



MANIPAL
ACADEMY of HIGHER EDUCATION

(Deemed to be University under Section 3 of the UGC Act, 1956)

Manipal College of Health Professions

Manipal Academy of Higher Education, Manipal

Outcome-Based Education (OBE) Framework

**Two Years Full Time
Postgraduate Program
(Choice - Based Credit System)**

**Master of Science in
Exercise and Sports Science**

(MSc. ESS)

With effect from July 2021

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
ABS5101	Advanced Biostatistics & Research Methodology	3	1	-	4	30	70	100
ESS5121	Introduction to Sport - Rules, Skills and Equipment	1	-	4	3	50	50	100
ESS5122	Athletic Training and Injury Prevention	1	-	4	3	50	50	100
ESS5101	Biomechanics in Sport	1	1	-	2	50	50	100
ESS5102	Foundations of Sports Nutrition	3	-	-	3	50	50	100
ESS5103	Foundations of Sport and Exercise Psychology	3	-	-	3	50	50	100
ESS5104	Physical Activity Guidelines in Health and Disease	1	1	-	2	50	50	100
ESS5111	Biomechanics in Sport Practicum	-	-	4	2	50	50	100
Total		13	3	12	22	380	420	800
Note: ESE for ABS5101 will be conducted as a theory exam for 50 marks and normalized to 70marks ESE for ESS5121, ESS5122 and ESS5111 will be practical only ESE for ESS5101, ESS5102, ESS5103, and ESS5104 will be theory only								

SEMESTER - II

Course Code	Course Title	Credit Distribution (hours/week)				Marks Distribution		
		L	T	P	CR	IAC	ESE	Total
EPG5201	Ethics & Pedagogy	1	1	-	2	100	-	100
ESS5201	Foundations of Strength and Conditioning	1	1	-	2	50	50	100
ESS5202	Foundations of Exercise Physiology	1	1	-	2	50	50	100
ESS5203	Essentials of Performance Analysis	2	1	-	3	50	50	100
ESS5204	Foundations of Sports Management	2	-	-	2	50	50	100
ESS5211	Foundations of Strength and Conditioning Practicum	-	-	4	2	50	50	100
ESS5212	Foundations of Exercise Physiology Practicum	-	-	4	2	50	50	100
ESS5213	Practical Training	-	-	6	3	100	-	100
Total		7	4	14	18	500	300	800
Note: ESE for ESS5211 and ESS5212 will be practical only ESE for EPG5201, ESS5201, ESS5202, ESS5203, and ESS5204 will be theory only								

SEMESTER - III

Course Code	Course Title	Credit Distribution (hours/week)				Marks Distribution		
		L	T	P	CR	IAC	ESE	Total
ESS6101	Advanced Strength and Conditioning	2	1	-	3	50	50	100
ESS6102	Advanced Exercise Physiology	2	1	-	3	50	50	100
ESS6170	Thesis Proposal	-	-	6	2	100	-	100
ESS6111	Advanced Strength and Conditioning Practicum	-	-	6	3	50	50	100
ESS6112	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
<p>Note: The students may choose any one option from the list of program elective combinations from the table below. ESE for ESS6101, ESS6102, will be conducted as a theory exam for 100 marks and normalized to 50marks ESE for ESS6111 and ESS6112 be conducted as a practical exam for 100 marks and normalized to 50marks</p>								

SEMESTER - IV

Course Code	Course Title	Credit Distribution (hours/week)					Marks Distribution		
		L	T	P	PW	CR	IAC	ESE	Total
ESS6280	Thesis	-	-	-	36	12	50	50	100
ESS6201	Entrepreneurship and Innovation	2	-	-	-	2	100	-	100
ESS6211	Internship	-	-	12	-	6	100	-	100
Total		2	-	12	36	20	250	50	300
ESE for ESS6280 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	ESS6011	Advanced Sports Biomechanics	2	1	-	3
	ESS6012	Advanced Sports Biomechanics - Practicum	-	-	6	3
2	ESS6021	Advanced Physical Activity	2	1	-	3
	ESS6022	Advanced Physical Activity - Practicum	-	-	6	3

Note: ESE for ESS6011 and ESS6021 will be conducted as a theory exam
ESE for ESS6012 and ESS6022 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		