

## M.Sc. (SPORTS BIOMECHANICS)

### PROGRAM OUTCOMES (POs):

By the end of the program, the students will be able to

PO1	<b>Domain knowledge:</b> Demonstrate knowledge of basic concepts, principles and applications of the specific science discipline.
PO2	<b>Resource Utilisation.</b> Cultivate the skills to acquire and use appropriate learning resources including library, e-learning resources, ICT tools to enhance knowledge-base and stay abreast of recent developments.
PO3	<b>Analytical and Technical Skills:</b> Ability to handle/use appropriate tools/techniques/equipment with an understanding of the standard operating procedures, safety aspects/limitations.
PO4	<b>Critical thinking and Problem solving:</b> Identify and critically analyse pertinent problems in the relevant discipline using appropriate tools and techniques as well as approaches to arrive at viable conclusions/solutions.
PO5	<b>Project Management:</b> Demonstrate knowledge and scientific understanding to identify research problems, design experiments, use appropriate methodologies, analyse and interpret data and provide solutions. Exhibit organisational skills and the ability to manage time and resources.
PO6	<b>Individual and team work:</b> Exhibit the potential to effectively accomplish tasks independently and as a member or leader in diverse teams, and in multidisciplinary settings.
PO7	<b>Effective Communication:</b> Communicate effectively in spoken and written form as well as through electronic media with the scientific community as well as with society at large. Demonstrate the ability to write dissertations, reports, make effective presentations and documentation.
PO8	<b>Environment and Society:</b> Analyse the impact of scientific and technological advances on the environment and society and the need for sustainable development.
PO9	<b>Ethics:</b> Commitment to professional ethics and responsibilities.
PO10	<b>Life-long learning:</b> Ability to engage in life-long learning in the context of the rapid developments in the discipline.

### PROGRAM SPECIFIC OUTCOMES (PSOs):

By the end of the program, the students will be able to

PSO1	Examine the essential health, safety and ethical aspects to be considered when undertaking applied sport and exercise biomechanics investigations.
PSO2	Manipulate, interpret and report conclusions related to a range of data and applied problems.
PSO3	Evaluate appropriate laboratory equipment to enable a sport and exercise biomechanics investigation to be undertaken.
PSO4	Integrate advanced scientific and professional skills in the context of sport and exercise biomechanics.

**M.Sc. (EXERCISE PHYSIOLOGY)****PROGRAM OUTCOMES (POs):**

By the end of the program, the students will be able to

PO1	<b>Domain knowledge:</b> Demonstrate knowledge of basic concepts, principles and applications of the specific science discipline.
PO2	<b>Resource Utilisation.</b> Cultivate the skills to acquire and use appropriate learning resources including library, e-learning resources, ICT tools to enhance knowledge-base and stay abreast of recent developments.
PO3	<b>Analytical and Technical Skills:</b> Ability to handle/use appropriate tools/techniques/equipment with an understanding of the standard operating procedures, safety aspects/limitations.
PO4	<b>Critical thinking and Problem solving:</b> Identify and critically analyse pertinent problems in the relevant discipline using appropriate tools and techniques as well as approaches to arrive at viable conclusions/solutions.
PO5	<b>Project Management:</b> Demonstrate knowledge and scientific understanding to identify research problems, design experiments, use appropriate methodologies, analyse and interpret data and provide solutions. Exhibit organisational skills and the ability to manage time and resources.
PO6	<b>Individual and team work:</b> Exhibit the potential to effectively accomplish tasks independently and as a member or leader in diverse teams, and in multidisciplinary settings.
PO7	<b>Effective Communication:</b> Communicate effectively in spoken and written form as well as through electronic media with the scientific community as well as with society at large. Demonstrate the ability to write dissertations, reports, make effective presentations and documentation.
PO8	<b>Environment and Society:</b> Analyse the impact of scientific and technological advances on the environment and society and the need for sustainable development.
PO9	<b>Ethics:</b> Commitment to professional ethics and responsibilities.
PO10	<b>Life-long learning:</b> Ability to engage in life-long learning in the context of the rapid developments in the discipline.

**PROGRAMMESPECIFIC OUTCOMES (PSOs):**

By the end of the programme, the students will be able to

PSO1	Examine the essential health, safety and ethical aspects to be considered when undertaking applied exercise physiology investigations.
PSO2	Manipulate, interpret and report conclusions related to a range of data and applied problems.
PSO3	Evaluate appropriate laboratory equipment to enable an exercise physiology investigation to be undertaken.
PSO4	Integrate advanced scientific and professional skills in the context of exercise physiology.

### M.Sc. Sports Nutrition

By the end of the program, the students will be able to

#### PROGRAM OUTCOMES (POs):

PO1	<b>Domain knowledge:</b> Demonstrate knowledge of basic concepts, principles and applications of the specific science discipline.
PO2	<b>Resource Utilisation.</b> Cultivate the skills to acquire and use appropriate learning resources including library, e-learning resources, usage of scientific sports training methods and testing methods to enhance knowledge-base and stay abreast of recent developments.
PO3	<b>Analytical and Technical Skills:</b> Ability to handle/use appropriate tools/techniques/equipment with an understanding of the standard operating procedures, safety aspects/limitations on diverse population with specific needs
PO4	<b>Critical thinking and Problem solving:</b> Identify and critically analyse pertinent problems in the relevant discipline using appropriate tools and techniques as well as approaches to arrive at viable conclusions/solutions.
PO5	<b>Project Management:</b> Demonstrate knowledge and scientific understanding to identify the purpose, design nutritional schedules, use appropriate methodologies, analyse and interpret data and provide solutions.
PO6	<b>Organisational skills:</b> Exhibit organisational skills and the ability to manage time and resources.
PO7	<b>Individual and team work:</b> Exhibit the potential to effectively accomplish tasks independently and as a sports nutritionist in diverse settings, and in goal specific settings.
PO8	<b>Ethics:</b> Commitment to professional ethics and responsibilities.
PO9	<b>Life-long learning:</b> Ability to engage in life-long learning in the context of the rapid developments in the discipline.
PO10	<b>Use of Technology:</b> Ability to utilize the available modern technology/Equipments/nutritional assessment in obtaining maximum positive results, demonstrate the ability to write dissertations, reports, make effective presentations and documentation.

#### PROGRAM SPECIFIC OUTCOMES (PSOs):

By the end of the program, the students will be able to

PSO1	Understand principles of scientific sports nutrition to be applied in the field of performance enhancement.
PSO2	Understand the principles of nutrition and its effect on physical, physiological and psychological aspect of trainees.
PSO3	Understand and apply the principles of Exercise physiology, Biomechanics, Strength and conditioning and use them effectively in the planning and execution of nutritional strategies.
PSO4	Provide exposure in various supplementations/nutritional aids for team/ individual sports and to have an understanding on the effect of these methods individually and in combination on improvement of various performance capabilities.
PSO5	Applying the knowledge gained in designing supplementations/nutritional aids for different population with diverse needs.
PSO6	Provide exposure in various allied disciplines (Exercise physiology/Sports Biochemistry/Biomechanics/ Strength and conditioning).
PSO7	Provide exposure to modern experimental/theoretical methods for measurement, observation and assessment of various components of health/performance related fitness.
PSO8	Engage in research and life-long learning to adapt to changing environment.

## M.Sc. Strength and Conditioning

### PROGRAM OUTCOMES (POs):

By the end of the program, the students will be able to

PO1	<b>Domain knowledge:</b> Demonstrate knowledge of basic concepts, principles and applications of the specific science discipline.
PO2	<b>Resource Utilisation.</b> Cultivate the skills to acquire and use appropriate learning resources including library, e-learning resources, usage of scientific sports training methods and testing methods to enhance knowledge-base and stay abreast of recent developments.
PO3	<b>Analytical and Technical Skills:</b> Ability to handle/use appropriate tools/techniques/equipment with an understanding of the standard operating procedures, safety aspects/limitations on diverse population with specific needs
PO4	<b>Critical thinking and Problem solving:</b> Identify and critically analyse pertinent problems in the relevant discipline using appropriate tools and techniques as well as approaches to arrive at viable conclusions/solutions.
PO5	<b>Project Management:</b> Demonstrate knowledge and scientific understanding to identify the purpose, design training schedules, use appropriate methodologies, analyse and interpret data and provide solutions.
PO6	<b>Organisational skills:</b> Exhibit organisational skills and the ability to manage time and resources.
PO7	<b>Individual and team work:</b> Exhibit the potential to effectively accomplish tasks independently and as a individual/team trainer in diverse settings, and in goal specific settings.
PO8	<b>Ethics:</b> Commitment to professional ethics and responsibilities.
PO9	<b>Life-long learning:</b> Ability to engage in life-long learning in the context of the rapid developments in the discipline.
PO10	<b>Use of Technology:</b> Ability to utilize the available modern technology/Equipments/Training methods in obtaining maximum positive results, demonstrate the ability to write dissertations, reports, make effective presentations and documentation.

### PROGRAM SPECIFIC OUTCOMES (PSOs):

By the end of the program, the students will be able to

PSO1	Understand principles of scientific sports training to be applied in the field of performance enhancement through diverse sports training methods.
PSO2	Understand the principles of training and its effect on physical, physiological and psychological aspect of trainees.
PSO3	Understand and apply the principles of Exercise physiology, Biomechanics and Nutrition and use them effectively in the training processes.
PSO4	Provide exposure in various methods of training for team/ individual sports and to have an understanding on the effect of these methods individually and in combination on improvement of various performance capabilities.
PSO5	Applying the knowledge gained in designing effective training programs for different population with diverse needs.
PSO6	Provide exposure in various allied disciplines (Exercise physiology/Sports Biochemistry/Biomechanics/Sports nutrition).
PSO7	Provide exposure to modern experimental/theoretical methods for measurement, observation and assessment of various components of health/performance related fitness.
PSO8	Engage in research and life-long learning to adapt to changing environment.

## M.Sc. (SPORTS PSYCHOLOGY)

### PROGRAM OUTCOMES (POs):

By the end of the program, the students will be able to

PO1	<b>Domain knowledge:</b> Demonstrate knowledge of basic concepts, principles and applications of the specific science discipline.
PO2	<b>Resource Utilisation.</b> Cultivate the skills to acquire and use appropriate learning resources including library, e-learning resources, ICT tools to enhance knowledge-base and stay abreast of recent developments.
PO3	<b>Analytical and Technical Skills:</b> Ability to handle/use appropriate tools/techniques/equipment with an understanding of the standard operating procedures, safety aspects/limitations.
PO4	<b>Critical thinking and Problem solving:</b> Identify and critically analyse pertinent problems in the relevant discipline using appropriate tools and techniques as well as approaches to arrive at viable conclusions/solutions.
PO5	<b>Project Management:</b> Demonstrate knowledge and scientific understanding to identify research problems, design experiments, use appropriate methodologies, analyse and interpret data and provide solutions. Exhibit organisational skills and the ability to manage time and resources.
PO6	<b>Individual and team work:</b> Exhibit the potential to effectively accomplish tasks independently and as a member or leader in diverse teams, and in multidisciplinary settings.
PO7	<b>Effective Communication:</b> Communicate effectively in spoken and written form as well as through electronic media with the scientific community as well as with society at large. Demonstrate the ability to write dissertations, reports, make effective presentations and documentation.
PO8	<b>Environment and Society:</b> Analyse the impact of scientific and technological advances on the environment and society and the need for sustainable development.
PO9	<b>Ethics:</b> Commitment to professional ethics and responsibilities.
PO10	<b>Life-long learning:</b> Ability to engage in life-long learning in the context of the rapid developments in the discipline.

### PROGRAM SPECIFIC OUTCOMES (PSOs):

By the end of the program, the students will be able to

PSO1	Examine the essential health, safety and ethical aspects to be considered when undertaking applied sport psychology investigations.
PSO2	Manipulate, interpret and report conclusions related to a range of data and applied problems.
PSO3	Evaluate appropriate laboratory equipment to enable a sport psychology investigation to be undertaken.
PSO4	Integrate advanced scientific and professional skills in the context of sport psychology.