

# **Diploma in Sports Science and Recreational Activities - SC233 (Pending Approval)**

## **1. Objectives**

During the past decade, Mauritius has experienced a rise in health problems related to stress, hypertension, diabetes, obesity and cardiovascular diseases, which are associated with unhealthy lifestyles. There is thus a need for Mauritians to carry out physical exercises and indulge in sports activities to alleviate the above problems.

A Programme of Studies in Sports Science and Recreational Activities has therefore become a necessity as any other subject being taught in our curriculum. The objective of this diploma programme is to provide fundamental sub-degree training and practical experience in Sports Science and Recreational Activities to school leavers and to the personnel in both governmental and private bodies, tourist, education and social areas related to sports and recreational activities.

The programme will provide:

- ◆ a base knowledge regarding various concepts of sports and recreational activities;
- ◆ an understanding of the significance of sports and health education in society; and
- ◆ an understanding of how sports activities and events are organised

## **2. Programme Requirements**

Credit in five (5) subjects at 'O' Level including Mathematics **and** 2 GCE 'A' Level passes.

Preference will be given to applicants with relevant experience in the field and each case will be considered on its own merits.

All applicants will have to undergo a fitness and medical test.

## **3. Programme Duration**

	<b>Normal</b>	<b>Maximum (under flexible)</b>
Diploma (Part-Time):	3 Years (6 Semesters)	7 Years (14 Semesters)

**4. Credits per Semester:** Minimum 6, Maximum 12 subject to regulation 3.

**5. Minimum Credits Required for the Award of Diploma:** 66

## **6. Assessment**

Each module will carry 100 marks and will be assessed as follows (unless otherwise specified):

Assessment will be based on a written examination of 2 hr duration for theory part and continuous assessment carrying a range of 10 % to 30 % of total marks. Continuous assessment should include at least 1 class test.

For a student to pass a module, a minimum of 30% should be attained in both of Continuous Assessment and Written Examination separately, with an overall total of a minimum of 40% in that module.

All modules carry 3 credits except practical modules and project/dissertation, which carry 2 and 6 credits respectively.

Students will have to choose 9 practical modules. Practical modules will be assessed wholly by continuous assessment.

## 7. List of Modules - Diploma in Sports Science and Recreational Activities

### CORE MODULES

Code	Module Name	Hrs/Wk	Credits
		L+P	
PES 1111	Principles of Physical Education & Sports	3+0	3
PES 1121	Physical Fitness & Exercises	3+0	3
HLS 1121	IT and Communication Skills for Health Sciences	2+2	3
PES 1211	Minor and Traditional Games	3+0	3
DPH 1131	Anatomy and Physiology	3+0	3
PES 2102	Organisation and Management of Sports 1	3+0	3
PES 2103	Sociology and Psychology of Sports	3+0	3
PES 2202	Organisation & Management of Sports 2	3+0	3
PES 2203	Health Education	3+0	3
PES 2201	First Aid and Sports Injuries	2.5+1	3
PES 3000	Project/Dissertation	-	6
PES 3101	Kinesiology & Biomechanics	3+0	3
PES 3102	Growth & Motor Development	3+0	3
PES 3201	Instructional Strategies for Physical Education	3+0	3
PES 3202	Physiotherapy & Massage	2+2	3

### Practical Modules

Code	Module Name	Hrs/Wk	Credits
		L+P	
PES 1020	Table Tennis	1+2	2
PES 1021	Football	1+2	2
PES 1022	Badminton	1+2	2
PES 1023	Volleyball	1+2	2
PES 2020	Handball	1+2	2
PES 2021	Athletics	1+2	2
PES 2022	Weight Training	1+2	2
PES 2023	Basketball	1+2	2
PES 3020	Swimming	1+2	2
PES 3021	Tennis	1+2	2
PES 3022	Gymnastics & Aerobics	1+2	2
PES 3023	Aquasports	1+2	2
PES 3024	Leisure and Entertainment/Artistic Expressions	1+2	2

**Not all practical modules may be on offer.**

## 8. Programme Plan - Diploma in Sports Science and Recreational Activities

### YEAR 1

Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	Credits
<b>CORE</b>				<b>CORE</b>			
		<b>L+P</b>				<b>L+P</b>	
PES 1111	Principles of Physical Education and Sports	3+0	3	HLS 1121	IT and Communication Skills for Health Sciences	2+2	3
PES 1121	Physical Fitness & Exercises	3+0	3	PES 1211	Minor and Traditional Games	3+0	3
<b>ELECTIVES</b>				<b>ELECTIVES</b>			
PES 1020	Table Tennis	1+2	2	PES 1022	Badminton	1+2	2
PES 1021	Football	1+2	2	PES 1023	Volleyball	1+2	2

### YEAR 2

Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	Credits
<b>CORE</b>				<b>CORE</b>			
		<b>L+P</b>				<b>L+P</b>	
DPH 1131	Anatomy & Physiology	3+0	3	PES 2202	Organisation & Management of Sports 2	3+0	3
PES 2102	Organisation and Management of Sports	3+0	3	PES 2203	Health Education	3+0	3
PES 2103	Sociology and Psychology of Sports	3+0	3	PES 2201	First Aid and Sports Injuries	2.5+1	3
<b>ELECTIVES</b>				<b>ELECTIVES</b>			
PES 2020	Handball	1+2	2	PES 2022	Weight Training	1+2	2
PES 2021	Athletics	1+2	2	PES 2023	Basketball	1+2	2

### YEAR 3

Semester 1				Semester 2			
Code	Module Name	Hrs/Wk	Credits	Code	Module Name	Hrs/Wk	Credits
<b>CORE</b>				<b>CORE</b>			
		<b>L+P</b>				<b>L+P</b>	
PES 3000	Project/Dissertation	-	-	PES 3000	Project/Dissertation	-	6
PES 3101	Kinesiology & Biomechanics	3+0	3	PES 3201	Instructional Strategies for Physical Education	3+0	3
PES 3102	Growth & Motor Development	3+0	3	PES 3202	Physiotherapy & Massage	2+2	3
<b>ELECTIVES</b>				<b>ELECTIVES</b>			
PES 3020	Swimming	1+2	2	PES 3022	Gymnastics & Aerobics	1+2	2
PES 3021	Tennis	1+2	2	PES 3023	Aquasports	1+2	2
				PES 3024	Leisure and Entertainment/Artistic Expressions	1+2	2

## **9. Outline Syllabus**

### **CORE MODULES**

#### **DPH 1131 - ANATOMY AND PHYSIOLOGY**

General Human Anatomy. Structure and function of the human skeleton. Structure and function of systems and organs: digestive, respiratory, cardiovascular, reproductive and nervous systems and organs of taste, smell, hearing, seeing and feel. Endocrine glands and hormones. Functional Anatomy. General Embryology.

#### **HLS 1121 - IT AND COMMUNICATION SKILLS FOR HEALTH SCIENCES**

Introduction to computers. Hardware and software. Input, Output and storage. Business area analysis. Organisation of Data. Systems Analysis of Design Data Communications. Impact of computers on Society. Future of computing. Practical sessions. In addition, the module will address the basic principles of written and oral communication and specific skills required for effective communication in the academic context, work context and in society at large

#### **PES 1111 – PRINCIPLES OF PHYSICAL EDUCATION AND SPORTS**

Philosophy of Physical Education, Historical foundation of Physical Education, China, India, Germany, Physical Education in Greece and Rome. Brief history of popular sports in Mauritius, football, volleyball, basketball, badminton, tennis. Ancient Olympic games. Modern Olympic games. Contribution of the great educational thinkers of the 18<sup>th</sup> and 19<sup>th</sup> centuries in Physical Education.

#### **PES 1121 - PHYSICAL FITNESS AND EXERCISES**

Testing protocols. Fitness evaluation. Components of Fitness – Health and Skill related components. Benefits of exercises, physical, psychological and other benefits. Basic guidelines for planning a fitness programme. Specificity of exercise, training and implication of training. General principles of exercises, overload, progression, specificity and reversibility principle. Physiology of fitness. Training for sports and fitness. General response to training. Training nutrition.

#### **PES 1211 - MINOR AND TRADITIONAL GAMES**

Definition of games, minor games, traditional games, major games, lead up games, play, recreation, sports, physical education, movement education, cognitive and psychomotor development through fundamental motor skills, classification of minor games, safety aspects.

#### **PES 2102 – ORGANISATION AND MANAGEMENT OF SPORTS 1**

Relation of physical education to recreational and leisure services. Camping and Outdoor education. Introduction to leisure in a changing world. Recreation theories. Research management. Leisure historical perspective, leisure trends, planning and government. The government and leisure agencies. Leisure provision in the commercial sector. Programming leisure and recreational services and facilities.

#### **PES 2103 - SOCIOLOGY AND PSYCHOLOGY OF SPORTS**

Anxiety and arousal in sport. Attention, intentional style and sport behaviour. Imagery and mental rehearsal. Uses of Imagery. Motivation in sport. Theories of motivation. Motivating athletes: Dos and Don'ts'. Examine sociological issues of sport through theoretical approaches. Understand the concept of play, games, sports, and athletics on a continuum. Sports socialisation in children and youth. Discuss the influence of the media on sports. Gender issues in sports.

#### **PES 2202 - ORGANISATION AND MANAGEMENT OF SPORTS 2**

Aims and objectives of Physical Education. Physical Education as applied to general education. Teaching Physical Education, professional consideration and organisation. Career opportunities. Challenges facing Physical Education. Chief elements of organisation and administration. Intramural activities. Drawing of fixtures. Public relation in Physical Education. Sports Act. Governance of a sports organisation. Physical Education and Sports for the handicapped.

#### **PES 2202 - HEALTH EDUCATION**

Nutrition and lifestyle: Nutrients and their functions. Energy requirements of young adults, athletes, older individuals. Energy use during exercise. Weight management. Non-communicable diseases (diabetes, cardiovascular diseases, hypertension, cancer). Drugs, alcohol and tobacco: consequences of alcohol,

tobacco and drug use. Legal consequences of alcohol, tobacco and drug use. Community resources. Programs that raise awareness of alcohol, drug use and tobacco. Doping. Effects of free radicals. Mental and emotional health: Health literacy, decision-making and risk evaluation. Character traits, Effective communication skills, emotional management, Stress management. Personal, community and environmental health: Injury and violence prevention. Personal safety, Personal hygiene, citizenship, Health and the environment, Health care products and services. AIDS/HIVs and its prevention; Sexuality, Pregnancy and childbirth. Theories for behavioural change.

### **PES 2203 - FIRST AID AND SPORTS INJURIES**

Definition of first aid, qualities of good first aid, principles of first aid, contents of first aid box, factors underlying sports injuries, methods of treating specific sports injuries, safety and accident prevention, first aid measures in emergency situations. First aid after concussion injuries.

### **PES 3101 - KINESIOLOGY AND BIOMECHANICS**

Role of Kinesiology in Physical Education. Axes and planes, centre of gravity, Line of gravity starting positions forearm and wrist joint. Location and action of major muscles. Major characteristics, location and action of major joints on hip, knee and ankle joints. Concept of mechanical bases of kinesiology and its application to Physical Education and Sports. Newton's Laws of motion. Mass, Weight, Force, Equilibrium, Friction, Speed, Velocity, Acceleration and Momentum and their application to sports activities. Nomenclature of movements. Flexion/Extension. Abduction/Adduction. Internal/External Rotation.

### **PES 3102 - GROWTH AND MOTOR DEVELOPMENT**

Growth and physical activity. Body proportions. How children grow and develop. Acquisition of motor skills. Factors affecting skill acquisition. General categories of motor skills. Factors that influence learning in physical education. Open skill and closed skill. Adequate posture during sports activities.

### **PES 3201 - INSTRUCTIONAL STRATEGIES FOR PHYSICAL EDUCATION**

Developmental Physical Education. Basic concepts of Physical Education. Why teach Physical Education? The purpose of Physical Education in the primary school. The pre-Impact, Impact and the Post-Impact set. The ecology of the gymnasium. Guidelines for establishing routines. Behaviour modification. Minimising off task behaviours. Interpersonal Skills in Physical Education.

### **PES 3202 - PHYSIOTHERAPY AND MASSAGE**

Physiotherapy: Introduction to sports medicine. The role of physiotherapy in sports medicine. Various injuries of the muscular skeletal system during sports activities. The use of physical agents in the treatment of sports injuries. Stretching – Proprioception and Taping.

Massage: General introduction to various massage techniques. Massage prior to sports activities and during sports activities. Massage for recuperation. Practical sessions.

## **ELECTIVES/PRACTICAL MODULES**

### **PES 1020 - TABLE TENNIS**

Principles of set games, structures, rules, principles. Introductory activities and progressions. Skills and basic tactics. Safety aspects.

### **PES 1021 - FOOTBALL**

Introduction to principles of invasion games, structures, rules, principles, skills and basic tactics and game strategies, introductory activities and progressions, safety aspects.

### **PES 1022 - BADMINTON**

Principles of set games, structures, rules, principles. Introductory activities and progressions. Skills and basic tactics. Safety aspects.

### **PES 1023 - VOLLEYBALL**

Principles of set games, structures, rules, principles. Introductory activities and progressions. Skills and basic tactics. Safety aspects.

**PES 2020 - HANDBALL**

Introduction to principles of invasion games, structures, rules, principles, skills and basic tactics and game strategies, introductory activities and progressions, safety aspects.

**PES 2021 - ATHLETICS**

Introduction to sprint events, starts, introduction to relays, hurdle events, Middle distance and Long distance, Steeple Chase, Walks, Jumps: Long jumps, triple jumps, high jumps and pole vault, Throws: Shot put, Discus, Javelin, Hammer.

**PES 2022 - WEIGHT TRAINING**

Weight room guidelines (Safety), Basic Muscle anatomy, Fundamental of weight training/training system, execution of exercises/technique analysis, strength-activities designed for and to improve total body strength, benefits of strength training and conditioning, Program development based on periodisation concepts, Resistance training systems.

**PES 2023 - BASKETBALL**

Introduction to principles of invasion games, structures, rules, principles, skills and basic tactics and game strategies, introductory activities and progressions, safety aspects.

**PES 3020 - SWIMMING**

Principles of movement in water, Introduction to diving, Freestyle, Breaststroke, Backstroke, Sidestroke, Stretching.

**PES 3021 - TENNIS**

Principles of set games, structures, rules, principles. Introductory activities and progressions. Skills and basic tactics. Safety aspects.

**PES 3022 – GYMNASTICS AND AEROBICS**

Introduction to the dominant movement patterns, safety, warm-ups and landings. Springs and landings, tight body. Statics, Rotations. Locomotion. Educational gymnastics partner sequence. Aerobics.

**PES 3023 - AQUA SPORTS**

To be chosen from: Rescue Swimming, Water Polo, Water aerobics, Snorkelling/Using a mask and a short tube, Diving, Scuba diving using breathing apparatus, Water skiing, Boating, Canoeing, Kayaking, Parasailing, Yachting, Sailing using wind propulsion, Surfing downhill on waves, wind surfing.

**PES 3024 - LEISURE AND ENTERTAINMENT/ARTISTIC EXPRESSIONS**

Languages (English, French, German/Italian). History, Cultural Studies, Entertainment sites. Communication and entertainment techniques. Tourism and Leisure. Drama Activities. Administration of Activities. Stage make-up and costume. Audio-Visual Techniques. Music and Singing. Lights. Dance and choreography. Entrepreneurship.