PHYSIO FIRST EST. 1952

CHAMPIONING PRIVATE PHYSIOTHERAPY

PRE-COURSE DETAILS
NEW CONCEPTS IN EXERCISE PRESCRIPTION AND REHABILITATION

Tutor: Sid Ahamed
Duration: 1 Day
Content: Theory

This one day course links coaching methodology, the athletes macrocycles and rehabilitation and the principles used in modern coaching and explains to physiotherapists how to use training techniques and drills to help devise sport specific rehabilitative exercise.

Protocols for use in the clinic with progression pathways through rehabilitation and return to sport are detailed. The athletes' annual training plan (macrocycles) is introduced and the importance of linking rehabilitation drills to the athletes' phase of training explored.

This course is a blend of theory with interactive practical sessions interspersed where in addition to learning new approaches delegates can also introduce to the group rehabilitation drills or exercises they used within member's private practice giving a wide ranging and balanced approach.

Please note this course is theory based and does not include a practical element.

Course description

In order for coaches to understand the principles of training and exercise prescription they must first understand the basic tenets of:

- The biological laws applied
- Derived principles of training such as workload, training variation, periodization and cyclic organisation
- The concept of adaptation; cardio vascular, respiratory and metabolic – aerobic/anaerobic
- Training methodology; workload characteristics the use of meso cycles and micro cycles, over training, movement patterns and skill drills etc.
- Muscular performance.

In order for Physiotherapists to prescribe exercise appropriately with the specificity required they must understand the above principles whether they treat recreational athletes or the elite. This course will provide a snap shot of the relevant background theory and also provide practical advice and exercise protocols that can be used within your clinic environment or out on the field.

The course will review training techniques used in different sports – interval training, aerobic and anaerobic training, skill training etc including the concept of specificity of exercise. Derived principles of training will be highlighted, including workload and work rate, training frequency and rest cycles, training variations i.e. periodisation and cyclic organisation. The biological and physiological basis and the effects of the body of these training programmes covering the concept of adaption of the cardio vascular, respiratory and metabolic systems and their effect on muscle performance (strength, power and endurance) will also be looked at.

It will be demonstrated that rehabilitative exercise for an athlete, whether at elite or grass roots level, should address the specific needs of the individuals training program and sport
and it will be demonstrated that specialised exercise commonly used

in training regimes can be modified for use by physiotherapists to specifically meet the needs of their sporting patients. The course will conclude with suggested exercise protocols that can be used in private practice both in the clinical setting and out on the training field.

Course aims

- To enhance the participants knowledge of the training methodologies used in sport
- To enhance the participants knowledge of exercise physiology
- To enhance the participants knowledge of sport specific rehabilitation and exercise prescription
- To enhance the participant's confidence when dealing with athletes, coaches and sports medicine professionals.

Learning outcomes

- Understand the relevant background physiology of prescriptive exercise
- Be aware of a variety of training methods currently utilised in sport
- Understand the importance of exercise specificity
- Be able to devise appropriate exercise and rehabilitation regimes specific to their patients' individual needs, based on sound scientific principles.

Who should attend this course?

This course has been developed to assist all private practitioners, whether seeing athletes on a daily basis or only periodically, to ensure that we can speak their language and produce the outcomes they desire. The course aims to build on the physiotherapists existing knowledge base and undergraduate training, exploring the ever developing work of exercise physiology and training methodology.

Recommended reading

'Strength and Conditioning: *Biological principles and practical applications*'; Edited by Cardinale M, Newton R, Nosaka K. 2011 John Wiley & Sons ltd Chichester
ISBN: 978-0-470-01918-4

'Periodization Training For Sports: *Science based strength and conditioning plans for twenty sports*'; Bompa T O, Carrera M C. 2005 Human Kinetics Champaign, IL
ISBN 10: 0-7360-5559-2

'Dynamic Stretching'; Kovacs M 2010 ULYSSES Press Berkeley, CA
ISBN: 978-56975-726-0

'Training for Speed, Agility and Quickness'; 2nd Edition. Edited by Brown L E, Ferrigno V A. 2005 Human Kinetics Champaign, IL
ISBN 10: 0-7360-5873-7

'Running: *Biomechanics and Exercise Physiology Applied in Practice*'; Bosch F & Klomp R 2005 Elsevier London
ISBN: 0-443-07441-0

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Biography

Sid has a special interest in exercise prescription and rehabilitation in sport. As a former junior and senior 400m International sprinter he was personally introduced to training and exercise methodology by some of Britain's top sprint and athletics coaches. As a physiotherapist he has lectured to athletic coaches and remains involved with elite athletes both in terms of coaching and injury management.

He went on to study Medical Biochemistry at Birmingham University developing his interest and understanding of the biochemical and physiological processes involved during exercise prior to studying physiotherapy. He ran the Manchester City FC sports injuries clinic for 15 years gaining valuable experience in practical sport specific rehabilitation and has taught many courses in this specialist area throughout the UK and in the USA.

Sid has 25 years of experience as a freelance lecturer and for over ten years taught on the postgraduate Sports Injuries diploma at Crewe and Alsager and currently teaches a module on the undergraduate physiotherapy degree at MMU. He has lectured throughout the country on behalf of Physio First covering Rehabilitation in Sport, Current Concepts and Future Directions in Physiotherapy and Injuries in Sporting Children and Adolescents all of which are currently on the education program.

Timetable

As there are several courses running at once, break and lunch times will be staggered to avoid heavy queuing. The break and lunch times scheduled on the below timetable will vary per course.

Timetable	
Registration	08:45hrs to 9.15hrs
Morning session starts	09.15hrs
Break	11.00hrs
Morning session continues	11.15hrs
Lunch break	12:30hrs
Afternoon session starts	13.15hrs
Break	15:00hrs
Afternoon session continues	15.15hrs
Course close	16.30hrs