



RAMAKRISHNA MISSION VIVEKANANDA UNIVERSITY

**Belur Math, Howrah,
West Bengal: 711 202**

DEPARTMENT OF SPORTS SCIENCE & YOGA

Programme: PhD (Sports Science and Yoga)

Programme Outcomes

- PO1.** Have an integrated knowledge of the various disciplines in multidisciplinary field of Sports Science
- PO2.** Acquire and be equipped with skills in the application of theoretical knowledge on different subjects within the board field of Sports science.
- PO3.** Be able to practice for real life problem solving in an increasing complex and dynamic sports world.
- PO4.** Develop ability of focused research and thinking process mastering complex skills that are grounded in and guided by systematic theory and research
- PO5.** Be well informed, ethical and committed citizens contributing to the sports development

Programme Specific Outcomes

Of late, utilization of scientific concepts in sports to achieve higher level of performance could be observed all over world. In India, Sports Science is an emerging discipline in higher education. Sports or exercise science is a multidisciplinary approach encompassing various subjects like exercise physiology, biomechanics, sports psychology, sports medicine, nutrition and so on. A higher University degree is a requirement for working in sports and exercise science in Clinics, Sports Clubs, Fitness Centres and evaluation of professional athletes for a scientific back up in high performance sports. Professional players requires a much higher standard of care from the sports scientists who should hold postgraduate university qualifications and be proficient in their job. Considering the future need in the

country and shortage of persons trained to support different sporting teams, the Ramakrishna Mission Vivekananda University has embarked in research and academic courses in this field. The present course is an integrated course for M.Phil. and Ph.D.

By the end of the program post graduating students should

- Be able to display competencies and knowledge in key sports science functional areas
- Be able to work collaboratively with the coaches, administrators, sports persons and other scientists from various disciplines.
- Be able to identify research problems, carry out research and tests on sports persons.
- Be able to prepare research reports and research projects.

Course Outcomes

Title of the Course	No.	Course Outcomes
Introduction to Sports	CO1	The students will be able to understand the expanse of the field encompassed by Spots Science and Sports Medicine.
	CO2	They will also become well conversant with the rules and regulations of different sports and games.
	CO3	Students will be having adequate knowledge regarding the preparation of fitness programs. Be well conversant with the process of training, training camps, training cycles, competition cycles and the likes.
	CO4	They will be able to play a number of sports and games; also be able to train others. Develop added confidence in handling training classes.
	CO5	Practical classes on the field will help to understand theories in relation to the real life situation.
Fundamentals of Physical and biological sciences	CO1	Learn the basic principles of physics and calculations in relation with games and sports.
	CO2	They will learn methods of different measurements and calculation in physics as applied to sports and biomechanical analysis of sports.
	CO3	The students will develop capability in understanding mechanics of human motion and be able to do logical analysis.
	CO4	The students will be able to understand the structure and mechanism of human body function at the general level. He will learn the interrelation of the body systems and their implication to the function control.
	CO5	They will be able to measure the basic responses of the cardiovascular and respiratory system and interpret the data obtained.
Research Methodology	CO1	They will learn about the different varieties of research, methods of research design, ethical guidelines for carrying out research on human volunteers, methods of research review, searching of literature and methods of evaluation of scientific

		literature.
	CO2	They will learn the statistical methods applied in the field of sports sciences
	CO3	The students will learn to identify the research problems and design a research plan. Through practice of literature search they will be able to search literature for their own research work.
	CO4	Be competent to analyze and apply current development and research works in the field of sport science and Yoga.
	CO5	The students will be able to apply technologies in organizing different types of data, present results effectively by making appropriate displays, summaries, and tables of data, perform simple statistical analyses using R.
Communicative English & Dissertation writing	CO1	A basic knowledge of selected literary texts, movements and concepts in literature; The process of research oriented study and critical thinking.
	CO2	Human values and perspectives available in literary texts that embody the essence of multiple societies and cultures;
	CO3	Written and oral communication essential to participate in a global community;
	CO4	Comprehensive presentation skills and confidence in facing interviews
	CO5	The students will develop reading and writing ability in English language
Sports Science I	CO1	To learn the changes in human body systems due to exercise and sporting activities in an integrated manner.
	CO2	To gain skill in measurement of various physiological responses. Students will be able to measure the changes and interpret them in the context of sports Students will be ready to study effect of exercise in detail and in application perspective.
	CO3	They will understand the kinematic and kinetic aspects of human motion and sporting actions.
	CO4	They will learn the methods of calculation of centre of mass and its utility in sports.
	CO5	They will also learn the kinesiological analysis of movements.
Sports Science II	CO1	To learn Common acute and chronic sports related and orthopedic injuries, including soft tissue, bone & nerve injury; and their management in the field.
	CO2	To learn First aid, Cardio Pulmonary Resuscitation and special issues of women and disabled athletes
	CO3	To learn Basic concepts about different types of disability, classification of disability and Inclusive Adapted Physical Activity.
	CO4	To understand basic psychological procedures and simple psychological testing.
Seminar & Dissertation	CO1	The students will learn the methods of preparation of material and content for presentation, putting them

		into presentation software, intricacy of spoken word in a presentation.
	CO2	Learn to prepare varieties of diagrams and charts with interwoven pictures, photographs and flow charts.
	CO3	They will be competent to give presentation in various conferences, meetings, and deliver lectures.
	CO4	They will learn to execute research project by planning, collecting data, calculating the data and finally preparing a dissertation.

Programme: Post Graduate Diploma in Yoga (PGDY)

Programme Outcomes

PO1. At the end of the course the students will be able to understand traditional Indian Yoga systems; the philosophy of the Yoga systems and the new thought in Yoga movement in the country.

PO2. The students will be able to understand the principles of Hatha Yoga and the texts in this field.

PO3. The programme will develop basic understanding of the human anatomy, the human physiology and a deeper understanding of the human systems.

PO4. The students will be introduced to the essential elements of a yogic life style, the concept of health and disease and their remedies through yoga practice. They will also learn the overview of the five sheath human existence.

PO5. The students will be introduced to regular and rigorous practice (sadhana) of yoga practices that would make them disciplined and knowledgeable Yoga teachers.

Programme Specific Outcomes

The aim of the programme is to propagate and promote yoga for positive health. This programme will

- 1) introduce basic concepts of preventive health and health promotion through yoga
- 2) introduce concepts of Human Body to the students so as to making their
- 3) Develop clear understanding about the benefit and contraindication of Yoga practice and to train teachers on preventive health and promotion of positive health through yoga and personality development.

Course Outcomes

Title of the Course	No.	Course Outcomes
Foundations of Yoga	CO1	To learn Traditional Indian Yoga systems
	CO2	To understand The philosophy of the Yoga systems
	CO3	To learn new thought in Yoga movement in the country
	CO4	Will gain in-depth understanding of fundamental and applied scientific concepts and methods of Yogic Science and allied Science
	CO5	After completing the course, a student of yoga sciences & Holistic Health can find a career to teach and spread the knowledge in schools, colleges, health centers.
Hatha Yoga	CO1	To give an introduction of Hatha yoga
	CO2	To give an understanding of the prerequisites of Hatha Yoga
	CO3	To learn methods of performing asanas, pranayama, mudras and bandhas
	CO4	To introduce the principles of Hatha Yoga
	CO5	To introduce essential Hatha Yoga text
Human Anatomy and Physiology	CO1	To give a basic understanding of the human anatomy
	CO2	To give a basic understanding of the human physiology
	CO3	To give a deeper understanding of the human systems
	CO4	To understand the physiological functions
	CO5	To explain underlying mechanism of changes in body due to Yoga practice
Yogic Lifestyle	CO1	To introduce the essential elements of a yogic life style
	CO2	To introduce the concept of health and disease
	CO3	To give an understanding of the concept of ill health and their remedies through yoga
	CO4	To give an overview of the five sheath human existence
	CO5	To learn methods of natural healing methods
Yoga Practicum-I	CO1	To introduce a regular and rigorous practice (sadhana) of yoga practices
	CO2	The students will learn the procedures of Shat Karmas and be able to execute these
	CO3	The students will learn the Yogasanas and be able to guide others in practice.
Yoga Practicum-II	CO1	The students will learn the procedures of Pranayama and be able to execute these
	CO2	The Meditation and be able to guide others in practice.
	CO3	The procedures of executing Bandha and Mudra
Assignments & Self Appraisal	CO1	To introduce the principles of teaching Yoga
	CO2	To introduce class and lesson management

	CO3	To help overcome obstacles in self practice through self-appraisal
	CO4	To assess through regular viva voce and help deepen the understanding.
Essence of Principal Upanishads and BhagavadGita	CO1	To teach the essence of the principal Upanishads
	CO2	To teach the essence of the Bhagavad Gita
	CO3	Practice Yoga according to the principles of Upanishads
	CO4	Holistic living according to the precepts of Upanishads and Gita
Patanjala Yoga Darshana	CO1	To teach an overview of the Patanjali Yoga Sutras
	CO2	To teach the essence of the Patanjali Yoga Sutras
	CO3	Explain the basics of Samkhya and Yoga darshanas (Philosophies)
	CO4	Differentiate between various types of parinamas (transformations) of Chitta, meditation techniques & Samadhis and can explain the meaning and glory of Kaivalya.
	CO5	Define Mind (from Eastern and Western perspectives) especially the subconscious-mind – its various states and its various expressions in our daily lives.
Applied Yoga	CO1	To give an overview of the applications of yoga
	CO2	To teach the concept of yoga and psychology
	CO3	To teach the concept of yoga and personality development
	CO4	To teach the concept of yoga and stress management
	CO5	To teach the concept of yoga and sports
Methods of Teaching Yoga & Value Education	CO1	To learn teaching techniques to the students
	CO2	To teach class management and lesson planning
	CO3	To introduce educational tools of Yoga teaching
	CO4	To teach the concept of Yoga education and values
	CO5	
Yoga Practicum-III	CO1	To help maintain the yoga practise or Sadhana
	CO2	To teach yoga modules specific to Physical Stamina, Voice Culture, Eye sight, Memory, Concentration, Creativity, IQ, Anger Management
Yoga Practicum-IV	CO1	To get the practical experience and training to teach Advance Yoga techniques
	CO2	The students will be able to perform advanced level of Yoga.
	CO3	To learn about Cyclic Meditation (S-VYASA); Mindfulness based Stress Reduction Technique (Kabatzin)
	CO4	To learn about Mind Sound Resonance Technique (S-VYASA) ; Raja Yoga Meditation (Brahmakumaris), Transcendental Meditation (Mahesh Yogi); ZEN Buddhist Meditation
Teaching Practice	CO1	To inculcate the practice of teaching with a teaching

		internship to junior students in certificate and post-graduate diploma programmes
	CO2	The students will gain the ability to manage Yoga training classes.
	CO3	The students have to organize Yoga camps/ Workshops. Each students of Diploma would organize at least one Yoga Training Camp / Workshops under the supervision of a Yoga teacher.