precautions and contra-indications

5. Exercise Therapy

The safe and effective application of therapeutic exercise prescription in the physiotherapy management of pain and musculoskeletal conditions in animals including theory and understanding of the different physiological effects, evaluation of effects and progression/regression of treatment, knowledge of safety precautions and contra-indications

Practical Component

There is an obligatory **10 day Residential School** at Leahurst

Assessment

- **Short Answer Questions** - At the end of study units 1, 3 and 4 (30%)
- **Journal Critique** - You will be assigned a study unit and topic in which you will have to participate in journal club by providing a journal article and a summary of its applicability to practice/evidence based medicine (10%)
- **Discussions** - Discussions occur at anytime during the nominated week/study unit (10%)
- **Case Reports** - 2 x 1500 word case reports due at the end of study units 2 and 5 (50%)

APPENDIX 5

VETS775 Neuromotor System in Performance and Disease

Value: 20 credits

Notional Study Hours: 200

Aims of Module

The aim of this module is to develop an in depth knowledge of the neuromotor system in performance and disease including adaptations to training, feeding for performance and diseases and disorders affecting the neuromotor system in animals.

Learning Outcomes

At the end of this module, candidates will be able to:

1. demonstrate an in depth understanding of the effects of different types of training on both the neuromotor and cardiopulmonary systems;
2. compare and contrast adaptation to training of the neuromotor versus the cardiovascular and pulmonary systems;
3. demonstrate a critical awareness of nutritional requirements for and nutritional disorders likely to affect performance horses and dogs;
4. demonstrate systematic understanding of diseases and disorders which may affect the nervous and muscular systems and identify appropriate physiotherapy rehabilitation options;
5. demonstrate in depth understanding of anti-inflammatory, sedative and muscle relaxant drugs used in animals and their potential to affect physiotherapy assessment and treatment;
6. demonstrate critical evaluation of the scientific literature relating to the area of study.

Module Structure

1. Performance

- Adaptation to training of muscles, bones
- Effects of different types of training on the musculoskeletal system

2. Nutrition

- Feeding for performance in the horse and dog
- Nutritional disorders in the horse and dog

3. Small Animal and Equine Neurology

- The neurological examination
- Common neurological conditions
- Rehabilitation options

4. Small Animal and Equine Myopathies

- Differentiate neurological and muscular disease
- Common myopathies in animals

- Physiotherapy treatment and rehabilitation options

5. Wound Healing, Inflammation and Pharmacology

- Inflammation and factors affecting wound healing in different animal species
- Drug effects and side effects relevant to the physiotherapist

Practical Component

You are expected to arrange an informal 5 days of Veterinary Hospital Placements during the module. You may attend more than one Veterinary Hospital during this time. Placements will be assessed on a pass/fail basis.

Assessment

- **Veterinary Hospital Placement** - students are required to pass their Veterinary Hospital Placement (pass/fail)
- **Short Answer Questions** - At the end of study units 3 and 5 (30%)
- **Journal Critique** - You will be assigned a study unit and topic in which you will have to participate in journal club by providing a journal article and a summary of its applicability to practice/evidence based medicine (10%)
- **Discussions** - Discussions occur at anytime during the nominated week/study unit (10%)
- **Essays** – 3 x 1000 word essays due at the end of study units 1, 2 and 4 (50%)

APPENDIX 6

VETS776 Advanced Veterinary Physiotherapy Practice

Value: 20 credits

Notional Study Hours: 200

Aims of Module

The aim of this module is to enable the candidate to further develop, consolidate and critically appraise their clinical and theoretical veterinary physiotherapy skills and knowledge to be able to apply them in a professional manner in clinical practice.

Learning Outcomes

At the end of this module, candidates will be able to:

1. demonstrate in depth understanding and critical reflection in the principles of objective measurement, reassessment, and treatment progression relative to the animal's dysfunction;
2. critically appraise the theory, and assess the biomechanical contributions of the application of training aides, saddlery (tack) and the rider/handler in the onset, maintenance or resolution of equine/canine dysfunctions;
3. demonstrate a critical awareness of how the husbandry of an animal affects the onset and/or maintenance of musculoskeletal dysfunction;
4. critically evaluate, using principles of clinical reasoning, evidence based practice and an in depth understanding of the diseases and disorders involved, the use of advanced physiotherapeutic techniques in humans and demonstrate a systematic understanding and skill in their application to the treatment and rehabilitation of animals;
5. demonstrate critical evaluation of the scientific literature relating to the area of study;
6. critically reflect on veterinary physiotherapy current practice, identifying current problems and/or new insights into where veterinary physiotherapy could develop, incorporating a critical analysis of the veterinary or medical literature in the appropriate context to justify such developments;
7. demonstrate professionalism in veterinary physiotherapy practice, dealing with complex clinical problems both systematically and creatively, make sound judgements in the absence of complete data (clinical reasoning and evidence based practice), and communicate their conclusions clearly to specialist and non-specialist audiences.

Module Structure

1. Advanced Physiotherapy Techniques

- Neurological rehabilitation
- Respiratory physiotherapy
- The intensive care animal patient
- Cardiac rehabilitation

2. Husbandry of animals and musculoskeletal dysfunction

- The horse and rider interaction, including influence of tack

- The dog and handler interaction
- Training program design and over training

3. Professional Physiotherapy practice

- Avoiding “the revolving door”
- Working as a multidisciplinary team
- Selection and application of the correct treatment plan (clinical reasoning and EBM in practice)
- Communication as a professional

Practical Component

Students are required to complete their 20 days of Clinical Placements with Veterinary Physiotherapists by the end of this module and prior to the Practical Exam.

All students will also participate in a one hour exam which will cover the material contained within VETS771-VETS776 inclusive.

Students must pass the practical exam and clinical educator assessments to pass the module.

Assessment

- **Practical Examination** – At the end of the module (20%)
- **Clinical Educator Assessment** – on-going during placement and due prior to the practical exam (30%)
- **Case Reports** - 3 x 1000 words due at the end of study units 1-3 (50%)

APPENDIX 7

VETS777 Research Project (MSc)

Value: 60 credits

Notional Study Hours: 600

In order to enrol on the research project, candidates will be required to submit a research proposal, which includes nomination of a supervisor and identification of the research facilities available for research. Approval of the proposal is required for a candidate to enrol on the module. The proposal is generally due 2 months prior to the commencement of the module (March each year).

Proposals will be assessed on their feasibility to be done and the availability of resources, including staff resources for supervision.

Aims of Module

The aim of this module is for candidates to develop research skills, review the literature around a specific area, undertake independent research, critically evaluate research findings, and implement research results in practice.

Learning Outcomes

At the end of this module candidates will be able to:

1. demonstrate a systematic understanding of the role of research in informing clinical practice and evidence based medicine;
2. evaluate critically current research and advanced scholarship and communicate this in the form of a written literature review;
3. demonstrate an in depth understanding the types of research design commonly used in clinical research and the indications for the use of each;
4. demonstrate a comprehensive knowledge of experimental data collection and analysis, including interpretation of their validity;
5. demonstrate the ability to communicate research findings in the form of a scientific report (scientific paper or dissertation) and an oral presentation detailing data and results obtained during the research project, and putting these findings into scientific context;
6. demonstrate initiative and personal responsibility as well as being able to manage time, work to deadlines, and prioritise workloads;
7. demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level.

Method of Teaching

Projects are selected by students in consultation with potential supervisors and module co-ordinators. Supervisors will provide guidance and mentorship, ensuring the project is approved by the appropriate ethics committee if required, and maintaining communication with the candidate on a weekly basis.

Candidates are supported with an online series of tutorials and materials, including access to the University of Liverpool's online library.

A small amount of money (max. £500) will be available to your supervisor to cover costs associated with running the project e.g. consumables, travel (for you or them).

Module Structure

This module is divided into 3 units of work starting with basic research methodology and literature review prior to the research project.

1. Research techniques and evidence based medicine (150 hours)

- data management and spreadsheet design
- research in clinical practice - evidence based medicine
- principles of animal research and ethics
- introduction to research design
- validity and reliability in research instruments
- survey research
- statistical analysis

2. Literature review (200 hours)

- how to structure a scientific review of the literature

3. Project Work (250 hours)

Assessment

- **Short Answer Questions** – At the end of study unit 1 (5%)
- **Literature Review** – 2000 words due at the end of study unit 2 (20%)
- **Research Dissertation or Scientific Manuscript** – 5000 words due at the end of the module (60%)
- **Project Talk** - At the end of the module (15%)