



MASTER OF PHILOSOPY: BIOKINETICS

S T U D E N T B R O C H U R E PROGRAMME LAYOUT AND CONTENT

2023

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Introduction:

The University of Cape Town's Division of Physiological Sciences is proud to announce an MPhil in Biokinetics degree, which will be among the first such qualifications offered in South Africa. A structured master's programme with research will provide an opportunity for important clinical continuing education for the biokineticist, as well as creating a platform for conducting clinically relevant research to add to the growing body of evidence-based practice.

Aim:

One of the primary aims of the MPhil Biokinetics degree is provide in-depth and advanced training into the four sub-areas of Biokinetics. The course also aims to fulfil a need that practicing Biokineticists have highlighted (via a survey) to provide an evidence-based, and continuously updated approach to the Biokinetics clinical rehabilitation and management of patients and clients. Additionally, this course provides a vehicle for engaging students in clinically relevant research in the discipline of biokinetics and therapeutic exercise.

Modules:

<u>2023:</u>

- 1. Research Methods and Biostatistics (HUB5017F)
- 2. Biokinetics in the Workplace (HUB5018F)
- 3. Nutrition and Ergogenic Aids (HUB5022S)
- 4. Advanced Clinical Exercise Physiology (HUB5023S)
- 5. MPhil Biokinetics Mini Dissertation (HUB5024W) second years only

<u>2024:</u>

- 1. High Performance Athlete (HUB4072F)
- 2. Physical Activity and Epidemiology (HUB5017F)
- 3. Advanced Strength and Conditioning for Athletic Populations (HUB5020S)
- 4. Biokinetics in persons with neuromuscular conditions (HUB5021S)
- 5. MPhil Biokinetics Mini Dissertation (HUB5024W) for all second years in 2022.

The modules will comprise of 12-14 lectures either offered face-2-face OR live online for students not based in Cape Town. Some of the lectures will take place during a 'block week' (3 consecutive days) at the beginning and/or at the end of each term/semester. The balance of lectures will take place once every second week until the end of the semester, either on a Monday from 3pm to 5pm or a Thursday from 3pm to 5pm. If face-to-face practical components are required for a specific module that cannot be conducted online as well, the specific practical(s) will happen between the two module exams (one week apart) to accommodate students not based in Cape Town.

The evaluation for each of the modules will comprise of two assignments and a written exam. The assignments will be submitted during the semester. Some assignments may be written assignments for hand-in and other assignments may require a presentation to the lecturer and group (or both formats). The written examination will take place at the end of each semester. The student must pass each of the modules (50% pass mark) in order to qualify for the degree. The total assignment mark (average of the two assignments) will count 50% towards the final mark of the module. The examination mark counts for the other 50% of the final mark of the module.

One Examination is completed per module. Each theory examination will count 100 marks and will be completed over 3 hours. Exam papers usually consist of 5 x 20 mark questions, where a 20 mark question will cover a specific topic. The 'topic' question will be divided into any of the following: 1 x 20 mark essay question, 2 x 10 marks, 4 x 5 marks, 5 x 4 marks, etc.

Duly Performed (DP) Requirements

Students must attend 80% of the total number of lectures per module to write the written examination.

Dissertation:

Each student will be required to complete a mini-dissertation, with the bulk of the work being completed in the second year of study. Students must register for the mini-dissertation within their second year of study. The mini-dissertation must be submitted by early February of the following year to prevent re-registration for the mini-dissertation. Students will be encouraged to submit their experimental chapter for publication in peer-reviewed journal. It is also optional for students to only register for their dissertation component during their 3rd year of study, however, this mean it will take a minimum of 3 years to complete the Masters and if а student is receiving funding. most funding/scholarhips/bursaries will only cover 2 years of study for a Masters.

FREQUENTLY ASKED QUESTIONS:

1. When do applications open and close?

Applications open in April and the closing date is the 31 October. Applicants will be informed of the outcome end November/beginning December.

2. Who do I contact for an application form?

Contact Ms Salega Tape at the UCT Postgraduate office. Her email address is: <u>salega.tape@uct.ac.za</u> and her telephone number is 021 021 406 6340

3. Who should I contact if I have any other queries related to the course work? Please contact the course coordinator, A/Prof Jacolene Kroff. Her email address is: jacolene.kroff@uct.ac.za and her telephone number is 021 6505126.

4. How long does It take to complete the MPhil Biokinetics degree?

This is a two-year course to complete all coursework. Students are encouraged to complete their mini-dissertation during year two of the course, but will be allowed to re-register for additional years based on supervisor recommendations. If registering for a mini-dissertation only during year 3, the degree will take a minimum of 3 years to complete.

5. What is the overview of the course?

The course comprises of 8 modules and a mini-dissertation. Four modules are completed in year one, and the remaining 4 modules in year 2 plus the mini-dissertation.

6. How often do lectures take place?

Two modules are completed per semester. Lectures happen during 2 x block weeks (Monday to Wednesday) during the first two weeks of the semester. Hereafter lecturs happen once or twice (2 hours per lecture) every second week per module, respectively. Where the module requires face-to-face practical components, these components will be offered face-to-face between examination dates at the end of the semester. Therefore lectures are presented weekly on Monday and/or Thursday from 3pm to 5pm alternating from week to week between modules.

7. How are the modules evaluated?

Students must attend at least 80% of all lectures. There are TWO assignments and one exam per module. The exam takes place the last week of the semester.

8. Which modules take place in year 2023 (year 1)?

- 1. Clinical Exercise Physiology (HUB5023S)
- 2. Research Methods and Biostatistics (HUB5017F)
- 3. Biokinetics in the Workplace (HUB5018F)
- 4. Nutrition and Ergogenic Aids (HUB5022S)
- 5. MPhil Biokinetics Mini Dissertation (HUB5024W) (if you are 2nd year)

9. Which modules take place in year 2022(year 2)?

- 1. High Performance Athlete (HUB4072F)
- 2. Physical Activity and Epidemiology (HUB5017F)
- 3. Advanced Strength and Conditioning for Athletic Populations (HUB5020S)
- 4. Biokinetics and Neuromuscular Disorders (HUB5021S)

5. MPhil Biokinetics Mini Dissertation (HUB5024W) (if you are 2nd year)

10. How much does the dissertation contribute to the final mark?

Each student must complete a dissertation, the sub-section of which are; research proposal, literature review and the research project which can be drafted as for a peer-reviewed publication. The dissertation contributes a third of the total credits for the degree and should therefore comprise of two chapters (a literature/systemic review and one experimental chapter). To determine the fees for 2023, you can add 10% to the current 2022 fee.

11. Can you tell me more about ESSM?

More information on Division of Physiological Sciences can be found on their website at; http://www.essm.uct.ac.za/

12. What is the costs involved?

In 2022, each course code fee were R5640, thus R 5640 x 4 modules in year one = R22 560. You need to complete / register for your mini-dissertation in year two and the fee is R22 090 for the minor dissertation. You can also opt to do your mini-dissertation during an additional year 3, but do note, this has bursary/funding implications (most bursaries only fund a Masters student for 2 consecutive years).

Quick Summary of Courses for MPhil Courses for MPhil specialisation in Biokinetics:

All the courses are compulsory and more than 50% of the work towards the dissertation must be completed in year one.

	NQF credits	HEQSF level
HUB4072F High Performance Athlete	15	9
HUB5016F Physical Activity and Epidemiology	15	9
HUB5017W Research Methods and Statistics for		
Physical Activity	15	9
HUB5018S Biokinetics in the Workplace	15	9
HUB5020F Advanced Strength and Conditioning for Athletic		
Performance	15	9
HUB5021S Biokinetics and Neuromuscular Disorders	15	9
HUB5022S Nutrition and Ergogenic Aids	15	9
HUB5023S Advanced Clinical Exercise Physiology	15	9
HUB5024W Biokinetics minor dissertation	60	9
Total NQF credits:	180	

HUB5017F RESEARCH METHODS AND STATISTICS FOR PHYSICAL ACTIVITY

NQF credits: 15 at HEQSF level 9

Course entry requirements: None.

Course outline: The aim of this course is to provide students with the skills and knowledge to conduct both quantitative and qualitative research studies. In addition, the course facilitates the development and investigation of statistical methods and their application in clinical research. The course is divided into two parts: (i) research methods and (ii) statistics. Content includes the planning, development, execution and evaluation of a qualitative research study; and advanced statistical methods, such as linear regression and survival analyses.

HUB5018F BIOKINETICS IN THE WORKPLACE

NQF credits: 15 at HEQSF level 9

Course outline: This course is comprised of work site health promotion programmes. The coursework includes the theory underlying work-site health promotion programmes, how to plan and conduct a needs assessment, and to plan various work site health promotion strategies such as return to work assessments and programmes. The module consist of several real life examples of worksite health promotion programmes.

HUB5023S ADVANCED CLINICAL EXERCISE PHYSIOLOGY

NQF credits: 15 at HEQSF level 9

Course outline: The aim of this course is to provide biokineticists with advanced training in exercise physiology, enabling them to have a greater understanding of the physiological and metabolic processes and mechanisms that may influence both disease progression and sporting performance. The course content includes delving into the cellular and molecular adaptations that may occur with exercise training and the relationship between genetics, injuries and sports performance. Other topics that are addressed are the effects of exercise on the metabolic system, cellular respiration and regulation, and metabolism during exercise.

HUB5022S NUTRITION AND ERGOGENIC AIDS

NQF credits: 15 at HEQSF level 9

Course outline: Many clients and patients seeking biokinetics advice also require nutritional support. These include overweight and obese persons, persons with chronic, non-communicable disease, and sports persons and athletes. This course aims to provide students with a broad understanding of how ergogenic aids and nutrition can influence exercise and sports performance and also of weight management. The course aims to equip students to make sound judgements of both the value and dangers of ergogenic aids in exercise performance. The topics that are addressed in this course include energy expenditure and requirements for weight management and exercise performance, hyponatremia, body composition for sport and the use and abuse of nutritional and pharmacological supplements and ergogenic aids in sport. (It is important to note that students will not be sufficiently qualified to prescribe diets and eating plans for individuals or athletes; rather they will have an understanding of the physiological mechanisms and adaptations that occur with various forms of nutritional supplementation and effects of ergogenic aids.)

HUB5016F PHYSICAL ACTIVITY AND EPIDEMIOLOGY

NQF credits: 15 at HEQSF level 9

Course outline: This course aims to provide students with an understanding of the complex nature of the biological, socio-cultural and socio-ecological interactions on physical activity and health promotion, with an emphasis on quantifying the burden of disease associated with physical activity/inactivity, its relationship with other risk factors, and the evaluation of health promotion programmes in various settings. The topics that are covered in this course include the history of physical activity and health; concepts and methods in epidemiology; measurement and surveillance; development, implementation and evaluation of evidence-based health promotion programmes, focusing on physical activity in various settings; theories of behaviour change and their application in promoting physical activity; and environmental determinants of physical activity.

HUB4072F HIGH PERFORMANCE ATHLETE

NQF credits: 15 at HEQSF level 8

Course outline: Sports performance is improving almost daily in most sporting codes, which may in part be due to the many advances in sports training. This course provides an extensive understanding of skills applied when working with high performance or elite athletes. The coursework includes working in a multidisciplinary team, game analysis, travelling with a team, the influence of environmental factors on performance, developing sports-specific drills, and how to prepare for competitions such as the Olympics or World Cup.

HUB5021S BIOKINETICS AND NEUROMUSCULAR DISORDERS

NQF credits: 15 at HEQSF level 9 **Course entry requirements:** None. **Course outline:** This course specifically focuses on the role and application of biokinetics (in which exercise is the therapeutic modality) for patients and clients with neuromuscular conditions, and throughout life. A key focus is to position biokinetics practice, and align it with other disciplines such as physiotherapy and occupational therapy. The conditions that are addressed in this course include the aetiology, prognosis and exercise prescription for patients with stroke, spinal cord injuries, amputees, cerebral palsy, and Parkinson's disease.

HUB5020S ADVANCED STRENGTH AND CONDITIONING FOR ATHLETIC PERFORMANCE

NQF credits: 15 at HEQSF level 9

Course outline: There is an increasing need for biokineticists to expand their skills to become specialised sports and conditioning practitioners, especially in the climate of rapidly changing and evolving training methods and approaches. The course aims to provide biokineticists with advanced skills for strength and conditioning training, which will equip them to prescribe training regimes for special populations, general fitness and conditioning regimes, and sports performance and the rehabilitation of injuries. The coursework includes advanced training in understanding physiological and biomechanical mechanisms, principles and assessment, and how these apply to strength and conditioning training.

HUB5024W BIOKINETICS MINOR DISSERTATION

NQF credits: 60 at HEQSF level 9

Course outline: The minor dissertation is prepared under supervision. It must be between 15 000 and 20 000 words in length and must be on a topic in biokinetics. Students are trained in statistics where necessary, in research methods, in conducting literature reviews, and in designing a research proposal. Having submitted their research proposals and obtained formal ethics approval where necessary, candidates proceed with their research, analyse the results and write up the dissertation. Master's degree candidates must be able to reflect critically on theory and its application. They must be able to deal with complex issues systematically and creatively, to design and critically appraise research, to make sound judgements using the data and information at their disposal, and to communicate their conclusions clearly to specialist and non-specialist audiences. **Assessment:** External examination of the minor dissertation.

EXAMPLE LECTURE SCHEDULE (YEAR 1) (Titles and dates are subject to change for the actual lectures in 2023)

SEMESTER ONE						
	RESEARCH METHODS AND BIOSTATS					
	DATE	Time	Торіс	Lecturer		
1	06-Mar	15H00-17H00	Searching electronic indices for	Dale Rae		
			appropriate references- PubMed,			
			on reference manager or similar			
2	24-Mar	15H00-17H00	Probability and hypothesis testing: 2	James Brown		
			samples (t-tests)			
3	03-Apr	15H00-17H00	Analysis of variance & post-hoc testing	James Brown		
4	24-Apr	15H00-17H00	Analysis of variance for repeated	James Brown		
			measures/ covariance			
5	03-May	9H00 - 11H00	Library Orientation (Literature	Gill Morgan		
			Searches)			
6	03-May	12H00-14H00	Correlations and Limits of Agreement	Mike Lambert		
7	03-May	15H00-17H00	Critical appraisal techniques and	Mike Lambert		
			reviewing manuscripts			
8	08-May	15H00-17H00	Introduction to systematic reviews and	Vicki Lambert		
			meta-analysis			
9	15-May	15H00-17H00	Practical implementation of a meta-	Vicki Lambert		
			analysis			
10	12-Jun	15H00-17H00	Introduction to qualitative research	Cathi Draper		
11	19-Jun	9H00-11H00	Qualitative research methods	Cathi Draper		
12	19-Jun	12H00-14H00	Qualitative data analysis	Cathi Draper		
	10-Jul	09h00 - 12h00	Exam			

SEMESTER ONE						
	BIOKINETICS IN THE WORKPLACE					
	DATE	Time	Торіс	Lecturer		
1	21-Aug	15H00-17H00	Overview of Worksite Health	Vicki Lambert		
			Promotion			
2	04-Sep	15H00-17H00	Needs Analysis for Health Promotion	Vicki Lambert		
			Programmes			
3	26-Sep	9H00-11H00	EOH Health:	Paula Pienaar		
4	26-Sep	12H00-14H00	Evaluation Planning	Jacolene Kroff		
5	26-Sep	15H00-17H00	Return to Work	Jacolene Kroff		
6	28-Sep	9H00-11H00	EOH Health:	Paula Pienaar		
7	28-Sep	12H00-14H00	Developing Worksite Health	Vicki Lambert		
			Promotion Programmes			
8	28-Sep	15H00-17H00	Health Promotion in SA workplace:	Nilo Kriek		
			ESKOM			
9	10-0ct	15H00-17H00	EOH Health:	Paula Pienaar		
10	23-0ct	15H00-17H00	Presentation of New Health	Vicki Lambert		
			Promotion Programme			
11	06-Nov	09H00-11H00	Health Promotion in SA workplace:	Nilo Kriek		
			ESKOM (field visit)			
12	06-Nov	12H00-14H00	Health Promotion in SA workplace:	Nilo Kriek		
			ESKOM (field visit)			
	20-Nov	09h00 - 12h00	THEORY EXAM			

	SEMESTER 2				
		NUTRITION AN	ID ERGOGENIC AIDS HUB5022S		
	DATE	Time	Торіс	Lecturer	
1	14-Aug	15H00-17H00	Nutrition, Physical Activity and	Rowena Visagie	
			Energy Balance		
2	28-Aug	15H00-17H00	Energy Metabolism: Protein, Fats,	Jacolene Kroff	
			Carbohydrates		
3	18-Sep	15H00-17H00	Sports Specific Nutrition 1	Rowena Visagie	
			(Endurance Sports)		
4	27-Sep	9H00-11H00	Sports Specific Nutrition 2 (Power	Dietetics Dept	
			Sports)		
5	27-Sep	12H00-14H00	Nutrition for Weight Control	Dietetics Dept	
6	27-Sep	15H00-17H00	Nutrition for Diabetes	Sarah Chantler	
7	02-0ct	15H00-17H00	Fad and Quick Fix Diets	Dietetics??	
8	16/29 Oct	15H00-17H00	High Fat Low Carbohydrate Diets	Dietetics Dept	
9	30-Oct	15H00-17H00	Vitamins and Minerals for	Shelley Meltzer	
			Nutrition		
10	06-Nov	15H00-17H00	Supplements: Ergogenic Aids	Gary Gabriels	
			(composition, contamination, etc)		
11	07-Nov	9H00-11H00	Supplements: Ergogenic Aids (incl	Gary Gabriels	
			legislation and testing)		
12	07-Nov	12H00-14H00	Fact versus fiction (nutritional and	Gary AND	
			ergogenic supplements)	Shelly	
	13-Nov	09h00 - 12h00	THEORY EXAM		

	SEMESTER TWO					
	ADVANCED CLINICAL EXERCISE PHYSIOLOGY					
	DATE	Time	Торіс	Lecturer		
1	13-Mar	15H00-17H00	Exercise Physiology Fundamentals	Ayesha		
			test	(invigilating)		
2	30-Mar	15H00-17H00	Central Govenor Theory	Tim Noakes		
3	10-Apr	15H00-17H00	Recovery after exercise	Mike Lambert		
4	02-May	09H00-11H00	Introduction to Genetics	Alison September		
5	02-May	12H00-14H00	Biomedical Innovation in advanced	Sudesh Sivarasu		
			Exercise Physiology 1			
6	02-May	15H00-17H00	Biomedical Innovation in advanced	Sudesh Sivarasu		
			Exercise Physiology 2			
7	04-May	9H00-11H00	The future of genomics in Clinical	Alison September		
			Exercise medicine			
8	04-May	12H00-14H00	Biomedical Innovation in advanced	Sudesh Sivarasu		
			Exercise Physiology 3			
9	04-May	15H00-17H00	Obesity and Metabolic Sequale	Louise Clamp		
10	22-May	15H00-17H00	Exercise and Respiratory Disease	Jacolene Kroff		
11	29-May	15H00-17H00	Exercise Induced Bronchospasm tests	Jacolene Kroff		
12	05-Jun	15H00-17H00	Oral Glucose Tolerance Test and	Jacolene Kroff /		
			Diabetes	Hendriena Victor		
	14-Jul	09h00 - 12h00	THEORY EXAM			

Semester 1				
	HIGH PERF	E HUB4072F		
Nr	Date	Time	Lecture	Lecturer
1	27-Ian-20	15b00 - 17b00	Background to monitoring fitness	Mike Lambert
2	03-Feb	09h00 - 11h00	Practical aspects - monitoring fitness and fatigue 1	Mike Lambert
3	03-Feb	11h30 - 13h30	Practical aspects - monitoring fitness and fatigue 2	Mike Lambert
4	03-Feb	14h00 - 16h00	Introduction to Circadian rhythms, sleep, travel on performance.	Dr Dale Rae
5	04-Feb	09h00 - 11h00	Rugby Team Analysis 1	Dr Sharief Hendricks
6	04-Feb	11h30 - 13h30	Circadian Rhythms: Influence on performance	Dr Dale Rae
7	04-Feb	14h00 - 16h00	Rugby Team Analysis 2	Dr Sharief Hendricks
8	17-Feb-20	15h00 -17h00	accommodate change	
9	02-Mar-20	15h00 -17h00	Paralympic sport (Governance and classification system)	Sarah Arnold
10	16-Mar-20	15h00 -17h00	Accommodate change or added lecture	
11	30-Mar-20	15h00 -17h00	High Performance testing for competitive swimmers 1	Lezandré Wolmarans
12	20-Apr-20	15h00 -17h00	High Performance testing for competive swimmers 2	Lezandré Wolmarans
13	30-Apr-20	15h00 -17h00	Drugs and Sport 1	Dr Jeroen Swart
14	07-May-20	15h00 -17h00	Drugs and Sport 2	Dr Jeroen Swart
	08-Jun-20	9h00 - 12h00	WRITTEN EXAM	

EXAMPLES OF LECTURE SCHEDULES FOR EACH MODULE (YEAR 2) (Titles and dates are subject to change for the actual lectures in 2024)

	PHYSICAL A			
Nr	Date	Time	Lecture	Lecturer
			Making the case for PA (inlc role of PA,	
1	10-Feb-20	15h00 -17h00	barriers)	Vicki Lambert
2	24-Feb-20	15h00 -17h00	Physical Activity and Policy	Vicki Lambert
3	09-Mar-20	15h00 -17h00	Best Practice for PA interventions	Vicki Lambert
4	23-Mar	09h00 - 11h00	Environmental determinants of Physical activity 1	Vicki Lambert
5	23-Mar	11h30 - 13h30	Theories of behaviour change	Philippa Skowna
6	23-Mar	14h00 - 16h00	Basic measures in PA epidemiology 1	Vicki Lambert
			Objective Measures of Sleep & Physical	
7	24-Mar	09h00 - 11h00	activity: Actiwatch 1	Dale Rae
8	24-Mar	11h30 - 13h30	Objectives Measures of Physical activity	Jacolene Kroff
9	24-Mar	14h00 - 16	Survey instruments and analysis	Vicki Lambert
			Objective Measures of Sleep & Physical	
			activity: Actiwatch 2 - Presentation	
10	06-Apr-20	14h00 - 16h00	(assignment)	Dale Rae
			Environmental determinants of Physical	
11	04-May-20	15h00 -17h00	activity 2	Vicki Lambert
12	11-May-20	15h00 -17h00	Leading the horse to water	Vicki Lambert
13	18-May-20	15h00 -17h00	Physical activity and children 1	Catherine Lacey
14	25-May-20	15h00 -17h00	Physical activity and children 2	Catherine Lacey
	17-Jun-20		WRITTEN EXAM	

Semester 2						
	STRENGTH AND CONDITIONING FOR ATHLETIC POPULATIONS HUB5020S					
Nr	Date	Time	Lecture	Lecturer		
1	13-Jul-20	09h00-11h00	Revision of anatomy of musco-skeletal system	Graham Louw		
2	13-Jul-20	11h30 - 13h30	RIPT	Niel Michau		
3	13-Jul-20	14h00 - 16h00	Testing and Evaluation	Ayden Smith		
4	14-Jul-20	09h00 - 11h00	Adaptations to endurance training	Ben Capostagno		
5	14-Jul-20	11h30 - 13h30	DOMS and Muscle degeneration	Mike Lambert		
6	14-Jul-20	14h00 - 16h00	Exercise, Spotting techniques, biomechanics of resistance training	Ayden Smith		
7	27-Jul-20	15h00 - 17h00	Age and sex related differences and their implications of resistance training	Ayden Smith		
8	17-Aug-20	15h00 - 17h00	Plyometric, power, ballistics, reactive strength	Ayden Smith		
9	31-Aug-20	15h00 - 17h00	Speed, agility, speed endurance development	Ayden Smith		
10	14-Sep-20	15h00 - 17h00	Periodization	Ayden Smith		
11	28-Sep-20	15h00 - 17h00	RIPT	Niel Michau		
12	12-0ct	15h00 - 17h00	Periodization models	Ayden Smith		
	09-Nov-20	9h00 - 12h00	Strength and Conditioning Exam			

SEMESTER 2

	BIOKINETIC			
Nr	Date	Time	Lecture	Lecturer
1	20-Jul-20	15h00 - 17h00	Central Nervous System	Graham Louw
2	03-Aug-20	15h00 - 17h00	Peripheral Nervous System	Graham Louw
3	24-Aug-20	09h00 - 11h00	Rehabilitation of people living with Spinal Cord Injuries	Yumna Albertus
4	24-Aug-20	11h30 - 13h30	Rehabilitation of people living with spinal cord injuries: Intro to Exo- skeleton	Rob Evans
5	24-Aug-20	14h00 - 16h00	Rehabilitation of people with traumatic brain injuries: Assessment and exercise prescription	Rob Evans
6	25-Aug-20	09h00 - 11h00	Functional activities of unilateral transtibial amputees Including the findings of muscle activation and biomechanical analysis	Sarah Arnold
7	25-Aug-20	11h30 - 13h30	Practical implementation using functional exercises for transtibial amputees	Sarah Arnold
8	25-Aug-20	14h00 - 16h00	Cerebral Palsy - Exercise Prescription & Rehabiltation of people living with CP	Rob Lamberts
9	07-Sep-20	15h00 - 17h00	Cerebral Palsy - Best practice rehabilitation	Rob Evans
10	21-Sep-20	15h00 - 17h00	Parkinson's disease	Elizma Atterbury
11	05-Oct-20	15h00 - 17h00	Stroke Patients: Evidence based rehabilitation	Elizma Atterbury
12	19-0ct	15h00 - 17h00	Parkinson's disease	Elizma Atterbury
13	26-0ct	15h00 - 17h00	Stroke Patients: Best Practice Rehabilitation techniques	Elizma Atterbury
	16-Nov-20	09h00 - 12h00	Biokinetics and Neuromuscular disorders Exam	