CO-PO Attainment Report of Master of Physiotherapy (MPT) – Academic Year 2022–24

1. Course Outcomes (COs) and Program Outcomes (POs)

1.1. Establish the correlation between the courses and the Program Outcomes & Program

1.1.1 Course Outcomes (COs) (05)

Course outcomes (COs) ·are the statements indicating what a student can do after the successful completion of a course. Every Course leads to some Course Outcomes. The CO statements are defined by considering the course content covered in each module of a course. For every course there are 6 Cos. The keywords used to define COs are based on Bloom's Taxonomy. The Course Outcomes are defined in accordance with the University curriculum.

1.1.2 Course coding system:

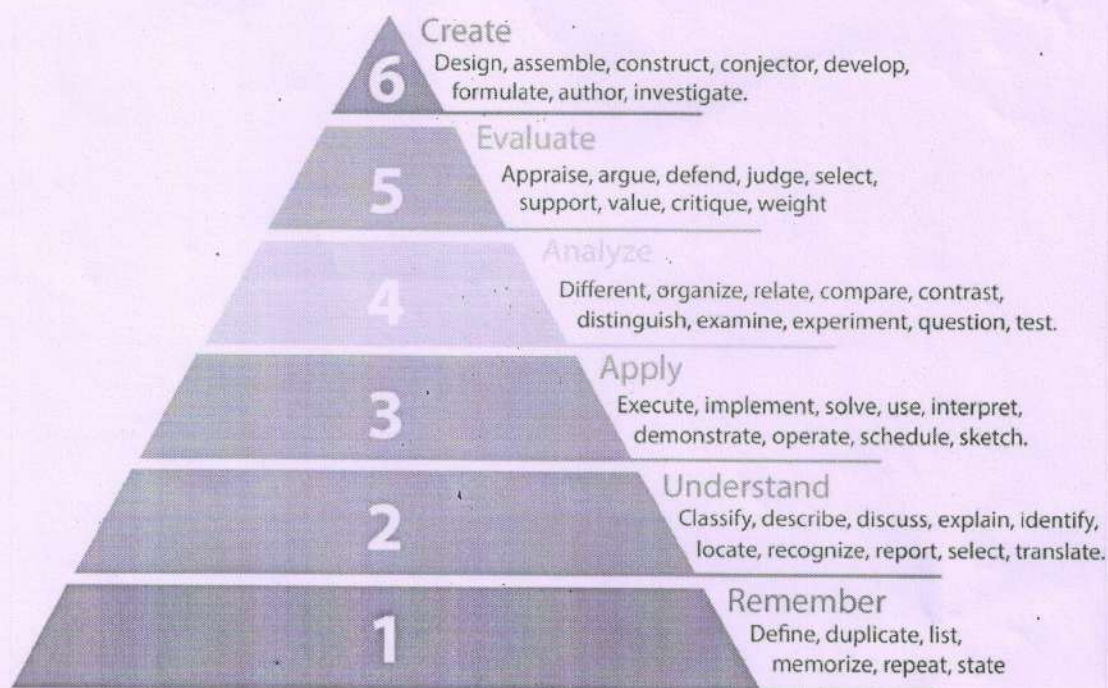63011101, 63011102 etc....

| C: Course | 1: Course Semester | 01: Subject code | .1 to .6: Course Outcome |

BLOOM'S TAXONOMY

6 Create
Design, assemble, construct, conjector, develop, formulate, author, investigate.

5 Evaluate
Appraise, argue, defend, judge, select, support, value, critique, weight

4 Analyze
Different, organize, relate, compare, contrast, distinguish, examine, experiment, question, test.

3 Apply
Execute, implement, solve, use, interpret, demonstrate, operate, schedule, sketch.

2 Understand
Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate.

1 Remember
Define, duplicate, list, memorize, repeat, state

CO-PO matrices Methodology

- Students need to develop certain qualities to effectively contribute to industry, academia, and society. These qualities are defined as Program Outcomes (POs), and the curriculum is structured to foster them.
- Based on how well the course content supports achieving each PO (e.g., PO1, PO2, PO3, etc.), courses are rated as substantial (3), moderate (2), or slight (1) in their contribution.
- Faculty members align Course Outcomes (COs) with POs, considering the broader goals and relevance of the course. This mapping is finalized through discussions in departmental committee meetings and institution-wide faculty meetings, resulting in the CO-PO Matrix.
- The correlation between COs and POs are established through the process given below:

Step 1: COs defined by the faculty or given by council are mapped with the Program outcomes.

Step 2: For each course, the average value of POs is obtained.

Step 3: Step 2 is carried out for all the courses in the program.

Target level set for CO attainment from results

Target Set (Attainment Level)	Percentage result
Level 1	50-60
Level 2	61-75
Level 3	>76

Course-PO matrix of courses for all years of study

The mapping of all the courses with PO's is summarized and presented in following table 1.

Note: Correlation levels1, 2 or 3, as defined below:

1: Slight (Low)

2: Moderate (Medium)

3: Substantial (High)

'-' Indicates there is no correlation,

1) CORRELATION OF COS WITH POS (Table 1)

CORRELATION OF COS WITH POS

| SUBJECT	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	OVERALL CO AVG	CO ATTINTMENT
MPT101	2.7	1.5	2.8	1.8	1.7	1.3	3.0	1.0	-	1.7	-	-	2.0	3
MPT102	3.0	1.7	2.7	1.0	3.0	2.3	2.7	2.0	-	1.5	2.0	3.0	2.3	3.
MPT103	3.0	1.7	3.0	1.5	1.0	2.3	2.3	2.0	-	1.0	-	-	2.3	3
MPT104	2.0	2.3	2.5	1.5	1.7	2.0	2.3	2.0	2.5	2.3	1.5	-	2.2	3
MPT201	2.3	2.0	2.5	1.7	1.5	2.0	2.7	2.0	1.0	1.0	-	-	2.0	3
MPT202	1.7	-	-	2.0	-	1.6	-	-	-	2.0	2.0	-	2.7	0.9
MPT203	3.0	1.8	2.7	1.7	1.3	1.7	2.3	3.0	2.0	1.3	1.0	-	2.0	1.6
MPT204	1.7	2.0	2.0	-	1.5	1.8	1.0	1.0	-	1.0	-	2.3	1.8	3.0
MPT205	2.0	2.3	2.5	1.5	1.7	2.0	2.3	2.0	2.5	2.3	1.5	-	1.8	3
AVERAGE	2.4	1.9	2.6	1.6	1.7	1.9	2.3	1.9	2.0	1.6	1.6	2.7	2.1	2.6

2) Attainment of Course Outcomes

INTERNAL ASSESSMENT:

The internal assessment will be done based on continuous evaluation method. Every year, there is one internal examination for both the theory and the practical. For the award of internal marks in theory and practical, other components like attendance, seminar presentations, workshops & conferences attended and journal submission will also be taken into consideration.

Internal marks calculation - 30% of total Marks of a subject (Separately for theory and practical):

Distribution of 30% of Marks is as follows:

- Continues examinations (monthly exams):5 marks
- Attendance: 5 marks (3 mark for >75% to 80%, 4 marks for >80% to 85%, 5 marks for >85% to 100%)
- Internal exam: 10 marks
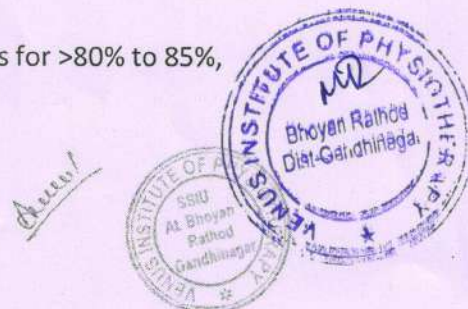
- Pre University exam: 10marks

UNIVERSITY (EXTERNAL) EXAMINATION:

- **PASSING CRITERIA:** Every student should have an aggregate score of minimum 50% Marks of combined in both the Internal and University Examination but separately in theory and practical examination. (It is not compulsory to pass in section–I and section–II separately.)

Record the attainment of Course Outcomes of all courses with respect to set attainment levels

Following Procedure is followed for the assessment of attainment of COs through Internal Assessment marks and end semester marks:

Setting of attainment levels:

Step 1: Course Outcome attainment levels: The CO attainment levels are set for each course in the final examination as target. Accordingly, the target levels for CO attainment are set.

Step 2: Criteria for setting and improvement of the target levels: For every course the target level for an assessment year is set on the basis of the target achieved in the previous year. For any course, achieving the maximum attainment level of 3 during the assessment year, the attainment level for the subsequent year shall be redefined by increasing the target marks. Table 2 presents the target levels for CO attainment.

Step 3: Weightage and CO attainment achieved: As per the University curriculum, the total marks for the theory courses is100, Accordingly the weightage adopted for the program are:

— 70% weightage for University examination and

— 30% weightage for internal assessment.

— All CO attainment for MPT programme in 1st and 2nd year is shown inTable2

Table 2

COURSE OUTCOME ATTAINMENT FOR 2022-23 ENROLLED BATCH								
Target Set:								
Level 1	50-60							
Level 2	61-75							
Level 3	>76							
Course	Course Code	Exam	No. of Students appeared	No. of Students scoring more than 15/35 marks (in internal & external exam)(THEORY),30/70(PRACTICAL)	% students scoring defined marks	Attainment level	Weighted Score	Course Outcome attainment
MPT 1ST YEAR ACEDEMIC YEAR 2022-23								
Basic Sciences Part-I	MPT 101	INT	10	10	100.00	3	0.9	3
		EXT	10	10	100.00	3	2.1	
Basic Sciences Part-II	MPT 102	INT	10	10	100.00	3	0.9	3
		EXT	10	10	100.00	3	2.1	
Advanced Physiotherapeutics (Clinical Applied & Allied Therapeutics, Medical & Surgical)	MPT 103	INT	10	10	100.00	3	0.9	3
		EXT	10	10	100.00	3	2.1	

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Non-Elective Case and Micro-Teaching	MPT 104	INT	10	10	100.00	3	0.9	3
		EXT	10	10	100.00	3	2.1	
MPT 2ND YEAR ACEDEMIC YEAR 2023-24								
Physical & Functional Diagnosis-Part-I&II	MPT 201	INT	10	10	100.00	3	0.9	3
		EXT	10	9	90.00	3	2.1	
Elective: Basics, Assessment and Evaluation	MPT 202	INT	10	10	100.00	3	0.9	0.9
		EXT	10	0	0.00	0	0	
Elective: Clinical Conditions & Physiotherapeutic Interventions	MPT 203	INT	10	10	100.00	3	0.9	1.6
		EXT	10	6	60.00	1	0.7	
Dissertation	MPT 204	EXT	10	10	100.00	3	3	3
Non-Elective Case + Elective Case (Separate for Each elective), Viva	MPT 205	INT	10	10	100	3	0.9	3
		EXT	10	10	100	3	2.1	

3) **Provide results of evaluation of each PO** Table show the target levels for POs through courses

Following Procedure is followed to assess the attainment of POs.

1. For every course the target level for an assessment year is set on the basis of the target achieved in the previous year.
2. For any course, achieving the maximum attainment level of 3 during the assessment year, the attainment level for the subsequent year shall be redefined by increasing the target marks.

A) SET A PO TARGET:

- The **CO Target** is set as **1** (based on institutional or course expectations).

- The **Maximum CO Score** is **3** (on a 3-point scale: 1 = low, 2 = medium, 3 = high).

- From the **CO-PO matrix**, the **average PO score** corresponding to this CO is **2.7**.

- To determine the **PO Target**, we use the formula:

PO Target =
(CO Target multiplied by Average PO from the CO-PO Matrix) divided by Maximum CO Score

PO target of all PO for MPT programme is reflecting table 3

B) Po attainment =

PO Attained =
The product of CO Attained and PO Target, subsequently divided by the CO Target (which may or may not equal CO Attained, depending on attainment performance).

In the process of assessing Program Outcomes (POs) for a course, attainment is calculated using two key components: **Direct Attainment** and **Indirect Attainment**. Both are essential to provide a balanced and comprehensive view of how well the course supports the development of POs.

1. Direct Attainment (80%)

Direct attainment is based on the actual performance of students in various academic assessments. These assessments include internal tests, university examinations, assignments, practical evaluations, and any other measurable activities linked directly to Course Outcomes (COs).

Each CO is mapped to relevant POs based on predefined correlation levels (such as low, medium, or high). After evaluating the extent to which students have achieved the COs, this data is used to estimate how much of the PO has been attained through that course. Since this method reflects actual academic performance, it is given higher weightage—**80%** of the final PO attainment.

2. Indirect Attainment (20%)

Indirect attainment is gathered through feedback mechanisms such as student surveys, course exit surveys, alumni feedback, and other perception-based tools. These instruments measure how well students believe the course has helped them achieve the desired Program Outcomes.

Although this data is subjective, it offers valuable insight into the students' perceived learning and satisfaction. Therefore, it is considered as part of the evaluation process, contributing **20%** to the final PO attainment.

Overall PO Attainment

Sum of direct attainment (80%) + indirect attainment(20%) in the ovrall PO attainment

We have 12 PO for MPT attainment and PO attainment of all PO's are as follows (Table 4)

TABLE 3 TARGET LEVEL FOR POS THROUGH COURSES

SUBJECT	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2
MPT101	0.9	0.5	0.9	0.6	0.6	0.4	1.0	0.3	0.0	0.6	0.0	0.0
MPT102	1.0	0.6	0.9	0.3	1.0	0.8	0.9	0.7	0.0	0.5	0.7	1.0
MPT103	1.0	0.6	1.0	0.5	0.3	0.8	0.8	0.7	0.0	0.3	0.0	0.0
MPT104	0.7	0.8	0.8	0.5	0.6	0.7	0.8	0.7	0.8	0.8	0.5	0.0
MPT201	0.8	0.7	0.8	0.6	0.5	0.7	0.9	0.7	0.3	0.3	0.0	0.0
MPT202	0.6	0.0	0.0	0.7	0.0	0.5	0.0	0.0	0.0	0.7	0.7	0.0
MPT203	1.0	0.6	0.9	0.6	0.4	0.6	0.8	1.0	0.7	0.4	0.3	0.0
MPT204	1.7	2.0	2.0	0.0	1.5	1.8	1.0	1.0	0.0	1.0	0.0	2.3
MPT205	0.7	0.8	0.8	0.5	0.6	0.7	0.8	0.7	0.8	0.8	0.5	0.0
SUM OF PO	8.2	6.4	8.2	4.2	5.4	6.8	6.9	5.7	2.7	5.4	2.7	3.3
COUNT OF PO	9.0	8.0	8.0	8.0	8.0	9.0	8.0	8.0	4.0	9.0	5.0	2.0
DIRECT TARGET (AVG)	0.9	0.8	1.0	0.5	0.7	0.8	0.9	0.7	0.7	0.6	0.5	1.7
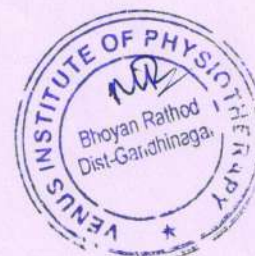
					TABLE 4 ATTAINMENT LEVEL FOR PO'S							
SUBJECT	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
MPT101	2.7	1.5	2.8	1.8	1.7	1.3	3.0	1.0	0.0	1.7	0.0	0.0
MPT102	3.0	1.7	2.7	1.0	3.0	2.3	2.7	2.0	0.0	1.5	2.0	3.0
MPT103	3.0	1.7	3.0	1.5	1.0	2.3	2.3	2.0	0.0	1.0	0.0	0.0
MPT104	2.0	2.3	2.5	1.5	1.7	2.0	2.3	2.0	2.5	2.3	1.5	0.0
MPT201	2.3	2.0	2.5	1.7	1.5	2.0	2.7	2.0	1.0	1.0	0.0	0.0
MPT202	0.5	0.0	0.0	0.6	0.0	0.5	0.0	0.0	0.0	0.6	0.6	0.0
MPT203	1.6	0.9	1.4	0.9	0.7	0.9	1.2	1.6	1.1	0.7	0.5	0.0
MPT204	1.7	2.0	2.0	-	1.5	1.8	1.0	1.0	-	1.0	-	2.3
MPT205	2.0	2.3	2.5	1.5	1.7	2.0	2.3	2.0	2.5	2.3	1.5	0.0
TOTAL PO ATTAINMENT	18.8	14.4	19.3	10.4	12.7	15.1	17.5	13.6	7.1	12.1	6.1	5.3
COUNT	9.0	8.0	8.0	8.0	8.0	9.0	8.0	8.0	4.0	9.0	5.0	2.0
AVERAGE ATTAINMENT	2.1	1.8	2.4	1.3	1.6	1.7	2.2	1.7	1.8	1.3	1.2	2.7
ATTAINMENT OF PO DIRECT	2.1	1.8	2.4	1.3	1.6	1.7	2.2	1.7	1.8	1.3	1.2	2.7
80% OF DIRECT ATT	1.67	1.44	1.93	1.04	1.27	1.34	1.75	1.36	1.41	1.08	0.98	2.13
20% OF INDIRECT ATTAINMENT	0.54	0.57	0.51	0.53	0.55	0.49	0.51	0.52	0.49	0.58	0.58	0.55
TOTAL	2.21	2.01	2.44	1.57	1.82	1.83	2.26	1.88	1.91	1.66	1.56	2.68
ATTAINMENT OF PO DIRECT	2.1	1.8	2.4	1.3	1.6	1.7	2.2	1.7	1.8	1.3	1.2	2.7