

2. PROGRAM EDUCATION OBJECTIVES (PEOs)

The overall objective of the learning outcome-based curriculum framework (LOCF) for MSc. Exercise and Sports Science as follows:

PEO No.	Education Objective
PEO 1	Students will be able to use their fundamental knowledge, technical and practical competence in enhancing human performance as and when required to achieve professional excellence.
PEO 2	Students will demonstrate strong and well defined practical and technical skills in optimizing human performance for sporting excellence and health benefits
PEO 3	Students will be able to practice the profession maintaining high professional standards, exhibiting ethical behaviours, strong communication skills, and effective inter-personal skills to work in an inter-disciplinary team.
PEO 4	Students will be able to use collaborative skills to identify, assess and formulate problems and execute the solution to the needs of athletes and the organizations.
PEO 5	Students will be able to imbibe the culture of research, innovation, entrepreneurship and incubation in the sporting community.
PEO 6	Students will be able to participate in lifelong learning process for a highly productive career and will be able to relate the concepts of maximising human potentials and minimize injury risk, while serving the cause of the society.



3. GRADUATE ATTRIBUTES

S No.	Attribute	Description
1	Domain Knowledge	Demonstrate comprehensive knowledge, competency and understanding of one or more disciplines that form a part of a professional domain
2	Clinical / Hands-on skills	Demonstrate clinical / hands-on skills in order to deliver and manage quality health care services
3	Communication Skills	Demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups using appropriate media.
4	Team work	Demonstrate the ability to effectively and efficiently work and collaborate with diverse teams in the best interest of health care needs of the community
5.	Professional ethics	Demonstrate the ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in professional life.
6.	Research / Innovation-related Skills	A sense of inquiry and investigation for raising relevant and contemporary questions, synthesizing and articulating.
7.	Critical thinking and problem solving	Demonstrate capacity to think critically and extrapolate from what one has learned by applying their competencies and knowledge to solve different kinds of non-familiar problems in real life situations.
8	Information/Digital Literacy	Demonstrate capability to use ICT in a variety of learning situations, demonstrate ability to access,

S No.	Attribute	Description
		evaluate, and use a variety of relevant information sources and to use appropriate software for analysis of data.
9	Multicultural Competence	Demonstrate knowledge of the values and beliefs of multiple cultures and a global perspective, effectively engage in a multicultural society, interact respectfully with diverse groups.
11.	Leadership qualities	Demonstrate leadership capability to formulate an inspiring vision, build a team, motivate and inspire team members to attain organizational vision
12.	Lifelong Learning	Demonstrate the ability to acquire knowledge and skills, that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to demands of work place through knowledge/skill development/reskilling.

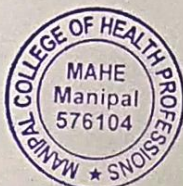


- g) Apply one's domain knowledge and transferable skills that are relevant to some of the job trades, employment opportunities and seek solutions to real-life problems.

5. PROGRAM OUTCOMES (POs):

After successful completion of MSc. Exercise and Sports Science program students will be able to:

PO No.	Attribute	Competency
PO 1	Domain knowledge	Possess and acquire scientific knowledge to work as a professional optimizing human function.
PO 2	Technical/ Hands-on skills	Demonstrate and possess technical and hands-on skills to provide quality care for the athletes and teams
PO 3	Team work	Demonstrate team work skills to support shared goals within an interdisciplinary environment.
PO 4	Ethical value & professionalism	Possess and demonstrate ethical values and professionalism within the legal framework of the society
PO 5	Communication	Communicate effectively and appropriately within an interdisciplinary environment and the society
PO 6	Evidence based practice	Devise assessment and programs that are based on evidence and aligns with professional excellence
PO 7	Life-long learning	Exhibit continued interest in enhancing knowledge and skills, which evolve over a period of time
PO 8	Entrepreneurship, leadership and mentorship	Display entrepreneurial inclination, leadership and mentorship skills.



Program Specific Outcomes (PSO)

PSO No.	Attribute	Competency
PSO 1	Self-Management	Work and learn independently take responsibility for personal learning and actions.
PSO 2	Critical Thinking	Raise vital questions, gather and assesses relevant information, come to well-reasoned conclusions, and examine implications and practical consequences
PSO 3	Multicultural Competence	Demonstrate an understanding of self, local, and global culture in relation to interacting with/learning about other culture



6. COURSE STRUCTURE, COURSE WISE LEARNING OBJECTIVE, AND COURSE OUTCOMES (COs)

SEMESTER - I

Course Code	Course Title	Credit Distribution (hours/week)				Marks Distribution		
		L	T	P	CR	IAC	ESE	Total
ABS6101	Advanced Biostatistics & Research Methodology	3	1	-	4	30	70	100
ESS6121	Introduction to Sport - Rules, Skills and Equipment	1	-	4	3	50	50	100
ESS6122	Athletic Training and Injury Prevention	1	-	4	3	50	50	100
ESS6101	Biomechanics in Sport	1	1	-	2	50	50	100
ESS6102	Foundations of Sports Nutrition	3	-	-	3	50	50	100
ESS6103	Foundations of Sport and Exercise Psychology	3	-	-	3	50	50	100
ESS6104	Physical Activity Guidelines in Health and Disease	1	1	-	2	50	50	100
ESS6111	Biomechanics in Sport Practicum	-	-	4	2	50	50	100
Total		13	3	12	22	380	420	800

Note:
ESE for ABS6101 will be conducted as a theory exam for 50 marks and normalized to 70marks
ESE for ESS6121, ESS6122 and ESS6111 will be practical only
ESE for ESS6101, ESS6102, ESS 6103, and ESS6104 will be theory only

SEMESTER - II

Course Code	Course Title	Credit Distribution (hours/week)				Marks Distribution		
		L	T	P	CR	IAC	ESE	Total
EPG6201	Ethics & Pedagogy	1	1	-	2	100	-	100
ESS6201	Foundations of Strength and Conditioning	1	1	-	2	50	50	100
ESS6202	Foundations of Exercise Physiology	1	1	-	2	50	50	100
ESS6203	Essentials of Performance Analysis	2	1	-	3	50	50	100
ESS6204	Foundations of Sports Management	2	-	-	2	50 100	50	100
ESS6211	Foundations of Strength and Conditioning Practicum	-	-	4	2	50	50	100
ESS6212	Foundations of Exercise Physiology Practicum	-	-	4	2	50	50	100
ESS6213	Practical Training	-	-	6	3	100	-	100
Total		7	4	14	18	500	300	800

Note:
ESE for ESS6211 and ESS6212 will be practical only
ESE for EPG6201, ESS6201, ESS6202, ESS6203, and ESS6204 will be theory only

SEMESTER – III

Course Code	Course Title	Credit Distribution (hours/week)				Marks Distribution		
		L	T	P	CR	IAC	ESE	Total
ESS7101	Advanced Strength and Conditioning	2	1	-	3	50	50	100
ESS7102	Advanced Exercise Physiology	2	1	-	3	50	50	100
ESS7170	Thesis Proposal	-	-	6	2	100	-	100
ESS7111	Advanced Strength and Conditioning Practicum	-	-	6	3	50	50	100
ESS7112	Advanced Exercise Physiology Practicum	-	-	6	3	50	50	100
ESS****	Program Elective	2	1	-	3	50	50	100
ESS****	Program Elective Practicum	-	-	6	3	50	50	100
Total		6	3	24	20	400	300	700

Note:
The students may choose any one option from the list of program elective combinations from the table below.
ESE for ESS7101, ESS7102, will be conducted as a theory exam for 100 marks and normalized to 50marks
ESE for ESS7111 and ESS7112 be conducted as a practical exam for 100 marks and normalized to 50marks

SEMESTER - IV

Course Code	Course Title	Credit Distribution (hours/week)					Marks Distribution		
		L	T	P	PW	CR	IAC	ESE	Total
ESS7280	Thesis	-	-	-	36	12	50	50	100
ESS7201	Entrepreneurship and Innovation	2	-	-	-	2	100	-	100
ESS7211	Internship	-	-	12	-	6	100	-	100
Total		2	-	12	36	20	250	50	300

ESE for ESS7280 will be conducted as a thesis defense practical exam.

Program Electives

Program elective is credited and choice-based. The students make a choice from pool of electives offered by the department. The ESE is conducted for 50 marks.

LIST OF PROGRAM ELECTIVE

Program Elective

Option	Course Code	Course Title	Credit Distribution (hours/week)			
			L	T	P	CR
1	ESS7011	Advanced Sports Biomechanics	2	1	-	3
	ESS7012	Advanced Sports Biomechanics - Practicum	-	-	6	3
2	ESS7021	Advanced Physical Activity	2	1	-	3
	ESS7022	Advanced Physical Activity - Practicum	-	-	6	3

Note: ESE for ESS7011 and 7021 will be conducted as a theory exam
ESE for ESS7012 and ESS7022 will be conducted as a practical exam

OVERALL CREDIT DISTRIBUTION

Semester	Credit distribution					Marks Distribution		
	L	T	P	PW	CR	IAC	ESE	Total
I - SEMESTER	13	3	12	-	22	380	420	800
II - SEMESTER	7	4	14	-	18	500	300	800
III - SEMESTER	6	3	24	-	20	400	300	700
IV - SEMESTER	2	-	12	36	20	25	50	300
Grand Total	28	10	62	36	80	1305	1070	2600

INTERNAL ASSESSMENT COMPONENT (IAC) WEIGHTAGE DISTRIBUTION

Theory		Practical	
Components	%	Components	%
Mid semester exam	60	Mid semester exam	80
Class Participation	20	Class Participation	20
Assignments/Seminar	20		

