



## RESIDENTIAL COURSE

# OPTIMISING PHYSICAL PERFORMANCE

2-day live-in

29 – 30 Oct 2007

Sydney Olympic Park



### Programme Overview

Optimising Physical Performance is an intensive programme designed to bring participants up to date with the very latest practices in the development of High Performance Sport. The focus of this programme is on the application of sport science to the enhancement of performance, with particular emphasis on physical conditioning. Presenters are leading figures in high performance sport combining academic excellence with significant practical experience and application of the latest research to performance at the elite level.

### Who should attend?

This course is designed for professionals responsible for managing the development of physical performance of elite athletes within national and international competitions. Participants will already hold a senior position and have a history of achievement.

### How will you benefit?

On completion of this course participants will be able to:

- Draw on the latest research and industry practice to develop superior conditioning programmes for elite athletes
- Develop new strategies to consistently monitor athletes' physical condition and adjust training loads appropriately
- Better understand coordination strategies between conditioning, medical and coaching staff
- Evaluate the potential benefits of new technologies for monitoring and adjusting training loads in response to game demands
- Utilise the latest nutritional research to maximise athletes' performance and recovery

Participants who complete the course will receive an Executive Certificate which is endorsed by the SKA Academic Advisory Committee and bears the marks of the University of Sydney and the University of Technology, Sydney.

### Course Content

#### SCIENCE OF CONDITIONING

- Maximising endurance performance
- Scientific training for strength and power

Research in the field of elite sport training is progressing at an advancing rate every year. As a consequence, finding the time to keep up with this research becomes increasingly more demanding. Targeted sessions combining latest research findings with practical knowledge of industry best practice will be presented to ensure that participants keep up to date with the latest methods.

## MONITORING AND MAINTENANCE OF PHYSICAL WELLBEING

- Strategies to minimise fatigue and accelerate recovery
- High performance nutrition
- Systems for monitoring and hastening Rehabilitation

Maintenance of physical wellbeing is essential to keep athletes performing at their peak physical capacity. Increasing demands on elite athletes in all sports make this more difficult to achieve and promote the need for up to date knowledge. Emphasis will be placed on coordination between the various sport science roles responsible for keeping athletes at their peak through a season of high intensity competition.

## CURRENT TRENDS IN COACHING AND SPORTS TECHNOLOGY

The link between monitoring movement patterns of players during competition and then applying the information to training and conditioning drills is complex for many people. Modern technology allows us to collect scientific data in real time during competition, however using this information to enhance performance remains a challenge. This subject will focus on the utilisation of player movement patterns to develop training programmes that maximise the principles of specificity to achieve quality training outcomes.

## Presenters\*



**John Marsden**

*Sport Science Coordinator, NSW Institute of Sport (NSWIS)*

John has an extensive background working with high performance sport in Australia since 1989. Initially with the Sydney Academy of Sport, he worked with the Australian Winter Olympic programme until 1998, the Sydney Swans 1994-98 and the Sydney Kings 1994-97. He was the Manager of Performance Enhancement Services at the Northern Territory Institute of Sport from 1999-2002 and worked in environmental physiology. He followed this with a brief sojourn into NZ sport support working with Paralympic sport, tennis and skiing. John is currently responsible for overseeing the development and provision of sport science services to NSWIS programs and athletes.



**Prof Kevin Norton**

*Director of Research and Knowledge Services,  
Sport Knowledge Australia*

Professor Norton has held academic positions at the University of Newcastle, University of New South Wales and the University of South Australia. His current research focuses on the evolution of sports performance - and the causes and consequences of these changes. He has worked closely with senior coaches in both Australian Rules Football and Rugby Union in the analysis of player demands during matches, contributing to the design of training programmes to match these demands.



**Dr Helen O'Connor**

*School of Exercise and Sport Science, The University of Sydney*

Helen has extensive experience working with elite athletes and teams. She is currently the consultant sports dietician to the NSW Institute of Sport and has worked with the premiership winning Sydney Swans and Canterbury Bulldogs for over 10 years. She has worked with numerous professional and elite athletes assisting them with their nutritional preparation for training and competition. Helen was President of Sports Dieticians Australia (SDA) from 1996-2000 and organised the nutrition information kiosk which provided information on diet to the participants during the Sydney 2000 Olympic Games.



**A/Prof Peter Reaburn**

*Head of School, School of Health and Human Performance  
Central Queensland University*

Peter's passion is bridging the gap between sport and sport science. He is a former National Vice-President (Sport Science) of the Australian Association for Exercise and Sports Science and is currently on the Scientific Committee for that organisation. He is the recipient of an Australian Sports award for services to AUSSI Masters Swimming nationally. He has written four books including *Training for Speed and Endurance* and *Guiding the Young Athlete*.



**Stephen Schwerdt**

*Head Fitness Coach, Adelaide Football Club*

Stephen has been working as the Head Fitness Coach for the Adelaide Football Club for the last 8 years. During this time the Adelaide Crows have been at the forefront of new and innovative approaches to conditioning and rehabilitation methods in the AFL. Stephen has a long association with current Senior Coach and well known Sports Physiologist Neil Craig, and has specialised in the application of GPS tracking data in game specific training. Prior to working with the Adelaide Football Club, Stephen had a long and distinguished playing career with the Crows and in the SANFL.

\*Disclaimer:

All presenters listed have confirmed their involvement at the time of printing. No guarantee can be given that they will attend and present.

## Testimonials

*"This was a fantastic course that has opened my eyes to new age thinking and started the juices flowing for further improving my programmes and standards. Best practice and most recent research offered – from the presenters and the group. This highly exciting programme allows networking, values to challenge your own beliefs, and to shape higher performance within one's own sport."*

**Ryan Cameron – Assistant Coach  
Southern Districts Rugby Union  
Head of Physical Education and Sport  
St. Catherine's School**

*"Excellent group involvement and encouraging transfer of ideas. Great sharing of information between different sports."*

**Andrew Leeds - Physiotherapist / Rehab Manager  
West's Tigers NRL Club**

*"Good setting with small numbers which allowed lots of discussion and chance to get to know others. Good use of time – kept busy and moving."*

**Yvette McCausland - NZ Under 21 Squad Coach  
Netball New Zealand**

*"Specific, scientific and practical."*

**Joel Hocking - Assistant Fitness Coach  
Essendon Football Club**

## Course Materials

Pre-reading materials, notes and copies of presentations as well as further reading.

## Teaching / Learning Methods

The programme will be based around case studies, with participants required to undertake, in groups, problem solving exercises in relation to the case study.

The participants will have to discuss and justify their solutions. In some circumstances the focus of the case study will be present to respond to the solutions proposed by the participants. One of the features of this course is the opportunity for participants to share their knowledge and experience and cross-fertilise ideas from their various sport backgrounds.

## Students Participation Requirements

Students are required to attend the lectures and partake in class discussions as well as group problem solving. It is expected and will be assumed by the lecturers that the students will read all material supplied to them prior to attending the course and that the student will bring to class discussions and problem solving their prior knowledge, reading and experience.

Certificates will only be awarded to those students who demonstrate knowledge and understanding of the major subjects and who have attended not less than 80% of classes.

**VENUE** Sydney Olympic Park

**DATES** 29 - 30 October 2007

**COST** AU\$1,950 (incl GST)\*\*

Applications close on 28 September 2007

\*\*The above cost includes accommodation, meals and course materials

5% off for enrolments paid by Friday 7 Sep 2007

Corporate multiple participant rates available

For more information on the course content, presenters' details, application form and all courses offered by

Sport Knowledge Australia, please visit <http://www.sportedu.org>

Telephone +61 2 93909390 Fax +61 2 93909391 Email [info@sportedu.org](mailto:info@sportedu.org)

Level 1, Building A - 1 Herb Elliott Ave - Sydney Olympic Park - NSW 2127 Australia

### OPTIMISING PHYSICAL PERFORMANCE 29-30 October 2007

	Monday 29 October	Tuesday 30 October
8:00		
8:30		Fatigue and Recovery Peter Reaburn
9:00		
9:30		
10:00	Welcome/Intro	Morning Tea
10:30		
11:00	Rehabilitation Systems Stephen Schwerdt	Fatigue and Recovery Peter Reaburn
11:30		
12:00		Lunch
12:30	Lunch	
13:00		
13:30		Performance Nutrition Helen O'Connor
14:00	Technology for Training	
14:30		
15:00	Afternoon Tea	
15:30		
16:00	Strength and Power John Marsden	Maximising Endurance Peter Reaburn
16:30		
17:00	Comfort Break	Closing
17:15		
18:00	Strength and Power John Marsden	
18:30		
19:00		
19:30	Dinner	
20:00		
20:30		
21:00	Coach's perspective	
21:30		



## RESIDENTIAL PROGRAMME APPLICATION FORM

NAME OF PROGRAMME/COURSE: .....

### PERSONAL DETAILS:

Title: Mr Mrs Miss Ms Other (please specify): .....

First Name: ..... Family Name: .....

Postal Address: .....

City: ..... State: .....

Country ..... Postcode: .....

Daytime phone number: .....

Mobile/Cell: ..... Fax Number: .....

E-mail Address: .....

Country of Citizenship: .....

**NOTE:** Unless otherwise stated, proficiency in spoken and written English is essential for participants in all Sport Knowledge Australia residential programmes.

**ORGANISATION:**

Name of Organisation: .....

Your Position: .....

Organisation postal address (if different from above): .....

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City: ..... State: .....

Country: ..... Postcode: .....

Title of the person to whom you report: .....

Please describe your current organisation: .....

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Please describe your current responsibilities: .....

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**OTHER DETAILS:**

If you are applying for a half scholarship, please tick through which category:

- Women in sport       Indigenous sport       Disabled sport

Please explain your role relating to the above chosen category: .....

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How did you hear about the programme?

- Course prospectus/brochure       Print advertisement
- Email notification from SKA       Web search/SKA website
- Previous participant/word of mouth
- Other (please specify): .....

**DECLARATION:**

*I (the applicant) certify that all the information supplied in connection with this application is accurate and authentic.*

Signature: ..... Date: .....

**Please attach a current CV with your application form and return to:**

**By Post:**

Academic Programme Course Manager  
Sport Knowledge Australia  
PO Box 3400  
Rhodes Shopping Centre NSW 2138  
Australia

**By Fax:**

Attention: Academic Programme Course Manager  
+61 (0)2 9390 9391

**By E-mail:**

info@sportedu.org

*Notice of acceptance will be relayed within 14 days. Upon acceptance an invoice will be issued, and payment is required within 21 days of invoice date.*