

# Postgraduate Diploma/Master's in Veterinary Physiotherapy

# **STUDENT HANDBOOK**

# 2023/24 INTAKE



**Veterinary Postgraduate Unit** 

School of Veterinary Science University of Liverpool Leahurst CH64 7TE

**Tel:** +44 (0) 151 794 6016 **Email:** <u>vpuoffice@liverpool.ac.uk</u>

#### WELCOME FROM THE PROGRAMME DIRECTOR

As the Director of the Veterinary Physiotherapy Programme at the University of Liverpool, I am very pleased to present our provision of our blended programme for the PgDip/MSc in Veterinary Physiotherapy. We have an excellent team of experienced academic staff, both physiotherapists and veterinarians coupled with a large external network of physiotherapy educators. We are supported by an excellent team of administrative staff who pride themselves in their excellent support of our students. Blended means some of the delivery of the programme is online and some is face to face. We aim to provide a stimulating and interactive programme of modules, clinical educator days, veterinary practice observational placements and residential schools with fun, efficient and tailored education coordinated by veterinary physiotherapists and veterinarians, for graduates with a degree in human physiotherapy. Those of you on the MSc programme will enjoy getting involved in research and interacting with your allocated supervisor at the University of Liverpool.

We have an emphasis on bringing together participants into a community of learning and we use both online opportunities as well as our face to face opportunities to develop our community with colleagues and mentors. We look forward to seeing you soon!

Catherine Miciowan

Professor Catherine McGowan Programme Director, Veterinary Physiotherapy

#### PURPOSE OF THE HANDBOOK

This handbook is applicable to anyone studying with us for their PgDip or MSc in Veterinary Physiotherapy programmes. 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 our virtual learning environment, "Canvas".

The University of Liverpool has a PGT Handbook for all of its PGT programmes which can be found here <u>https://www.liverpool.ac.uk/student-administration/my-student-record/student-handbooks/</u>. This handbook has a lot of generic information applicable to students studying PGT across all programme at the University of Liverpool and might be especially useful for those of you who are taking our full-time options and taking the opportunity to study on campus or locally. However, the information in this handbook is specifically for you.

#### **KEY CONTACTS**

#### Director

Professor Catherine McGowan BVSc MACVSc DEIM Dip ECEIM CertVBM PhD FHEA FRCVS

Programme Director, Veterinary Physiotherapy E-Mail: <u>cmcgowan@liverpool.ac.uk</u> Tel: +44(0)151 7946152

#### **Academic Support**

Lucy Barrett BSc (Hons) & Charlie Russell PgCert AMAUA Senior Administrators E-Mail: vpumod@liverpool.ac.uk Tel: +44(0)151 7956299

#### **Online Module Support**

Claire Lomas & David Dudley Student/Technical Support E-Mail: <u>vpusupport@liverpool.ac.uk</u> Tel: +44(0)151 7949458

## Elizabeth O'Sullivan

Journal Club Support E-Mail: <u>eosulliv@liverpool.ac.uk</u>

#### **Programme Registration and Payment**

Veterinary Postgraduate Unit Tel: +44(0)151 794 6016

E-Mail: <u>vpuoffice@liverpool.ac.uk</u>

#### **Programme Coordinator**

# Melanie Chapman BSc(Hons), BVSc, MSc, FHEA, CertEd. MRCVS

Veterinary Physiotherapy Programme Coordinator E-Mail: <u>Melanie.Chapman@liverpool.ac.uk</u>

Tel: +44(0)151 7949453

#### Clinical Educator & Observational Placement Support Natalie Jones, Lucy Maylor & Raymond

Cheung Student support Email: <u>vpusupport@liverpool.ac.uk</u> Tel: +44(0)151 7949458

#### **Residential School Support**

Natalie Jones, Lucy Maylor & Raymond Cheung Student support Email: <u>vpusupport@liverpool.ac.uk</u> Tel: +44(0)151 7949458

#### Introduction

# Prof Catherine McGowan BVSc CertVBM MANZCVSC DEIM Dip ECEIM PhD Cert VBM FHEA FRCVS

Cathy has been involved in postgraduate Master's level education since 1999 when she developed the Royal Veterinary College Master's and Postgraduate Diploma programs in Veterinary Physiotherapy which commenced in 2000. At the University of Queensland, she developed an online distance education MSc program for physiotherapists and conducted veterinary physiotherapy research. Cathy is a Diplomate of the European College of Equine Internal Medicine and an RCVS recognised specialist in equine internal medicine and is Programme Director of the Veterinary Physiotherapy Programmes at the University of Liverpool. She is also the chief editor of the first and second editions of the textbook 'Animal Physiotherapy'.

#### Melanie Chapman BSc(Hons), BVSc, MSc, fHEA, CertEd. MRCVS

Mel qualified as a veterinary surgeon from the University of Liverpool and after graduation she spent some time in mixed practice where she enjoyed the variety of the role. Mel has recently settled into small and exotic animal medicine and whilst she has a particular interest in medicine and surgery of backyard hens, she has also written the European Association of Zoos and Aquaria Husbandry Guidelines for keeping of DeBrazza monkeys in EU collections. Mel has a Master's degree in Livestock Health and Production from the Royal Veterinary College and gained her teaching qualification in 2009 and Fellowship status of the Higher Education Academy in 2010.

Mel is a highly experienced lecturer and has had various educational leadership roles, from course management to programme development in Further and in Higher Education. Mel has contributed to our undergraduate and postgraduate programmes since she came back to us in 2020, specialising in teaching anatomy and physiology to our Veterinary undergraduate students. Mel is keen beekeeper with 2 hives of bees and also keeps hens (mainly ex-battery). She is a trustee for the National Animal Welfare Trust and writes educational medicine articles for the British Hen Welfare Trust.

#### THE VETERINARY PHYSIOTHERAPY PROGRAMME

The University of Liverpool has developed the 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 Physiotherapists in Animal Therapy (ACPAT) as an upgrade route from Category B to A status

#### **Programme Structure**

The 6 module Postgraduate Diploma in Veterinary Physiotherapy can be studied on a parttime basis over 2 years (3 modules per year) or full-time over one year. The 7 module Veterinary Physiotherapy MSc degree is only offered on a 1-year, full-time basis

# Whether you are studying for your PgDip or MSc, all modules are taught and assessed at Master's level (Level 7).

Students in all versions of the programme have online taught modules in three 12-week semesters per year, starting semester one early September, semester two early January and semester three at the end of April.

All modules have a practical face to face taught component that varies from five to 20 days, which may fall either within or outside the online module blocks depending on resource and staff availability (see modules below). The research module for MSc

students involves a considerable face to face supervisor/research component, the extent of which varies depending on the project.

# All modules must be completed in a prescribed order and all modules must be passed (pass mark 50%) in order to achieve the relevant degree award.

In order to be awarded the Postgraduate Diploma in Veterinary Physiotherapy, students must successfully complete the following six modules in one or two years:

• VETS772 Principles of Veterinary Physiotherapy & Approach to the Animal Patient

5 days Physiotherapy Assessment skills practical

- VETS775 Neuromotor System in Performance and Disease 5 days observational placement in a veterinary practice or hospital or the University of Liverpool Veterinary teaching hospitals
- VETS771 Anatomy & Biomechanics for the Veterinary Physiotherapist 5 days Anatomy skills practical
- VETS774 Veterinary Physiotherapy Practice 10 days Treatment skills practical
- VETS773 Orthopaedics of the Common Domestic Species for the Veterinary Physiotherapist

5 days observational placement in a veterinary practice or hospital or the University of Liverpool Veterinary teaching hospitals

• VETS776 Advanced Veterinary Physiotherapy Practice 20 days clinical educator training to be undertaken anytime following the Physiotherapy Assessment skills practical training

# Information for each practical component will be available on each module specifying details of times and dates or sent to you directly from a member of our admin team.

The MSc in Veterinary Physiotherapy is only offered on a full-time basis, and in order to be awarded the MSc, students must also complete a Research Project (VETS777).

## **Module Provision Timetable**

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Dates	Part-Time PgDip	Full-Time PgDip	Full-Time MSc
04 Sep 2023 to 27 Nov 2023	Principles of Veterinary Physiotherapy & Approach to the Animal Patient VETS772	Principles of Veterinary Physiotherapy & Approach to the Animal Patient VETS772	Principles of Veterinary Physiotherapy & Approach to the Animal Patient VETS772
		Neuromotor System in Performance & Disease VETS775	Neuromotor System in Performance & Disease VETS775
			VETS777 Research Project
08 Jan 2024 to 02 Apr 2024	Anatomy & Biomechanics for the Veterinary Physiotherapist VETS771	Anatomy & Biomechanics for the Veterinary Physiotherapist VETS771	Anatomy & Biomechanics for the Veterinary Physiotherapist VETS771
		Veterinary Physiotherapy Practice VETS774	Veterinary Physiotherapy Practice VETS774
			VETS777 Research Project
29 Apr 2024 to 22 Jul 2024	Orthopaedics of the Common Domestic Species for the Veterinary Physiotherapist	Orthopaedics of the Common Domestic Species for the Veterinary Physiotherapist VETS773	Orthopaedics of the Common Domestic Species for the Veterinary Physiotherapist VETS773
	VETS773	Advanced Veterinary Physiotherapy Practice VETS776	Advanced Veterinary Physiotherapy Practice VETS776
			VETS777 Research Project
202425			
Dates	Part-Time PgDip	Full-Time PgDip	Full-Time MSc
26 Aug 2024 to 15 Sep 2024	VETS775 module release – preparation for module	N/A	N/A
16 Sep 2024	Neuromotor System in	N/A	N/A
to 09 Dec 2024	Performance & Disease VETS775		
10 Dec 2024 to 05 Jan 2025	Christmas break	N/A	N/A
06 Jan 2025 to 31 Mar 2025	Veterinary Physiotherapy Practice VETS774	N/A	N/A
31 Mar 2025 to 06 Apr 2025	Break week	N/A	N/A
07 April 2025 to	Break weeks/Easter/Core practical workshops	N/A	N/A
20 April 2025 (18 April Good Friday/20 April Easter Sunday)	**Australian 10-day Core practical workshop dates: Monday 07 April – Wednesday 16 April 2025		
21 Apr 2025 to	**UK 10-day Core Practical Workshop VETS774 Leahurst	N/A	N/A
04 May 2025	dates: - Monday 21April to Friday 25 April 2025		
	- Monday 28 April to Friday 02 May 2025		
05 May 2025 to 28 Jul 2025	Advanced Veterinary Physiotherapy Practice VETS776	N/A	N/A
Aug 2025 Exact Date TBC	Final practical exam – online or Leahurst	N/A	N/A

#### **Method of Teaching**

The programme is taught using a blended learning approach, including distance education in an online forum, practical residential schools, observational placements and clinical placements. Students receive support and guidance from subject specialists across all areas as well as their peer in peer to peer interactions facilitated in both online and face to face teaching. During the taught online components, students do not work in isolation but as part of a teaching group, with regular contact with fellow students and academics online via discussion boards and evening journal clubs.

Students have full access to the University of Liverpool's on site and online library the details of which are on the modules.

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

#### Assessment

Students will be assessed on a continuing basis and assignments are submitted online or provided as practical assessments during practical days. Throughout each module there are several 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 VETS772 (1 week in September) VETS771 (1 week in January) and VETS774 (2 weeks in April). All residential schools will take place on the Leahurst Campus, Wirral or the Liverpool Campus in the city (Anatomy skills) except for Australian and New Zealand students who may be able to attend some of the schools in Australia (with an additional cost).

#### **Veterinary Hospital Placements**

Students are required to attend two 5-day observational Veterinary Hospital Placements as part of VETS773 and VETS775

#### **Veterinary Physiotherapy Clinical Placements**

Students are required to complete a minimum of 140 hours over 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 for parttime PgDip students and after the first module for the full-time PgDip and Master's students and form part of the assessment for VETS776. Details of approved Clinical Educators are available on your modules in Canvas.

#### **Final Practical Examination**

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

#### 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 <u>page</u>.

If you do email academic or administrative staff, please do so **only** from your University email account stating the programme you are enrolled on and if possible, your student ID number. The staff manage several programmes and this will help us to identify you more easily and respond to your enquiry.

Please try to find information in this handbook, the University of Liverpool's PGT Handbook, through your modules, especially the FAQs section, 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 provide that information for you and the benefit of other students.

#### **Canvas Based Messaging Service**

The platform which hosts the modules (Canvas) also offers the option of a Canvas based messaging service. Email remains the preferred choice for communication but students are welcome to use the Canvas messaging service when contacting one another or their module coordinator if their module coordinator directs them to do so. Please note, if your module coordinator does not ask you to use Canvas messaging, they are unlikely to check messages from there and so please use email or the Canvas General Discussion area.

#### **Student Intranet and Liverpool Life**

As a student at the University of Liverpool you have full access to the <u>Student Intranet</u>. Within this site you will find all the information, advice and guidance required to help you manage your academic life such as online library support, IT support, access to policies and procedures, support around managing your study and much more. We recommend you set the Student Intranet as your home page whilst you are studying.

Within the Student Intranet, you will also find Liverpool Life, which is the University of Liverpool's portal for current students. Within the portal you can access your programme results and transcripts and it has the facility to request official documentation.

#### Canvas

Canvas is the online teaching platform (virtual learning environment) used to deliver our modules. Canvas supports learning and teaching activities across the internet and the Veterinary Postgraduate Unit actively uses your modules in Canvas 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, wherever you are in the world. It also

allows students to communicate effectively with their peers, academics involved in the module and the VPU staff.

Students are expected to monitor information concerning their study on their module in Canvas regularly. Teaching specific information will be communicated via your module in Canvas 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 Canvas, 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 Exemption from Late Penalties and Extenuating Circumstances Guidelines.

#### **Veterinary Postgraduate Unit Website**

The Veterinary Postgraduate Unit's website is: http://www.liverpool.ac.uk/vets/cpd

#### **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 'Key Contacts' section within this handbook, but also on each module.

#### STUDENT RESPONSIBILITIES

All members of the University community – students, alumni and staff – share responsibility for the continued success of the institution and our students. The <u>Student Charter</u> sets out our partnership in learning, what the University will provide and what students should undertake.

#### Insurance

**Relevant activities include:** Observational Placements, Clinical Placements, Residential Schools and the Final Exam.

The University of Liverpool has a Public Liability (PL) policy in place which applies to all UoL students who are anywhere in the world on UoL activity.

#### Provider/organisation insurance requirements

All providers/organisations must have PL and/or Employers Liability (EL) Insurance (min indemnity limit is £5m). Proof of this is requested when the student goes on placement.

All providers/organisations are also requested for proof that they have appropriate risk assessment and induction procedures in place.

UK – PL is not compulsory but EL is mandatory for anyone who would be providing our students with any form of placement. Rest of the world – neither PL or EL is compulsory and may not be available.

#### **Student requirements**

The UoL is not liable for any treatment, care or advice the student gives i.e. Professional Liability. It is expected that the student is covered by their own specialist Association/Society, i.e. the Chartered Society of Physiotherapy, (or student-country equivalent). The CSP (or equivalent) only provides Public/Products Liability insurance so *the student needs to prove they have Professional Liability insurance*.

All students are expected to take reasonable care for their own health and safety and that of others who may be affected by their actions.

#### Final exam animals and locations

If the student is using animals and locations that they own, then there is no formal insurance requirement for either the UoL of the student. Under these circumstances, the student is expected to take reasonable care for their own health and safety and that of others who may be affected by their actions.

If the student is using animals and/or locations that they do not own, then it is expected that in the event of an incident, they would claim against the owners of the animals/locations. It is the responsibility of the owners of the animals/locations to have any/relevant insurance should they wish to provide the resources.

#### **Time and Study Commitment**

As a postgraduate student studying at Master's level 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 blended-learning student this is particularly important.

Weekly time commitments may vary week to week, but you are expected to study a minimum of approximately:

- 17 hours a week for part-time students undertaking a single 20-credit module;
- 33 hours a week for full-time PgDip students undertaking 2 modules;
- and 40 hours a week for full-time MSc students.

# Please note that you have 3 semesters per year and practical commitments during your non-teaching weeks.

#### **Online Communication**

As a blended programme, much of the communication is in written form on the online modules, 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
  - o 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**

For your online components 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:

#### For Windows and Mac

- **Operating System:** Windows 10, Mac OS 10.11 (El Capitan) or higher
- Processor: Intel i3 or equivalent; 2GHz or higher
- Hard Drive: 80 GB or greater
- **Memory:** 2 GB of RAM or higher, 4 GB preferred, depending on the OS
- Internet Connection: Broadband internet connection. Note: If you are using a mobile internet provider, you may experience timeouts, IP address issues, session problems, or course mail issues caused by latency. You may also incur additional costs if you go over your mobile data allowance.
- **Browser:** Firefox, Google Chrome. To verify that your browser has all required plugins, use <u>Canvas's Browser Checker</u>.
- **Software:** Mozilla Firefox or Google Chrome, Microsoft Office 2016, 2019 or Office 365, up-to-date Adobe Acrobat Reader\* (Adobe products are available via a free download).
- **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).
- Webcam/Microphone: Camera enabled device or separate webcam. Microphone enabled device or separate microphone
- Mobile App Requirements: Device OS iOS 11+ Android 5+

If you do not have the minimum specification outlined above or would like to ask a question about the technical requirements of joining our programme, please contact IT Services on 0151 794 4567 or email <u>servicedesk@liverpool.ac.uk</u> 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. All modules have an anonymous module feedback survey which we invite you to complete. In some years, 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.

## Student-Staff Liaison Committee (SSLC)

Students will be given the opportunity to nominate themselves for election as a year representative and work with staff and fellow students to improve the student learning experience – identifying and discussing issues which affect their modules/programme and helping to come up with solutions. One/two representative/s from each year will be voted in by the students.

An online SSLC meeting will take place once per semester approximately 3-4 weeks prior to the Board of Studies. A formal agenda will be issued and the student representatives will

gather any issues or ideas to raise at each meeting. Minutes will be taken and circulated for discussion at the next Board of Studies.

All students also have the opportunity to comment on individual modules anonymously on every module through the module survey tool, which is announced, administered and collated and discussed at academic team meetings.

#### **Student complaints**

The Student Charter sets out the general entitlements and responsibilities of students. If you believe you have a legitimate complaint that cannot be solved in the first instance by communication with our team, you should refer to the <u>Student Charter</u> to clarify what is reasonable for you to expect from the University in the relevant area and whether you have discharged your corresponding liabilities. If, having consulted the Student Charter, you wish to proceed with a complaint you may invoke the Student Complaints Policy and Procedure. For more information please click <u>here</u>.

#### Academic Advisor

All students at the University of Liverpool have an Academic Advisor and in your programme your advisor is your Programme Coordinator, Mel Chapman. Those of you undertaking the MSc will also have access to a supervisor who will provide advice on your research project. Please contact your Academic Advisor or supervisor for any questions or concerns about your programme.

#### ASSESSMENT INFORMATION

#### All assessment follows the university <u>code of practice of assessment</u> and the <u>Code</u> <u>of Practice Appendix C for PGT students</u>

#### **Penalties for Word Counts**

Almost all your assessments have a recommended number of words and students are advised to keep within that word count. Students should submit work that does not go under or over this figure by 10% and be aware that assessors may stop marking beyond the recommended number of words. Penalties will be applied for exceeding the word count and in some cases where assessors are looking for students to present work succinctly, penalties may be applied as soon as the word count has been exceeded. Unless stated otherwise in specific assessment guidelines, tables, diagrams, references and appendices are not included in the word count but these aspects must only enhance your work and not be a key part of answering the question. Please refer to the specific grading rubrics/ assessment criteria for guidance.

#### **Failing Assessments**

The University Code of Practice on Assessment (Appendix C) states: Candidates who are registered onto a programme of study leading to an award and fail one or more modules at the first attempt shall be permitted to present themselves for re-assessment in the failed assessment component(s) for each failed module **on one further occasion** during the maximum registration period. Re-assessment in research and independent study modules will normally take place within 12 months of the publication of results.

This means a student who fails the overall cumulative assessment for a module, will have their performance reviewed at the next exam board (module review board) and may be allowed to resubmit one or more items of assessment within 3 months of the module

#### completion date.

The marks gained for any individual module through reassessment will be capped at 50% for the purposes of calculating the overall average mark and determining classification for an award, except where the re-sit is a consequence of approved Extenuating Circumstances – often referred to as a 'first-sit'. The actual mark achieved through re-assessment will be the mark recorded on the transcript. 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 their programme of study will be terminated.

#### **Academic Integrity**

By submitting your work you are agreeing to the University's <u>Academic Integrity Policy</u> that you have not plagiarised nor copied material (including your own work assessed elsewhere), 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.

Written submissions 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 when 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 Skills4Study resource within your online or via the student homepages.

#### **Assessment Feedback**

Feedback can be found in the "Grades" section of the module in Canvas.

Feedback is generally in 3 forms, although not all assessors use all forms of feedback on every assessment:

- 1. The grading rubric see below for more details
- 2. Comments on your actual submission this often includes editorial corrections
- 3. General text comments on your work overall

#### Timing of Feedback

If you submit an assignment on time we aim to provide marks and feedback before the next assignment (of the same type) is due. However, if you submit late, you may not receive feedback until the end of the module.

For modules with larger assessments such as the Research Project, the typical university feedback period of 1 month will be applied.

#### Variation in Feedback

There are several examiners who mark the assessments. This inevitably may lead 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 assessed by examiners who are the most qualified to do so. If you can assimilate all the pieces of advice it should help you with any future writing/research project as well as 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 view 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 because of personal opinions such as this but we consider it extremely valuable to you to have access to expert opinion.

#### **Grading Rubrics**

Specific grading rubrics will be used for all assessment and these will be available within the relevant assessment instructions page in Canvas. These rubrics provide specific feedback on your work, with detailed descriptions of both your allocated result as well as what is required to achieve a better result. All rubrics are available on the module prior to submission of an assessment and it is your responsibility to view these and ensure your assessment is aligned with the grading rubric.

#### **Moderation**

Any student who achieves a final borderline mark of 40-55% will be moderated by the Module Coordinator or designated module moderator. 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/Board of Examiners will be formed consisting of academics contributing to the assessment for the relevant module being examined, Programme Coordinator, Programme Director, Module Coordinator or representative and the External Examiner. This will be held three times a year. The primary remit is to approve completed module marks giving the External Examiner the opportunity to comment, however, where students have failed, the Board of Examiners will include a Progress Board and progress of any failed students will be discussed and outcomes decided taking into consideration any extenuating circumstances.

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

A final Examination Board will be held for the third board of examiners each year to confirm examination marks and recommend award or not (pass/fail) of the final award 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

students with disabilities or specific learning difficulties 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 (<u>http://www.liverpool.ac.uk/studentsupport/disability/</u>) for further information and guidance.

To speak with a member of the Team and arrange for a support plan to be put in place, please telephone the Disability Support Team on (0151) 794 4714, 794 5117, 795 0323 or contact them by email: <u>disteam@liverpool.ac.uk</u>

**Please Note:** Any disclosure made must also be reported to the Assessment Administrator on <u>vpusupport@liverpool.ac.uk</u> at the start of your module so that any individual support outlined in your plan (e.g. additional time allowances etc.) can be put into place for you as soon as possible.

#### PROCEDURES

#### Procedure for Handling Late Penalties for Submission of Assessed Coursework

#### See section 6. Of the Code of Practice of Assessment

As a postgraduate student you are expected to be motivated and self-directed, and are responsible for organising your own time (e.g. holidays/travel) and making sure that assessment deadlines and other requirements are met. Please note that pressures from paid employment are specifically not regarded as extenuating circumstances.

Any assessment submitted late will be subject to a penalty of 5% of the total mark per working day for a maximum of 5 days. (However, the mark will not be reduced below the pass mark for the assessment).

# Work received more than five working days after the submission deadline will receive a mark of zero.

Students with <u>extenuating circumstances</u> on medical or other exceptional grounds, are entitled to request exemption from late penalties for any coursework that has the opportunity for late submission.

Request for exemptions from late penalties will only be granted for a **maximum of two weeks**. Coursework submitted after this time shall be treated as a non-submission and dealt with under the <u>Policy on Extenuating Circumstances in Relation to Performance</u> in Assessments and Examinations.

Requests for exemption from late penalties should be submitted via email at the same time as the late coursework or at the earliest opportunity thereafter.

Students are able to request exemption from late penalties for two individual assessments per academic session without the need for supporting evidence (i.e.: they may self-certify) by emailing <a href="mailto:vpusupport@liverpool.ac.uk">vpusupport@liverpool.ac.uk</a> who will verify the application for exemption with the relevant nominee.

For any additional requests, students should submit **evidence** to support their application claims for extenuating circumstances using the form linked on the module.

Assessment which requires, in part, group interaction within a certain time frame, including journal club, may have marks deducted if the late submission falls outside of the interaction period, even if an exemption is granted.

#### **Extenuating Circumstances Affecting Assessment Performance**

We recognise that sometimes students can perform poorly in assessments due to extenuating circumstances **on the day**.

Extenuating circumstances might include:

- Illness affecting the student
- Bereavement
- Serious illness affecting a close family member
- Unforeseeable or unpreventable events.

Independent documentary evidence, such as medical certificates, must be provided in all cases to verify extenuating circumstances and must be submitted **within 3 working days of the assessment**, preferably in writing or by email.

If the Programme Director or the Extenuating Circumstances Committee (for the end of module assessments) accepts that there have been extenuating circumstances surrounding your performance, it will usually not regard the poorer than expected performance at its face value in making decisions about your progress in studies or final degree classification. Accepted extenuating circumstances will not affect an assessment grade, but where the assessment has been failed, you may be allowed a resit attempt as a "first attempt". You will be informed of the outcome of your claim after the meeting of the Board of Examiners.

# Further information and forms for submission of Extenuating Circumstances will be posted on your online module under "Guidelines and Support".

#### **Procedure for Suspending your Studies**

You may find it necessary at some point during your programme to suspend your studies. This 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 your academic advisor (Programme Coordinator).

If you do decide to suspend your studies, you will need to complete a Suspension of Studies Form and have this approved by the School. It should be noted that suspensions should be applied for in whole months up to a maximum of one year. For the most up to date procedures and a copy of the form, please visit the Student Administration <u>website</u>.

#### **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 click <u>here.</u>

## **VETS771** Anatomy and 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

LO1. Use the appropriate anatomical vocabulary for describing the arrangement and orientation of a particular structure.

LO2. Describe the anatomy of the domestic species and critically evaluate similarities and differences in the arrangement of muscles, bones, tendons, joints, nerves and major blood vessels between common domestic species and humans.

LO3. Describe the structure and mechanical properties of muscle, tendon, bone and cartilage critically evaluating the response of these structures to the mechanical environment, exercise, fatigue, ageing and injury.

LO4. Critically analyse the biomechanics of locomotion of the horse and dog, including sports specific locomotion and factors affecting locomotion including the rider, training aids and farriery.

LO5. Critically evaluate the scientific literature relevant to musculoskeletal anatomy and biomechanics of the common domestic species.

#### 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.
- Properties of muscle proteins, structure and function in contraction (sliding filament theory of muscle contraction), muscle fibre types and 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 Campus/Liverpool Campus, UK.

- **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 any time during the nominated week/study unit (10%)
- Essay 2000 word essay due at the end of the module (30%)

# VETS772 Principles of Veterinary Physiotherapy and 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

LO1. Critically analyse the legal, professional and ethical implications of veterinary physiotherapy practice.

LO2. Systematically evaluate of the importance of liaison with veterinarians, veterinary nurses and other paraprofessionals.

LO3. Communicate successfully at many different levels, changing the terminology used to accommodate the audience.

LO4. Systematically apply principles of evidence-based practice to evaluate the scientific literature relating to and the implications for veterinary physiotherapy clinical practice. LO5. Apply clinical reasoning to issues through independent thought and informed judgement.

LO6. Recognise normal and problem behaviours of commonly-treated domestic animals; describe how animal behaviour is modified by pain and implement safe and appropriate responses.

LO7. Perform physiotherapy assessments of both large and small animals, critically evaluate the findings and then establish appropriate treatment goals.

#### **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 Campus, UK.

- **Practical Test** At the end of the residential school (10%)
- Short Answer Questions At the end of study units 1 and 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 any time 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%)

# 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

LO1. Critically analyse the musculoskeletal demands of working pets and athletic animals.

LO2. Describe the veterinary approach of diagnosing lameness in animals as applicable to veterinary physiotherapists.

LO3. Relate problems associated with osseous, joint, tendon and ligament structures due to developmental disorders, injury/trauma and degenerative disorders to appropriate physiotherapy rehabilitation options.

LO4. Relate veterinary conservative and surgical treatment approaches to physiotherapy rehabilitation of orthopaedic disorders.

LO5. Critically analyse fracture biomechanics, healing, repair and complications in relation to management strategies including post-operative care and physiotherapy management of patients with fractures.

LO6. Critically evaluate the scientific literature relevant to orthopaedics of the common domestic species for the veterinary physiotherapist.

#### **Module Structure**

**1. CANINE ORTHOPAEDICS** 

Musculoskeletal demands of working pets.

Veterinary Approach to the lame dog

Components of the lameness examination

- Examination at rest and during movement
- Manipulative tests
- Diagnostic imaging

Osseous, joint, tendon and ligament disorders resulting from developmental, injury/trauma and degenerative disorders

Treatment approaches to orthopaedic disease as applicable to veterinary physiotherapists.

Post-operative management of surgical orthopaedic disorders

• Including aspects of fracture biomechanics, healing and repair, including complications

#### 2. EQUINE ORTHOPAEDICS

Musculoskeletal demands of athletic animals.

Common nomenclature, conformational and clinical terms and definitions

Veterinary approach to the lame horse

Components of the lameness examination

- Examination at rest and during movement
- Manipulative tests
- Diagnostic analgesia: Nerves and joints
- Diagnostic imaging

Osseous, joint, tendon and ligament disorders resulting from developmental, injury/trauma and degenerative disorders

Treatment approaches to orthopaedic disease as applicable to veterinary physiotherapists

Post-operative management of surgical orthopaedic disorders

• Including aspects of fracture biomechanics, healing and repair, including complications

#### **Practical Component**

You are required to arrange an informal 5 days of Veterinary Hospital Placements during the module. You may attend more than one Veterinary Hospital during this time.

- 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%)

## **VETS774 Veterinary PhysiotherapyPractice**

#### Value: 20 credits Notional Study Hours: 200

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

LO1. Critically analyse the functional effects of primary dysfunction on the entire musculoskeletal system.

LO2. Apply 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.

LO3. Critically evaluate the theoretical basis of individual manual, physical, electro-, hydroand exercise therapy techniques, including the optimum time of application, and use of these techniques when treating animals.

LO4. Critically evaluate the scientific literature relevant to veterinary physiotherapy practice.

#### **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 contraindications.

## 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 Campus/Liverpool Campus, UK.

- Short Answer Questions (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 any time during the nominated week/study unit (10%)
- **Case Reports -** 2 x 1500 word case reports (50%)

## **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**

LO1 Compare and contrast adaptation to training of the neuromotor versus the cardiovascular and pulmonary systems.

LO2 Compare and contrast gastrointestinal function between small and large animals, and interpret how nutrition affects health and performance.

LO3 Systematically analyse the diseases and disorders which may affect the nervous and muscular systems, and identify appropriate physiotherapy rehabilitation options.

LO4 Translate knowledge of the effect of the anti-inflammatory and sedative drugs from humans to animals, and interpret how these effects might affect physiotherapy assessment and treatment.

LO5 Compare and contrast inflammation and wound healing across different species including humans.

LO6 Critically evaluate the scientific literature relating to the neuromotor system in performance and disease.

#### **Module Structure**

1.Training effects on the cardiorespiratory and neuromotor systems 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

 Small Animal and Equine Neurology and Myopathies The neurological examination Common neurological conditions Rehabilitation options Differentiate neurological and muscular disease Common myopathies in animals Physiotherapy treatment and rehabilitation options

4. 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.

- Veterinary Hospital Placement students are required to pass their Veterinary Hospital Placement (pass/fail)
- Short Answer Questions (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 any time during the nominated week/study unit (10%)
- **Essays** 3 x 1000 word essays (50%)

## **VETS776 Advanced Veterinary Physiotherapy Practice**

Value: 20 credits Notional Study Hours: 200

#### Aims of Module

The aim of this module is to enable the student 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

LO1. Critically analyse and reflect on the principles of objective measurement,

reassessment, and treatment progression relative to the animal's dysfunction.

LO2. Critically evaluate the theory behind, 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.

LO3. Critically analyse how the management of an animal affects the onset and/or maintenance of musculoskeletal dysfunction.

LO4. Critically evaluate the use of advanced physiotherapeutic practice in humans, using principles of clinical reasoning, evidence-based practice and an in-depth knowledge of the diseases and disorders involved, and demonstrate skill in their application to the treatment and rehabilitation of animals.

LO5. Critically evaluate the scientific literature relating to advanced veterinary physiotherapy practice.

LO6. Critically reflect on current veterinary physiotherapy practice, identifying current problems and/or new insights into where veterinary physiotherapy could develop, and incorporating a critical analysis of the veterinary or medical literature to justify such developments.

LO7. Deal with complex clinical problems systematically and creatively, make sound judgements in the absence of complete data (using clinical reasoning and evidence-based practice), and communicate conclusions clearly to specialist and non-specialist audiences.

#### Module Structure

Study Unit 1 Advanced Physiotherapy Techniques The intensive care animal patient Cardiac rehabilitation Neurological Rehabilitation Respiratory physiotherapy

Study Unit 2 Management of animals and musculoskeletal dysfunction The dog and handler interaction The horse and rider interaction, including influence of tack Training program design and over training

Study Unit 3 Professional Physiotherapy practice Animal Ethics 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.

- **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 (50%)

## **VETS777 Research Project (MSc)**

Value: 60 credits Notional Study Hours: 600

#### Aims of Module

The aim of this module is for students 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 students 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 the module coordinator. Supervisors will provide guidance and mentorship, ensuring the project is approved by the appropriate ethics committee if required, and maintaining communication with the student (the frequency of which will vary based on the stage of the project, but is likely to be monthly on average).

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

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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 overlapping 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)

- 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
- data management and spreadsheet design
- basic statistical analysis

#### 2. Literature review (200 hours)

• how to structure a scientific review of the literature

#### 3. Project Work (250 hours)

- conduct of a small research study, clinical audit or systematic review
- communicate findings in the form of an oral presentation detailing results obtained during the project
- preparation of a scientific research manuscript, audit report or systematic review
- collaborate effectively with your supervisor and other members of the team involved in the project

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