## Rehabilitation after illness and injury in companion and sports animals, 15.0 credits -VM0124

Semester: spring 2022, 220117-220323
Course Coordinator: Sara Ringmark

Deputy Course Coordinator & Examiner: Anna Bergh

Course administrator: <u>us-frist@slu.se</u>

Contact: Sara.Ringmark@slu.se 018-671422, Anna.Bergh@slu.se 018-672152

The course is given partly as a distance-learning course, i.e. some weeks are free from teaching activities but meant to be reserved for independent litterature studies as well as work with the rehabilitation plan (course examination). Certain elements are **mandatory and are identified in the schedule with bold formatting.** If you are unable to take part of any of the mandatory elements, a re-exercise opportunity will be offered later during the spring semester. **NOTA BENE!** Due to the corona-19 situation, there can be acute changes in the schedule- so please keep informed by following messages at the Canvas course room!

The main part of the lectures will be held over Zoom, so please install zoom and look for updates on lecture zoom links on the Canvas course page. Part of the course will be held in conjunction between BI1358 "Exercise physiology and rehabilitation for performance and injury prevention" and DO0122 "Rehabilitation within veterinary care". *Italic formatting identify elements recommended but not part of this course*.

Date	Time	Activity	Teacher	Room				
week 3	Module	Module 1: Introduction and Module 2: Functional anatomy, and physiology.						
	09.15- 09.45	Introduction to the course	ABe, SR					
	10.00- 11.45	Introduction to rehabilitation and rehabilitation order. Introduction to veterinary rehabilitation and functional anatomy. Introduction to rehabilitation plan	ABe	Dvalin				
Monday 17/1		Visit the reception at Ull's house to get codes for the internet, passage cards, etc (independently)						
	12.30- 14.15	The anatomy of the musculoskeletal apparatus	JS	Sal V				

	14.30- 16.15	Injury mechanisms, healing processes, adaptation to load.	ABe	Are
Tuesday 18/1	08.00- 17.30 Asis: demo= 8-9,30 Wet/dry= 9,30-11 Wet/dry= 11-12,30 Palpation: 13.30- 17,30	Anatomy, independent repetition and demo of functional anatomy (separate schedule). Practical training palpation. Two groups on dog and horse, respectively, who then shift. Bring your dog if you can.	ABe, JS, AP, KS	Asis (dry and wet), Amphi-theatre Bulan 1 and 2 (dog) house 3 (horse)
	9.15- 10.00	Physiology of the locomotion apparatus, joints, tendons and ligaments	MR	zoom
Wednes- day 19/1	10.15- 11.00	Injury perspectives in different sports (with BI1358)	MR	zoom
	11.15- 12.15	Acute effects of physical activity -an overview (with BI1358)	AJ	Zoom
Thursday 20/1	09.15- 10.30 10.45- 12.00	Pain and its effect on physical function. How does an animal move/motor control. Introduction to functional diagnosis.	ABe	Zoom
Friday	9.15- 10.30	Muscle physiology: a) an important method b) effects of exercise and rest (with BI1358)	AJ	Zoom
21/1	11.00- 12.00 or when you like	Circulation- effects of training (with BI1358)	AJ	recorded

**Goal week 3:** Learning objective 1+5. (Functional anatomy. Healing, and tissue's adaptation to load. Functional diagnosis. Exercise physiology. Pain physiology.)

**Teaching material:** Book: ch 4-6. Canvas: Lecture handouts and Articles under "Module 1 and Module 2". Canvas room: "Resursrum rörelseapparaten".

Rehabplan: Chosen rehab case.

Monday 24/1	Independent studies	
Tuesday 25/1	Independent studies	
Wednesd ay 26/1	Independent studies	
Thursday 27/1	Independent studies	
Friday 28/1	Independent studies	

Goal week 4: As week 3

**Teaching material:** As week 3

**Rehabplan:** Written about the anamnesis and described the injury/illness (tissue, healing

times, healing processes).

**Test:** Canvas: quiz Palpation (situated at the Canvas course room).

week 5	Module 3:	Assessment of physical dysfunction		
Monday 31/1	13.15- 15.00	Clinically applied outcome measures in veterinary rehabilitation	ABe	Zoom
	Sometime before 3/2	Standardised exercise tests (with BI1358)	AJ	Recorded
Tuesday 1/2	Sometime before 3/2	Practical training: exercise test as a method to measure response to exercise (with BI1358)	AJ	Recorded
	13.15- 14.00	Example of rehab plan	ABe	zoom
Wednes- day 2/2	09.15- 12.00	Veterinary rehabilitation- a scientific update on treatment methods	ABe	Zoom
Thursday	9.15- 10.00	Follow-up on the exercise test (with BI1358)	AJ	Zoom
3/2	10.15- 12.00	The young horse project -a long term perspective study (with BI1358)	SR	Zoom
Friday 4/2		Independent studies		

**Teachingmaterial**: Book: chapter 11, 22. Canvas: Lecture handouts and articles on "Module

**Rehabplan:** Written about assessment methods (outcome measures).

**Examination:** Canvas course room: quiz assessment methods.

week 6	Module 4:	Rehabilitation methods		
Monday 7/2	13.15- 16.30	Practical training assessment methods	ABe, APe, KS	Bulan
Tuesday	09.15- 11.00	Massage therapy and passive range of motion. Intro to practical training	НН	Zoom
8/2	13.15- 14.30	Practical training massage, PROM	ABe	Bulan 1 + 2 samt experimentell
Wednes-	9.15- 12.00	Rehabilitation of the horse	НН	Zoom
day 9/2	14.15- 16.00	Practical training equine	CD	Hus 3 häststall
Thursday 10/2	9.15- 11.30	Case discussions, with ethical considerations, horse and dog	ABo, (AB)	Zoom
Friday 11/2		Independent studies		

Goal week 6: Learning objectives 2+3+4+5. (Rehab methods. Ethical discussions.)

**Teachingmaterial:** Book: chapter 12-14, 19-20. Canvas: Lecture handouts and articles on Module 4.

Rehabplan: Written about treatment methods and plan.

week 7	Module 4: Rehabilitation methods				
Monday 14/2		Independent studies			
Tuesday 15/2	10.15- 12.00 13.15- 16.00	The orthopedic patient. The critically ill patient The neurologic patient.	АН	Sal V	
Wednes- day 16/2	09.15- 12.00 13.15- 16.00	Lecture Rehabilitation in cats Practical training	АН	Are Bulan	
Thursday 17/2	09.15- 12.00	Practical training	АН	Bulan	

	13.15- 15.30	Home advice	MY, SA; CE	Zoom
Friday 18/2		Independent studies		

Goal week 7: as above.

**Teachingmaterial:** as above.

**Rehabplan:** Written treatment plan, starting writing about home advice and ethical discussion.

week 8	Module 4:	Module 4: Rehabilitation methods			
Monday 21/2		Independent studies			
Tuesday 22/2		Independent studies			
		Independent studies			
Wednes- day 23/2		Independent studies			
Thursday 24/2		Independent studies			
Friday 25/2		Independent studies			

Goal week 8: as above.

**Teachingmaterial:** Book: chapter 17-18. Canvas: Lecture handouts and articles on Module 4. **Rehabplan:** Written about home advice and ethical discussion.

week 9	week 9 Module 5: Rehabilitation plan						
Monday 28/2		Independent studies					
Tuesday 1/3		Independent studies					
Wednesd ay 2/3		Question time	ABe	zoom			
Thursday 3/3		Independent studies					
Friday 4/3		Independent studies					

Goal week 9: as above

**Teachingmaterial**: Canvas: Lecture handouts and articles on Module 5.

**Rehabplan:** Written about ethical considerations, team around the rehab patient and collaboration/responsibilities. Send in your rehabplan to a fellow student, read and comment another student's rehabplan.

Monday 7/3	Inc	dependent studies	
Tuesday 8/3	Inc	dependent studies	
Wednesd ay 9/3	Inc	dependent studies	
Thursday 11/3	Inc	dependent studies	
Friday 11/3	Inc	dependent studies	

Goal week 10: see above.

Teachingmaterial: as above

**Rehabplan:** Finalise the rehab plan and the oral presentation for the seminar

week 11	week 11 Module 5: Rehabilitation plan					
Monday 14/3	11-12	Time for questions	ABe	zoom		
Tuesday 15/3	8.15- 17.30	Seminar presentation rehabilitation plans	ABe	Särimner		
Wednesd ay 16/3		Work with rehab plan				
Thursday 17/3		Seminar presentation of training plans (BI1358-students present)				
Friday 18/3		Work with rehab plan				

Goal week 11: see above.

Teachingmaterial: as above

**Rehabplan:** Revise and finalise the rehab plan.

week 12	Module 5: 1	Rehabilitation plan	
Monday 21/3		Work with rehab plan	
Tuesday 22/3		Work with rehab plan	
Wednes- day 23/3		Send in rehab plan (23.55)	

- ABe Anna Bergh, Institutionen för kliniska vetenskaper, SLU
- JSö Josefin Söder, Institutionen för kliniska vetenskaper, SLU
- MR Marie Rhodin, Institutionen för anatomi, fysiologi och biokemi, SLU
- AH Amie Hesbach, Den Haag, The Netherlands
- AJ Anna Jansson, Institutionen för anatomi, fysiologi och biokemi, SLU
- SR Sara Ringmark, Institutionen för anatomi, fysiologi och biokemi, SLU
- **HH** Heli Hyytiäinen, Finlands Veterinärhögskola, Helsingfors, Finland
- ABo Anna Boström, Finlands Veterinärhögskola, Helsingfors, Finland
- SA Sophia Alanko, UDS
- MK Malin Karlsson, UDS
- MY Malin Yngvesson, UDS
- AP Anja Pedersen, KV
- KL Klara Smedberg, KV
- **CD** Charlotte Dillner, UDS