Neuroscience
Sports Vision Testing and Training
Presented by the Department of Physiology, Institute for Cellular and Molecular Medicine and UGSM-Monarch Business School

LEARNING OUTCOMES
This course will enable you to become familiar with the basic terms required to understand neurophysiology. It is highly recommended that you learn the meaning of the terms presented to you during each lecture as a significant part of neurophysiology can be understood if you know the 'language' of neurophysiology.

Using the information from the course, a personal vision programme will be designed by experienced visual trainers. The programmes can be tailored to accommodate individual sessions or packaged sessions depending on the requirements of the participant of team. The sports vision programme is designed to enable sports people to perform and achieve their maximum potential. Just as exercise and practice increase strength and speed, visual performance might also be improved to achieve maximum results. The issue of the extent to which visual performance of various kinds can be modified by experience and/or specific visual enhancement training has recently attracted significant interest from sports vision specialists. Their argument is that inefficient or inconsistent visual abilities can be improved through specific training programs.

Despite the fact that there have been a few promising studies, the problem for sports vision specialists is that there is a lack of evidence to show that visual training does improve visual function and that the improvements which may be observed on clinical tests transfer to an improvement in performance on the sports field.

COURSE STRUCTURE AND VENUE
This is a comprehensive course that will take place in the form of contact lectures, practicum's and online correspondence; a community engagement component will also be introduced. Assessments will consist of a portfolio, multiple choice tests, practical assessments via internet video feed and a final examination. Additionally a specified amount of practical hours must be completed by the candidate.

ASSESSMENT AND ACCREDITATION
The recommended NQF level is 5.

CONTENT ENQUIRIES
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REGISTRATION AND ENQUIRIES
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BRIEF DESCRIPTION
Orientation in physiology, homeostasis, cells and tissue, muscle and neurophysiology, cerebrospinal fluid and the special senses. Practical work: Experimental physiology to complement the theory. Fitness is often thought of in terms of strength, endurance, flexibility and body composition. Motor skills, which bridges the gap between fitness and technical ability is vital in training for sporting excellence. A well-conditioned visual system leads more efficiently a motor system to perform at its peak. Players should do at least 15-30 min of sports vision training during each day of practice. The body must be trained to respond to what the eyes see. The eyes cannot be trained in isolation. The body must be trained to work as a unit.

COURSE CONTENT
1. Introduction, anatomical orientation and homeostasis
2. Cells and tissues
3. Muscle physiology
4. Neurophysiology, CSF and Special senses
5. Importance of Sports Vision Testing
7. Sports Vision Applications

WHO SHOULD ENROL?
• Students at universities
• Private sector
• Optometry

The programme can be presented to academic staff and students at universities countrywide. Market research confirms that there is a significant need for this programme. The potential market consists of students, sports people, and sport companies.

ADMISSION REQUIREMENTS
Entry approval via selection panel

COURSE FEE (CE AT UP IS EXEMPT FROM VAT)
R9000.00 (Including course pack and postage within South Africa)

COURSE PACK
• Sportsvision: Training for better performance, Thomas Wilson, Jeff Falkel (textbook)
• Perception, Cognition, and Decision Training: The Quiet Eye in Action, Joan N. Vickers (textbook)
• Sports Vision Pack
• 3 Months subscription to Eyedrills Offline/Online Visual Training System