



2.6.2. Attainment of Programme outcomes and Course outcomes are evaluated by the institution

INDEX

S.No.	Description	Page No.
1	Attainment Procedure of POs and COs with Sample data	1-9
2	Sample CO-PO attainment of an Academic Year	10-41
3	Sample CO-PSO attainment of an Academic Year	41-50

S.V. Suman

PRINCIPAL
Dr. K.V.S.R. Institute of Pharmacy
Opp: Dupadu R.S. N.H.-44,
KURNOOL-518218 (A.P.)

Attainment Procedure of POs and COs with Sample data

The process of attainment of COs, POs and PSOs starts from finalizing COs for each course of the program from first year to fourth year. The course outcomes given by University of Mumbai are discussed by the concerned faculty members and COs are finalized using action verbs of learning levels as per Bloom's Taxonomy.

Then, a correlation is established between COs and POs in the scale of 1 to 3, 1 being the slight (low), 2 being moderate (medium) and 3 being substantial (high). A mapping matrix is prepared in this regard for every course in the program including the elective courses. The course outcomes and their mapping with POs are reviewed frequently by a committee of senior faculty members before they are finalized. Correlation between the course outcomes and program outcomes (POs) and Program Specific Outcomes (PSOs) is established for all courses of the program. The PSOs are in tune with the expectation of the professional bodies and the society.

For each course, attainment level of all course outcomes is arrived at rigorously based on the student performance in the internal and external examinations. Similarly, the direct and indirect feedback at the end of course helps to assess the course outcome indirectly. Thus, the CO attainment is a combined result of direct and indirect assessment.

This in turn helps in arriving at the PO assessment as each CO is mapped with certain POs and PSOs. Besides this, the exit survey is taken from students for indirect assessment of the PO's. The alumni, employer and parent's surveys are also taken for indirect assessment of the POs and PSOs.

1. Direct Assessment Tools:

The evaluation process for computing the course outcomes is explained below.

It is based on the results of:

- (a) Internal (mid) Examinations
- (b) External (University) Exam

a. Internal Examination:

The examination pattern prescribed by the university is strictly followed. Two internal (mid) exams- mid exam 1 & mid exam 2- are conducted in each semester. In each of the two exams, each student is evaluated for 30marks with the following split-up:

Descriptive part	-	15 marks
Day to Day Assessment part	-	10 marks

The question papers are so set that a question relating to each of the course outcomes listed in 3.1.1 appears.

The percentage attainment of each CO is calculated based on the class average attainment.

The answer scripts of mid exams are evaluated and processed through the activities listed in the table

Table 2.6.2

S. No	Activity	Responsible person	Remarks
1	Evaluation of Answer Scripts of Internal (Mid) Examinations	Concerned Teaching Faculty	1. Completed within 3 days of the exam date. 2. The results are shared with the students and suggestions are given for improvement.
2	Submission of marks award list to the HOD.	Concerned Teaching Faculty	Within a week from the date of last internal exam.
3	Consolidation of marks secured in all courses & display on the notice boards	Class teacher	Students are given an opportunity to verify their marks and come out with grievances, if any.
4	Verification & Analysis	Class teacher	1 Marks are entered in the attendance registers. 2. Attainment of each CO listed in 3.1.1 is analyzed and measures for improvement are taken.
5	The mark sheets of all courses are submitted to principal	Class teacher	Analysis of results program wise
6	Review of results of all programs	Department Academic Audit Committee	Initiate all necessary measures to improve the course outcomes by suitable actions as recommended by committee.
7	Communicate marks to University	Chief Superintendent	As per the university schedule the internal marks are posted to the controller of examination of university.

The extent and the method of assessment process upon which the evaluation of course outcomes of Computer Science and Engineering program are as follows:

The various Assessment tools are:

Direct Assessment Tools:

- i. **Sessional Exams**-This type of performance assessment is carried out during the internal examination sessions which are held twice a semester. Each and every sessional is focused on attaining the course outcomes.

- ii. **End Semester Examination**-End Semester examination is a metric for assessing whether all the Course outcomes are attained or not. Examination is more focused on attainment of course outcomes through a descriptive mode.
- iii. **Laboratory tests:** This assessment is carried out in the day to day evaluation of student's performance in the laboratories with respect to conduct of various experiments.
- iv. **Project Evaluation:** Evaluation of the student based on the project work is also an important criterion for attainment of course outcomes. A rubric has also been employed in order to assess the students in terms of project work

Indirect Assessment Tools:

- i. **Feedback from Students:** End course feedback is collected from the students and analyzed on various aspects such as completion of course, faculty dealing the course etc.

Course Outcome Attainment:Evaluation of internal and external examination marks for setting Course attainment levels for all courses:

Evaluation of marks from both internal and external examinations- B.Pharmacy

	Semesters	Internal	External	Total marks
Academic Year	Semester – I	25	75	100
	Semester –II	25	75	100

Evaluation of marks from both internal and external examinations – Pharm D

	Year	Internal	External	Total marks
Academic Year	I Year	30	70	100

Step1: Direct Assessment

Measurement of Course attainment levels for Internal Examinations:

- ❖ Step1: Calculate the average attainment of each course outcome.
- ❖ Step2: Calculate the average percentage attainment of each course outcome.

Measurement of Course attainment levels for University Examinations:

- ❖ Attainment Level 1: If the percentage of course outcome attainment is in between 40% to 54.99% (inclusive).
- ❖ Attainment Level 2: If the percentage of course outcome attainment is in between 55% to 69.99% (inclusive).
- ❖ Attainment Level 3: If the percentage of course outcome attainment is above 70 % (inclusive).

Overall Direct Assessment including Internal and University Examinations:

- ❖ Weightage to University Examinations: 70%
- ❖ Weightage to Internal Examinations: 30%

Step2: Indirect Assessment:

Tools: Course Feed back

Process:

- ❖ Attainment Level 1: If students feedback is less than 65% (exclusive)
- ❖ Attainment Level 2: If students feedback is in between 65% to 75% (inclusive)
- ❖ Attainment Level 3: If students feedback is greater than 75% (inclusive)

Step3: Overall Course outcome Attainment including direct and Indirect Survey:

Attainment of Course outcomes = 80% of Direct Assessment + 20% of Indirect Assessment.



PRINCIPAL
Dr. K.V.S.R. Institute of Pharmacy
Opp: Dupadu R.S. N.H.-44,
KURNOOL-518218 (A.P.)

DEPARTMENT OF PHARMACY
ACADEMIC YEAR: 2021-22

NO.	NAME OF THE STUDENT	MID EXAM - I												MID EXAM - II												MID EXAM - III												EXTERNAL MARKS
		YEAR : I			SUBJECT:HAP			YEAR : I			SUBJECT:HAP			YEAR : I			SUBJECT:HAP			YEAR : I			SUBJECT:HAP															
		a	b	c	d	e	2	3	4	a	b	c	d	e	2	3	4	a	b	c	d	e	2	3	4													
0001	B V SUSHMA	2	2	2	2	2	9	10	2	2	2	2	2	9	8	2	2	2	2	2	2	10	9	8	51													
0002	BIJJAM YOGA AMRUTHA	2	2	2	2	1	9	10	2	2	2	2	2	9	8	2	2	2	2	2	2	10	9	8	46													
0003	DASARI PRIYANKA	2	2	2	1	1	9	8	2	2	2	2	2	10	9	2	2	2	0	2	2	9	8	35														
0004	EDIGA BALAKRISHNA	2	2	2	2	2	9	9	2	2	2	2	2	7	9	2	2	2	2	2	2	9	9	43														
0005	KASULA SATWIKA	2	2	2	1	0	9	9	2	2	2	2	2	8	9	2	2	2	2	1	9	9	9	35														
0006	K SUSMITHA	2	2	1	2	0	7	10	2	2	2	2	2	10	8	2	2	2	2	2	9	9	9	36														
0007	KURUVA BANGARU VANI	2	2	2	2	1	7	10	2	2	2	2	2	9	9	2	2	2	2	2	9	9	9	51														
0008	K V S NAGA VIGNETHA	2	2	2	2	2	8	9	2	2	2	2	2	9	9	2	2	2	2	2	10	9	9	56														
0009	MANGALI JANAKI	2	2	2	2	1	10	10	2	2	2	2	2	9	9	2	2	2	2	2	9	7	41															
0010	MANGALI JYOSHNA	2	2	2	2	2	10	7	2	2	2	2	2	10	9	2	2	2	2	2	9	9	43															
0011	MASAPOGU KEERTHI	2	2	2	2	1	7	9	2	2	2	2	2	9	8	2	2	2	2	1	10	9	44															
0012	NEELAM AMRUTHA	2	2	2	2	1	10	10	2	2	2	2	2	10	8									55														
0013	PINJARI MOULALI	2	2	2	2	1	7	9	2	2	2	2	2	9	8	2	2	2	2	2	9	9	37															
0014	SHAIK HARUN RASHEED	1	1	1	1	1	6	8	2	2	2	2	2	8	10	2	2	2	2	2	9	9	38															
0015	SURASURA AHALYA	2	2	2	2	2	9	8	2	2	2	2	2	9	8	2	2	2	2	2	8	8	31															
0016	THALARI NAVEEN	2	2		1	1	9	9	2	2	2	2	2	8	8	2	2	2	2	1	9	9	50															
0017	LAHARI	2	2	0	0	2	7	8	2	2	2	2	0	8	8	2	2	2	2	2	10	4	35															
0018	BIJJAM SNEHA REDDY	2	2	2	2	0	0	8	0	0	0	0	0	9	7	2	2	2	2	2	10	5	13															
0019	C UMESH CHANDRA	2	2	2	2	0	0	8	2	2	2	0	2	7	7	2	2	2	2	2	8	8	28															
0020	DUDEKUA REHANA	2	2	2	2	1	3	8	2	2	2	2	9	9	2	2	2	2	2	4	4	31																
0021	G SRAVANI	2	2	2	1	1	8	8	2	2	2	2	2	8	8	2	2	2	2	2	9	8	35															
0022	KAPU HIMAVARSHINI	2	2	2	1	1	6	8	2	2	2	2	2	8	8	2	2	2	2	2	8	8	40															
0023	MD MUSHEEDAHMED	2	2	2	2	1	7	5	2	2	2	2	2	9	7	2	2	2	2	2	9	9	28															
0024	MEHVISH INSHIA FAISAL								2	2	2	2	2	8	7	2	2	2	2	2	5	9	15															
0025	R NOUSHREEN TAJ	2	2	2	2	1	7	8	2	2	2	2	2	8	8	2	2	2	2	2	8	8	35															
0026	SANGU NAVYA	2	2	2	2	1	8	7	2	2	2	2	2	8	8	2	2	2	2	2	9	9	40															
0027	SHAIK AYESHA SIDDIQUA	2	2	2	1	1	2	8	2	2	2	2	2	8	10	2	2	2	2	1	9	9	36															
0028	S N MOHAMMED ADNAN	2	2	2	2	1		6	2	2	2	2	2	8		2	2	2	2	2	9	9	27															
0029	SYED AQHIB HUSSAINI	2	2	2	1	1	6	5	2	2	2	2	2	7	8	2	2	2	2	2	9	8	24															
0030	TALARI SAI SHARVANI	2	2	1	1	1	8	6	2	2	2	2		8	8	2	2	2	2	1	9	8	24															
0031	S AYESHA JABEEN	2	2	1	0	0	0	0	2	2	2	2	2	7		2	2	2	2	2	8	8	10															
0032	S ASHRAF BEGUM	2	2	2	2	1	7	9	2	2	2	2	2	8	9	2	2	2	2	2	8	8	32															
0033	K RAJKUMAR	2	2	1	1	1	7	7	2	2	2	0	2	8	8	2	2	2	2	0	9	8	26															
AVERAGE		2	2	1.8	1.6	1	6.9	8.3	7.5	1.9	1.9	1.9	1.8	1.9	8.3	8.4	8.1	2	2	2	1.9	1.8	8.7	8.1	8.2	35.48												
COURSE OUTCOMES		CO101.1	CO101.2	CO101.2	CO101.2	CO101.2	CO101.1	CO101.2	CO101.2	CO101.3	CO101.3	CO101.4	CO101.3	CO101.4	CO101.4	CO101.4	CO101.4	CO101.4	CO101.4	CO101.4	CO101.4	CO101.4	CO101.4	CO101.4	CO101.4	(CO101.1-CO101.5)												
CO WISE SUM		8.9	22.2							22.3	36.5									10.1																		
CO WISE PERCENTAGE		74.16	79.28							85.8	86.9									84.2						35.48												

S.V. Kanna
PRINCIPAL
Dr. K.V.S.R. Institute of Pharmacy
Opp: Dupadu R.S. N.H.-44
KURNOOL-518218 (A.P.)

PART 1: COURSE OUTCOME ATTAINMENT

Course outcome	CO101.1	CO101.2	CO101.3	CO101.4	CO101.5			
Attainment Values	74.16	79.28	85.76	86.9	84.16			
Target Values	70	75	80	80	80			
Gap	NOGAP	NOGAP	NOGAP	NOGAP	NOGAP			

PART 2: CO-PO ATTAINMENT CALCULATION (BASED ON INTERNAL EXAMS + EXTERNAL EXAMS + COURSE FEED BACK):

Course Attainment Calculation							
CO ATTAINMENT	INTERNAL MARKS %	EXTERNAL MARKS %	DIRECT ATTAINMENT	INDIRECT ATTAINMENT	FINAL ATTAINMENT %		ATTAINMENT LEVELS
CO101.1	74.16	35.48	47.08	66.8	51.02		1.53
CO101.2	79.28	35.48	48.62	53.25	49.55		1.49
CO101.3	85.76	35.48	50.56	62.25	52.9		1.59
CO101.4	86.9	35.48	50.91	58.35	52.4		1.57
CO101.5	84.16	35.48	50.08	61.35	52.33		1.57

CO-PO Matrix for the Subject HAP

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8				PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO101.1	3																	
CO101.2		2																
CO101.3	3																	
CO101.4				2														
CO101.5		2	1															

ATTAINMENT LEVELS
1.53
1.49
1.59
1.57
1.57

FOR HAP SUBJECT

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1.5588	1.0188	0.5233	1.048											

S. Venkatesh

PRINCIPAL
Dr. K.V.S.R. Institute of Pharmacy
G. P. D. Road, D. V. Road, N.H.-44

DEPARTMENT OF PHARMACY																		
ACADEMIC YEAR: 2021-22																		
BRANCH:PHARMACY			MID EXAM - I					YEAR :I					SUBJECT:HAP LAB					EXTERNAL MARKS
S.NO.	ROLL NO.	NAME OF THE STUDENT	MID EXAM - I					MID EXAM - II										
			Identification	Synops	Major Experiment	Minor Experiment	Viva	Identification	Synops	Major Experiment	Minor Experiment	Viva	Identification	Synops	Major Experiment	Minor Experiment	Viva	
1	21ER1T0001	B V SUSHMA	4	3	7	3	1	4	4	7	3	1	4	4	7	3	1	65
2	21ER1T0002	BIJJAM YOGA AMRUTHA	4	3	7	3	1	4	4	7	3	1	4	4	7	3	1	63
3	21ER1T0003	DASARI PRIYANKA	4	3	7	3	1	4	3	7	3	1	4	4	7	3	1	61
4	21ER1T0004	EDIGA BALAKRISHNA	4	3	7	3	1	4	4	7	3	1	4	4	7	3	1	64
5	21ER1T0005	KASULA SATWIKA	4	3	7	3	1	4	3	7	3	1	4	4	7	3	1	66
6	21ER1T0006	K SUSMITHA	4	4	7	3	1	4	2	7	3	1	4	4	7	3	1	67
7	21ER1T0007	KURUVA BANGARU VANI	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	67
8	21ER1T0008	K V S NAGA VIGNETHA	4	3	7	3	1	4	4	7	3	1	4	4	7	3	1	66
9	21ER1T0009	MANGALI JANAKI	4	4	7	3	1	4	3	7	3	2	4	4	7	3	1	64
10	21ER1T0010	MANGALI JYOSHNA	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	64
11	21ER1T0011	MASAPOGU KEERTHI	4	3	7	3	1	4	3	7	3	1	4	4	7	3	1	64
12	21ER1T0012	NEELAM AMRUTHA	4	4	7	3	1	4	4	7	3	1						64
13	21ER1T0013	PINJARI MOULALI	4	3	7	3	1	4	3	7	3	1	4	4	7	3	1	63
14	21ER1T0014	SHAIK HARUN RASHEED	4	3	7	3	1	4	4	7	3	1	4	4	7	3	1	61
15	21ER1T0015	SURASURA AHALYA	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	61
16	21ER1T0016	THALARI NAVEEN TENUMI EKTA VASANTA	4	4	7	3	1	4	4	7	3	1	4	4	7	3	1	67
17	21ER1T0017	LAHARI	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	61
18	21ER1T0018	BIJJAM SNEHA REDDY	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	62
19	21ER1T0019	C UMESH CHANDRA	4	3	7	3	1	4	3	7	3	1	4	4	7	3	1	61
20	21ER1T0020	DUDEKUA REHANA	4	4	7	3	1	4	4	7	3		4	4	7	3	1	62
21	21ER1T0021	G SRAVANI	4	3	7	3	1	4	3	7	3	2	4	4	7	3	1	66
22	21ER1T0022	KAPU HIMAVARSHINI	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	67
23	21ER1T0023	MD MUSHEEDAHMED	4	4	7	3	1	4	4	7	3	1	4	4	7	3	1	62
24	21ER1T0024	MEHVISH INSHIA FAISAL						4	3	7	3	1	4	4	7	3	1	61
25	21ER1T0025	R NOUSHREEN TAJ	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	62
26	21ER1T0026	SANGU NAVYA	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	62
27	21ER1T0027	SHAIK AYESHA SIDDIQUA	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	62
28	21ER1T0028	S N MOHAMMED ADNAN	4	3	7	3	1	4	3	7	3	1	4	4	7	3	1	61
29	21ER1T0029	SYED AQHIB HUSSAINI	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	61
30	21ER1T0030	TALARI SAI SHARVANI	4	4	7	3	1	4	4	7	3	1	4	4	7	3	1	62
31	21ER1T0031	S AYESHA JABEEN	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	62
	21ER1T0032	S ASHRAF BEGUM	4	4	7	3	1	4	3	7	3	1	4	4	7	3	1	63
32	21ER1T0033	K RAJKUMAR	4	3	7	3	1	4	3	7	3	1	4	4	7	3	1	61
AVERAGE			4	3.6	7	3	1	4	3.3	7	3	1.1	4	4	7	3	1	63.09
COURSE OUTCOMES			CO107.1	CO107.3	CO107.1	CO107.2	CO107.3	CO107.2	CO107.2	CO107.2	CO107.4	CO107.3	CO107.4	CO107.4	CO107.4	CO107.4	CO107.3	#### (CO101.1-CO101.5)
CO WISE SUM			11	6.7		17.3					21							
CO WISE PERCENTAGE			100	55.83		96.1					84							63.09


PRINCIPAL
 Dr. K.V.S.R. Institute of
 Opp: Dupadu R.S.
 KURNOOL-518218

PART 1: COURSE OUTCOME ATTAINMENT								
Course outcome	CO101.1	CO101.2	CO101.3	CO101.4	CO101.5			
Attainment Values	100	55.83	96.1	84				
Target Values	70	50	90	80				
Gap	NOGAP	NOGAP	NOGAP	NOGAP	NOGAP			

PART 2: CO-PO ATTAINMENT CALCULATION (BASED ON INTERNAL EXAMS + EXTERNAL EXAMS + COURSE FEED BACK):								
Course Attainment Calculation								
CO ATTAINMENT	INTERNAL MARKS %	EXTERNAL MARKS %	DIRECT ATTAINMENT	INDIRECT ATTAINMENT	FINAL ATTAINMENT %			ATTAINMENT LEVELS
CO107.1	100	63.09	74.16	66.8	72.69			2.18
CO107.2	55.83	63.09	60.91	53.25	59.38			1.78
CO107.3	96.1	63.09	72.99	62.25	70.84			2.13
CO107.4	84	63.09	69.36	58.35	67.16			2.01
CO101.5	0	63.09	44.16	61.35	47.6			1.43

CO-PO Matrix for the Subject HAP LAB																
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	ATTAINMENT LEVELS
CO107.1	3															2.18
CO107.2				3												1.78
CO107.3				3												2.13
CO107.4	3															2.01
CO101.5																1.43

PO ATTAINMENTS													
PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11			
2.09775			1.9533										


PRINCIPAL
 Dr. K.V.S.B. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44.
 KURNOOL-518218 (A.P.)

Sample CO-PO & CO-PSO Attainment of an Academic Year

The step by step process for assessing Program Outcomes and Program Specific Outcomes is shown in the Table below.

Step 1	Each Program outcome is analyzed into elements (different abilities specified in the outcome) and a set of attributes are defined for each element (actions that explicitly demonstrate the mastery of the abilities specified). Also well designed surveys are also generated to assess the outcome
Step 2	Performance Indicators (Assessment criteria) and their targets are defined for each Program outcome
Step 3	Identify the courses that address the particular outcome (Each course contributes to at least one outcome). As a result each outcome is assessed in several courses
Step 4	The data pertaining to Direct attainment and indirect attainment is collected and analyzed in a continual process
Step 5	If the analyzed data meets the performance targets specified in Step 2, the outcome is attained, Otherwise Step 6 is considered
Step 6	The Department Advisory Board recommends the improvements in methods of content delivery and other curriculum improvements as needed

The assessment process involved in the assessment of Program Outcomes and Program Specific Outcomes is depicted in the figure below.

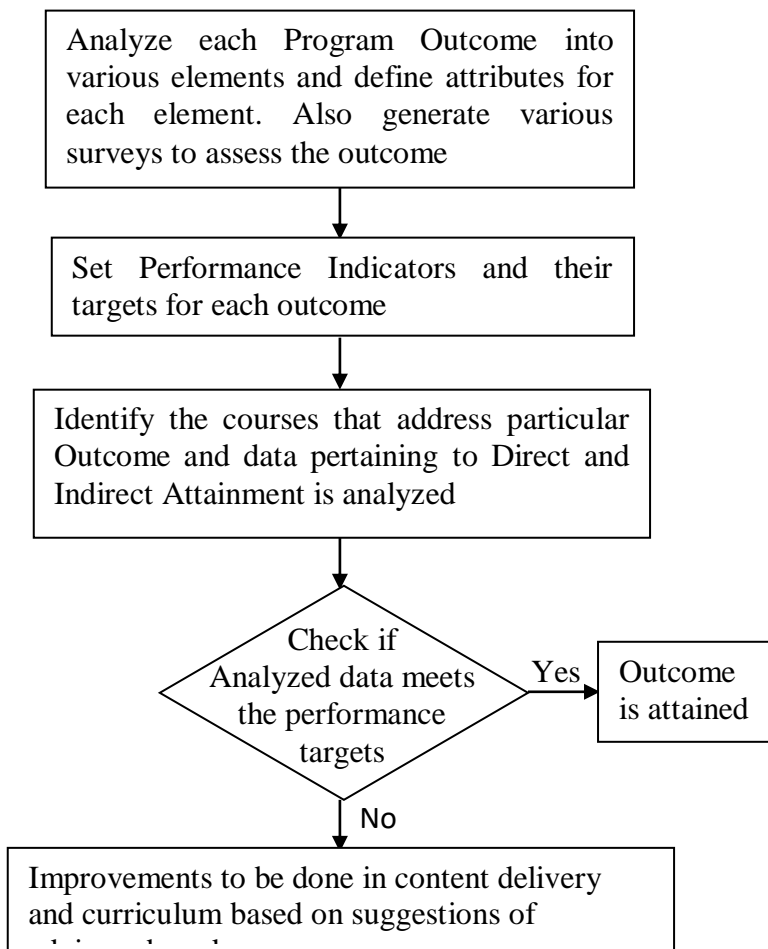


Fig: 2.6.2 Process of Assessment for Program Outcomes and Program Specific Outcomes

S.V. Anurama
PRINCIPAL
Dr. K.V.S.R. Institute of Pharmacy
Opp: Dupadu R.S. N.H.-44,
KURNOOL-518218 (A.P.)


Program Outcome Assessment Tools

Program Outcome 1: Pharmacy Knowledge: Possess knowledge and comprehension of the core and basic knowledge associated with the profession of pharmacy, including biomedical sciences; pharmaceutical sciences; behavioral, social, and administrative pharmacy sciences; and manufacturing practices.

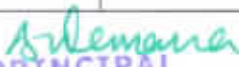
Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection	
R15					
C101- Human Anatomy and Physiology	Applies knowledge of Analysis, Preparations of Dosage forms, Inorganic compounds principles to provide Accurate data.	Internal/External evaluation /group Tasks/rubrics	Medium (2)	End of semester	
C102- Pharmaceutical Analysis-I		Exit Interview survey Alumni survey			High (3)
C103- Pharmaceutics – IC104- Pharmaceutical Inorganic Chemistry					
C105- Communication Skills					
C106- Remedial Biology					
C106- Remedial Mathematics					
C107- Human Anatomy and Physiology Lab		Internal/External evaluation /group Tasks/rubrics	Medium (2)	End of semester	
C108- Pharmaceutical Analysis – I Lab					
C109- Pharmaceutics – I Lab					
C110- Pharmaceutical Inorganic Chemistry Lab					
C111- Communication					


 PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KURNOOL-518218 (A.P)

Skills Lab C112- Remedial Biology Lab C201 Human Anatomy and Physiology-II C202- Pharmaceutical Organic Chemistry – I C203- Biochemistry C204- Pathophysiology C205- Computer Application in Pharmacy C206- Environmental Sciences C207- Human Anatomy and Physiology – III Lab C208- Pharmaceutical Organic Chemistry – I Lab C209- Biochemistry Lab C210- Computer Application in Pharmacy Laboratory C301- Pharmaceutical Organic Chemistry – II C302- Physical Pharmaceutics – I C303- Pharmaceutical Microbiology C304- Pharmaceutical	Solv Build up the capability of Analyzing.	Exit Interview survey Alumni survey	High (3)	End of the Course/Program
---	--	---	-----------------	------------------------------


PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KURNOOL-518218 (A.P)

Engineering-I C305- Pharmaceutical Organic Chemistry – II C306- Physical Pharmaceutics – I Lab C307- Pharmaceutical Microbiology C308- Pharmaceutical Engineering-I Laboratory C401- Pharmaceutical Organic Chemistry – III C402- Medicinal Chemistry – I C403- Physical Pharmaceutics – II C404- Pharmacology – I C405- Pharmacognosy and Phytochemistry – I C406- Medicinal Chemistry – I C407- Physical Pharmaceutics – II C408- Pharmacology – I C409- Pharmacognosy and Phytochemistry – I C501- Medicinal Chemistry-II C502- Industrial				
---	--	--	--	--


PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KURNOOL-518218 (A.P)

Pharmacy – I C503- Pharmacology – II C504- Pharmacognosy and Phytochemistry – II C505- Pharmaceutical Jurisprudence C506- Industrial Pharmacy – I C507- Pharmacology – II C508- Pharmacognosy and Phytochemistry – II C601- Medicinal Chemistry – III C602- Pharmacology – III C603- Herbal Drug Technology C604- Biopharmaceutics and Pharmacokinetics C605- Pharmaceutical Biotechnology C606- Quality Assurance C607- Medicinal Chemistry – III C608- Pharmacology – III C609- Herbal Drug Technology C702- Industrial				
---	--	--	--	--


Pharmacy-II C703- Pharmacy Practice C704- Novel Drug Delivery System C705- Instrumental Method of Analysis C801- Biostatistics and Research Methodology C802- Social and Preventive Pharmacy				
---	--	--	--	--

Program Outcome 2: Planning Abilities: Demonstrate effective planning abilities including time management, resource management, delegation skills and organizational skills. Develop and implement plans and organize work to meet deadlines.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
R15 C101- Human Anatomy and Physiology C102- Pharmaceutical Analysis-I C103- Pharmaceutics – I C104- Pharmaceutical Inorganic Chemistry C105- Communication Skills	Understand the definition to formulate its specifications	Internal/External evaluation /group Tasks/rubrics Exit Interview survey Alumni survey	Medium (2) High (3)	End of semester End of the Course/Program
C106- Remedial Biology C106- Remedial Mathematics C107- Human Anatomy and Physiology Lab	Recognize the data Requirements/ Identify AI Procedures	Internal/External evaluation /group Tasks/rubrics	Medium (2)	


S. Kumar
PRINCIPAL
Dr. K.V.S.R. Institute of Pharmacy
Opp: Dupadu R.S. N.H.-44,
KURNOOL-518218 (A.P)

C108- Pharmaceutical Analysis – I Lab	and specify the Methods tools, Other requirements needed .			End of semester
C109- Pharmaceutics – I Lab C110- Pharmaceutical Inorganic Chemistry Lab C111- Communication Skills Lab C112- Remedial Biology Lab C201 Human Anatomy and Physiology-II C202- Pharmaceutical Organic Chemistry – I C203- Biochemistry C204- Pathophysiology C205- Computer Application in Pharmacy C206- Environmental Sciences C207- Human Anatomy and Physiology – III Lab C208- Pharmaceutical Organic Chemistry – I Lab C209- Biochemistry Lab C210- Computer Application in Pharmacy Laboratory C301- Pharmaceutical Organic Chemistry – II C302- Physical Pharmaceutics – I C303- Pharmaceutical Microbiology C304- Pharmaceutical Engineering-I		Exit Interview survey Alumni survey	High (3)	End of the Course/Program


PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KURNOOL-518218 (A.P.)

C305- Pharmaceutical Organic Chemistry – II				
C306- Physical Pharmaceutics – II Lab				
C307- Pharmaceutical Microbiology				
C308- Pharmaceutical Engineering-I Laboratory				
C401- Pharmaceutical Organic Chemistry – III				
C402- Medicinal Chemistry – I				
C403- Physical Pharmaceutics – II				
C404- Pharmacology – I				
C405- Pharmacognosy and Phytochemistry – I				
C406- Medicinal Chemistry – I				
C407- Physical Pharmaceutics – II				
C408- Pharmacology – I				
C409- Pharmacognosy and Phytochemistry – I				
C501- Medicinal Chemistry-II				
C502- Industrial Pharmacy – I				
C503- Pharmacology – II				
C504- Pharmacognosy and Phytochemistry – II				
C505- Pharmaceutical Jurisprudence				
C506- Industrial Pharmacy – I				

C507- Pharmacology – II				
C508- Pharmacognosy and Phytochemistry – II				
C601- Medicinal Chemistry – III				
C602- Pharmacology – III				
C603- Herbal Drug Technology				
C604- Biopharmaceutics and Pharmacokinetics				
C605- Pharmaceutical Biotechnology				
C606- Quality Assurance				
C607- Medicinal Chemistry – III				
C608- Pharmacology – III				
C609- Herbal Drug Technology				
C701- Instrumental Method of Analysis				
C702- Industrial Pharmacy-II				
C703- Pharmacy Practice				
C704- Novel Drug Delivery System				
C705- Instrumental Method of Analysis				
C801- Biostatistics and Research Methodology				
C802- Social and Preventive Pharmacy				

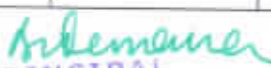

PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KURNOOL-518218 (A.P)

Program Outcome 3: Problem analysis: Utilize the principles of scientific enquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyze, evaluate and apply information systematically and shall make defensible decisions.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
<u>R15</u>				
C101- Human Anatomy and Physiology	Ability to analyze, evaluate and apply information systematically and shall make defensible decisions.	Internal/External evaluation	Medium (2)	End of semester
C102- Pharmaceutical Analysis-I		/group Tasks/rubrics		
C103- Pharmaceutics – I		Exit Interview survey Alumni survey	High (3)	End of the Course/Program
C104- Pharmaceutical Inorganic Chemistry				
C105- Communication Skills				
C106- Remedial Biology				
C106- Remedial Mathematics				
C107- Human Anatomy and Physiology Lab				
C108- Pharmaceutical Analysis – I Lab				
C109- Pharmaceutics – I Lab				
C110- Pharmaceutical Inorganic Chemistry Lab				
C111- Communication Skills Lab				
C112- Remedial Biology Lab				
C201 Human Anatomy and Physiology-II				
C202- Pharmaceutical				

<p>Organic Chemistry – I C203- Biochemistry C204- Pathophysiology C205- Computer Application in Pharmacy C206- Environmental Sciences C207- Human Anatomy and Physiology – III Lab C208- Pharmaceutical Organic Chemistry – I Lab C209- Biochemistry Lab C210- Computer Application in Pharmacy Laboratory C301- Pharmaceutical Organic Chemistry – II C302- Physical Pharmaceutics – I C303- Pharmaceutical Microbiology C304- Pharmaceutical Engineering-I C305- Pharmaceutical Organic Chemistry – II C306- Physical Pharmaceutics – II Lab C307- Pharmaceutical Microbiology C308- Pharmaceutical Engineering-I Laboratory C401- Pharmaceutical Organic Chemistry – III C402- Medicinal Chemistry – I</p>				
---	--	--	--	--


C403- Physical Pharmaceutics – II				
C4 04- Pharmacology – I				
C405- Pharmacognosy and Phytochemistry – I				
C406- Medicinal Chemistry – I				
C407- Physical Pharmaceutics – II				
C408- Pharmacology – I				
C409- Pharmacognosy and Phytochemistry – I				
C501- Medicinal Chemistry-II				
C502- Industrial Pharmacy – I				
C503- Pharmacology – II				
C504- Pharmacognosy and Phytochemistry – II				
C505- Pharmaceutical Jurisprudence				
C506- Industrial Pharmacy – I				
C507- Pharmacology – II				
C508- Pharmacognosy and Phytochemistry – II				
C601- Medicinal Chemistry – III				
C602- Pharmacology – III				
C603- Herbal Drug Technology				
C604- Biopharmaceutics and Pharmacokinetics				
C605- Pharmaceutical				


PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KURNOOL-518218 (A.P)

Biotechnology C606- Quality Assurance C607- Medicinal Chemistry – III C608- Pharmacology – III C609- Herbal Drug Technology C701- Instrumental Method of Analysis C702- Industrial Pharmacy-II C703- Pharmacy Practice C704- Novel Drug Delivery System C705- Instrumental Method of Analysis C801- Biostatistics and Research Methodology C802- Social and Preventive Pharmacy				
--	--	--	--	--

Program Outcome 4: Modern tool us age: Learn, select, and apply appropriate methods and procedures, resources, and modern pharmacy-related computing tools with an understanding of the limitations.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
<u>R15</u> C102- Pharmaceutical Analysis-I C103- Pharmaceutics – I C104- Pharmaceutical	Explore the new tool and able to develop	Internal/External Lab evaluation/rubrics	Medium (2)	End of semester


 PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KIIRNOOL-518218 (A.P)

<p>Inorganic Chemistry C105- Communication Skills C107- Human Anatomy and Physiology Lab C108- Pharmaceutical Analysis – I Lab</p>	<p>Programs/reports. Use current development techniques</p>	<p>Exit Interview survey Alumni survey</p>	<p>High (3)</p>	<p>End of the Course/Program</p>
<p>C109- Pharmaceutics – I Lab C110- Pharmaceutical Inorganic Chemistry Lab C112- Remedial Biology Lab C202- Pharmaceutical Organic Chemistry – I</p>		<p>Internal/External Lab evaluation /rubrics</p>	<p>Medium (2)</p>	<p>End of semester</p>
<p>C203- Biochemistry C204- Pathophysiology C206- Environmental Sciences C207- Human Anatomy and Physiology – II C208- Pharmaceutical Organic Chemistry – I C209- Biochemistry C210- Computer Application in Pharmacy C301- Pharmaceutical Organic Chemistry – II C302- Physical Pharmaceutics – I C304- Pharmaceutical Engineering C305- Pharmaceutical Organic Chemistry – II C306- Physical Pharmaceutics – II Lab</p>		<p>Exit Interview survey Alumni survey</p>	<p>High (3)</p>	<p>End of the Course/Program</p>

C307- Pharmaceutical Microbiology				
C308- Pharmaceutical Engineering-I Laboratory				
C401- Pharmaceutical Organic Chemistry – III				
C402- Medicinal Chemistry – I				
C403- Physical Pharmaceutics – II				
C404- Pharmacology – I				
C405- Pharmacognosy and Phytochemistry – I				
C406- Medicinal Chemistry – I				
C407- Physical Pharmaceutics – II				
C408- Pharmacology – I				
C501- Medicinal Chemistry-II				
C502- Industrial Pharmacy – I				
C503- Pharmacology – II				
C504- Pharmacognosy and Phytochemistry – II				
C505- Pharmaceutical Jurisprudence				
C506- Industrial Pharmacy – I				
C507- Pharmacology –				

S. Suman
PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KURNOOL-518218 (A.P)

<p>II</p> <p>C508- Pharmacognosy and Phytochemistry – II</p> <p>C601- Medicinal Chemistry – III</p> <p>C602- Pharmacology – III</p> <p>C603- Herbal Drug Technology</p> <p>C604- Biopharmaceutics and Pharmacokinetics</p> <p>C605- Pharmaceutical Biotechnology</p> <p>C607- Medicinal Chemistry – III</p> <p>C608- Pharmacology – III</p> <p>C609- Herbal Drug Technology</p> <p>C702- Industrial Pharmacy-II</p> <p>C703- Pharmacy Practice</p> <p>C704- Novel Drug Delivery System</p> <p>C705- Instrumental Method of Analysis</p> <p>C801- Biostatistics and Research Methodology</p> <p>C802- Social and Preventive Pharmacy</p>				
---	--	--	--	--


 PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KURNOOL-518218 (A.P)

Program Outcome 5: Leadership skills: Understand and consider the human reaction to change, motivation issues, leadership and team-building when planning changes required for fulfillment of practice, professional and societal responsibilities. Assume participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well-being.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
R15 C103- Pharmaceutics – I C104- Pharmaceutical Inorganic Chemistry C105- Communication Skills C107- Human Anatomy and Physiology Lab C108- Pharmaceutical Analysis – I Lab C109- Pharmaceutics – I Lab C110- Pharmaceutical Inorganic Chemistry Lab C112- Remedial Biology Lab C203- Biochemistry C204- Pathophysiology C206- Environmental Sciences C207- Human Anatomy and Physiology – II C208- Pharmaceutical Organic Chemistry – I C209- Biochemistry C210- Computer Application in Pharmacy C302- Physical Pharmaceutics	Explore the new participatory roles as responsible citizens or leadership roles when appropriate to facilitate improvement in health and well-being.	Internal/External evaluation /group Tasks/rubrics	Medium (2)	End of semester
		Exit Interview survey Alumni survey		High (3)

-I C304- Pharmaceutical Engineering C305- Pharmaceutical Organic Chemistry – II C307- Pharmaceutical Microbiology C308-Pharmaceutical Engineering C401- Pharmaceutical Organic Chemistry – III C402- Medicinal Chemistry – I C403- Physical Pharmaceutics – II C404- Pharmacology – I C405- Pharmacognosy and Phytochemistry – I C407- Physical Pharmaceutics – II C408- Pharmacology – I C501- Medicinal Chemistry-II C502- Industrial Pharmacy – I C503- Pharmacology – II C504- Pharmacognosy and Phytochemistry – II C505- Pharmaceutical Jurisprudence C506- Industrial Pharmacy – I C507- Pharmacology – II C508- Pharmacognosy and Phytochemistry – II C601- Medicinal Chemistry – III C602- Pharmacology – III				
---	--	--	--	--

C603- Herbal Drug Technology				
C604- Biopharmaceutics and Pharmacokinetics				
C605- Pharmaceutical Biotechnology				
C607- Medicinal Chemistry – III				
C608- Pharmacology – III				
C609- Herbal Drug Technology				
C702- Industrial Pharmacy-II				
C703- Pharmacy Practice				
C704- Novel Drug Delivery System				
C705- Instrumental Method of Analysis				
C801- Biostatistics and Research Methodology				
C802- Social and Preventive Pharmacy				

Program Outcome 6: Professional Identity: Understand, analyze and communicate the value of their professional roles in society (e.g. health care professionals, promoters of health, educators, managers, employers, employees).

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
R15 C105- Communication Skills C111- Communication Skills Lab	Understand, analyze and communicate		Medium (2)	

C205- Computer Application in Pharmacy	e the value of their professional roles in society	Internal/External evaluation	High (3)	End of semester
C208- Pharmaceutical Organic Chemistry – I		Tasks/rubrics		
C304- Pharmaceutical Engineering				
C306- Physical Pharmaceutics – I				
C401- Pharmaceutical Organic Chemistry – III		Exit Interview survey		End of the Course/Program
C409- Pharmacognosy and Phytochemistry – I		Alumni survey		
C501- Medicinal Chemistry-II				
C503- Pharmacology – II				
C504- Pharmacognosy and Phytochemistry – II				
C507- Pharmacology – II				
C601- Medicinal Chemistry – III				
C602- Pharmacology – III				
C701- Instrumental Method of Analysis				
C703- Pharmacy Practice				
C704- Novel Drug Delivery System				
C705- Instrumental Method of Analysis				
C801- Biostatistics and Research Methodology				
C802- Social and Preventive Pharmacy				

Program Outcome 7: Pharmaceutical Ethics: Honour personal values and apply ethical principles in professional and social contexts. Demonstrate behavior that recognizes cultural and

personal variability in values, communication and lifestyles. Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
C101- Human Anatomy and Physiology C106- Remedial Biology C111- Communication Skills Lab	Demonstrate behavior that recognizes cultural and personal variability in values, communication and lifestyles.	Internal/External evaluation/rubrics	Medium (2)	End of semester
C201- Human Anatomy and Physiology – II C205- Computer Application in Pharmacy C208- Pharmaceutical Organic Chemistry – I		Exit Interview survey Alumni survey	High (3)	End of the Course/Program
C303- Pharmaceutical Microbiology C304- Pharmaceutical Engineering C305- Pharmaceutical Organic Chemistry – II C306- Physical Pharmaceutics – I Lab C307- Pharmaceutical Microbiology C308- Pharmaceutical Engineering-I Laboratory C405- Pharmacognosy and Phytochemistry – I	Use ethical frameworks; apply ethical principles while making decisions and take responsibility for the outcomes associated with the decisions.	Internal/External evaluation /rubrics	Medium (2)	End of semester
		Exit Interview survey Alumni survey	High (3)	End of the Course/Program

C409- Pharmacognosy and Phytochemistry – I C501- Medicinal Chemistry-II C503- Pharmacology – II C504- Pharmacognosy and Phytochemistry – II C505- Pharmaceutical Jurisprudence C507- Pharmacology – II C508- Pharmacognosy and Phytochemistry – II C601- Medicinal Chemistry – III C606- Quality Assurance C609- Herbal Drug Technology C701- Instrumental Method of Analysis C702- Industrial Pharmacy – II C705- Instrumental Method of Analysis C801- Biostatistics and Research Methodology C802- Social and Preventive Pharmacy				
--	--	--	--	--

Program Outcome 8: Communication: Communicate effectively with the pharmacy community and with society at large, such as, being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
C101- Human Anatomy and				

Physiology C106- Remedial Biology C201- Human Anatomy and Physiology – II C205- Computer Application in Pharmacy C303- Pharmaceutical Microbiology	Understand The issues And communicate relevantly	Internal/External evaluation/rubrics	Medium (2)	End of semester
		Exit Interview survey Alumni survey	High (3)	End of the Course/Program
C305- Pharmaceutical Organic Chemistry – II C307- Pharmaceutical Microbiology C308- Pharmaceutical Engineering C401- Pharmaceutical Organic Chemistry – III C403- Physical Pharmaceutics – II C404- Pharmacology – I C501- Medicinal Chemistry-II C503- Pharmacology – II C504- Pharmacognosy and Phytochemistry – II C505- Pharmaceutical Jurisprudence C507- Pharmacology – II C508- Pharmacognosy and Phytochemistry – II C606- Quality Assurance C701- Instrumental Method of Analysis C705- Instrumental Method of Analysis	being able to comprehend and write effective reports, make effective presentations and documentation, and give and receive clear instructions.	Internal/External evaluation /rubrics	Medium (2)	End of semester
		Exit Interview survey Alumni survey	High (3)	End of the Course/Program

K. Venkatesh

C801- Biostatistics and Research Methodology				
C802- Social and Preventive Pharmacy				

Program Outcome 9: The Pharmacist and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety and legal issues and the consequent responsibilities relevant to the professional pharmacy practice

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
C303- Pharmaceutical Microbiology C304- Pharmaceutical Engineering	Information gathering, in and around the society and to have contextual knowledge to assess the issues.	Internal/External evaluation /group Tasks/rubrics	Medium (2)	End of semester
C305- Pharmaceutical Organic Chemistry – II C306- Physical Pharmaceutics – I C307- Pharmaceutical Microbiology C401- Pharmaceutical Organic Chemistry – III C402- Medicinal Chemistry – I C404- Pharmacology – I C409- Pharmacognosy and Phytochemistry – I C501- Medicinal Chemistry-II C502- Industrial Pharmacy – I C505- Pharmaceutical Jurisprudence		Exit Interview survey Alumni survey	High (3)	End of the Course/Program

S. Suman
PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 VUPBODL-518218 (A.P)

C508- Pharmacognosy and Phytochemistry – II C602- Pharmacology – III C603- Herbal Drug Technology C609- Herbal Drug Technology C701- Instrumental Method of Analysis C702- Industrial Pharmacy – II C704- Novel Drug Delivery System C705- Instrumental Method of Analysis C801- Biostatistics and Research Methodology C802- Social and Preventive Pharmacy				
---	--	--	--	--

Program Outcome 10: Environment and sustainability: Understand the impact of the professional pharmacy solutions in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
C101- Human Anatomy and Physiology C105- Communication Skills C106- Remedial Biology C201- Human Anatomy and Physiology – II C207- Human Anatomy and Physiology – II	Oral and written communication shown by the students in	Internal/External evaluation /group Tasks/rubrics Exit Interview survey	Medium (2) High (3)	End of semester End of the Course/Program

Physiology – II C208- Pharmaceutical Organic Chemistry – I C303- Pharmaceutical Microbiology C304- PharmaceuticalEngineeri ng C306- Physical Pharmaceutics – I C308- PharmaceuticalEngineeri ng C401- Pharmaceutical Organic Chemistry – III C405- Pharmacognosy and Phytochemistry – I C502- Industrial Pharmacy – I C504- Pharmacognosy and Phytochemistry – II C602- Pharmacology – III C606- Quality Assurance C701- Instrumental Method ofAnalysis C704- Novel Drug Delivery System C705- Instrumental Method ofAnalysis C801- Biostatistics and Research Methodology C802- Social and Preventive Pharmacy	curriculum	Alumni survey		m
--	------------	---------------	--	---

Program Outcome 11: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological

change. Self-assess and use feedback effective from others to identify learning needs and to satisfy these needs on an ongoing basis.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
C102- Pharmaceutical Analysis – I	Recognize the need for, and have the preparation and ability to engage in independent.	Internal/External evaluation/rubrics	Medium (2)	End of semester
C103- Pharmaceutics – I		Exit Interview survey		
C107- Human Anatomy and Physiology Lab		Alumni survey		
C109- Pharmaceutics – I Lab	Self-assess and use feedback effective from others to identify learning needs and to satisfy these needs on an ongoing basis.	Internal/External evaluation /rubrics	Medium (2)	End of semester
C202- Pharmaceutical Organic Chemistry – I				
C203- Biochemistry		Exit Interview survey Alumni survey	High (3)	End of the Course/Program
C206- Environmental Sciences				
C301- Pharmaceutical Organic Chemistry – II				
C306- Physical Pharmaceutics – I				
C402- Medicinal Chemistry – I				
C404- Pharmacology – I				
C405- Pharmacognosy and Phytochemistry – I				
C407- Physical Pharmaceutics – II				
C408- Pharmacology – I				
C409- Pharmacognosy and Phytochemistry – I				
C501- Medicinal Chemistry-II				
C603- Herbal Drug				

K. Venkatesh
PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KURNOOL-518218 (A.P)

Technology C609- Herbal Drug Technology C701- Instrumental Method of Analysis C702- Industrial Pharmacy – II C705- Instrumental Method of Analysis C801- Biostatistics and Research Methodology C802- Social and Preventive Pharmacy				
--	--	--	--	--

Program Outcome 12: Life-Long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
C101- Human Anatomy and Physiology C102- Pharmaceutical Analysis-I C103- Pharmaceutics – I C104- Pharmaceutical Inorganic Chemistry C105- Communication Skills C106- Remedial Biology C106- Remedial Mathematics C107- Human Anatomy and Physiology Lab C108- Pharmaceutical	Independently identify and use information sources (such as textbooks, scientific and technical journals, library system and tools) to accomplish a	Internal/External evaluation /group Tasks/rubrics	Medium (2)	End of semester

Analysis – I Lab C109- Pharmaceutics – I Lab C110- Pharmaceutical InorganicChemistry Lab C111- Communication Skills Lab C112- Remedial Biology Lab C201 Human Anatomy and Physiology-II C202- Pharmaceutical OrganicChemistry – I C203- Biochemistry C204- Pathophysiology C205- Computer Application inPharmacy C206- Environmental Sciences C207- Human Anatomy and Physiology – III Lab C208- Pharmaceutical Organic Chemistry – I Lab C209- BiochemistryLab C210- Computer Application inPharmacy Laboratory C301- Pharmaceutical Organic Chemistry – II C302- Physical Pharmaceutics – I C303- Pharmaceutical Microbiology C304- Pharmaceutical Engineering-I C305- Pharmaceutical	given, assignment			
--	----------------------	--	--	--

Sobhana
PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 TURNOOR-518218 (A.P)

Organic Chemistry – II				
C306- Physical				
Pharmaceutics – I Lab				
C307- Pharmaceutical				
Microbiology				
C308- Pharmaceutical				
Engineering-I Laboratory				
C401-Pharmaceutical				
Organic Chemistry – III				
C402-Medicinal Chemistry				
– I				
C405-Pharmacognosy and				
Phytochemistry – I				
C408-Pharmacology – I				
C501- Medicinal Chemistry-				
II				
C502-Industrial Pharmacy –				
I				
C503-Pharmacology – II				
C504-Pharmacognosy and				
Phytochemistry – II				
C506-Industrial Pharmacy –				
I				
C508-Pharmacognosy and				
Phytochemistry – II				
C601-Medicinal Chemistry				
– III				
C602- Pharmacology – III				
C603- Herbal Drug				
Technology				
C604- Biopharmaceutics and				
Pharmacokinetics				
C605- Pharmaceutical				
Biotechnology				
C606- Quality Assurance				

K. Venana
PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 KURNOOL-518218 (A.P)

C607- Medicinal Chemistry – III				
C608- Pharmacology – III				
C609- Herbal Drug Technology				
C701- Instrumental Method of Analysis				
C702- Industrial Pharmacy- II				
C703- Pharmacy Practice				
C704- Novel Drug Delivery System				
C705- Instrumental Method of Analysis				
C801- Biostatistics and Research Methodology				
C802- Social and Preventive Pharmacy				

Program Specific Outcome 1: Enable student's knowledge in scientific perception to understand the concepts and to solve the problems positively while making pharmaceutical formulations. Assimilate and develop analytical skills using advanced equipment to design and evaluate pharmaceutical products, also to assess their quality.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
C101- Human Anatomy and Physiology C103-Pharmaceutics – I C104-Pharmaceutical Inorganic Chemistry	Enable student's knowledge in scientific	Internal/External evaluation /group Tasks/rubrics	Medium (2)	End of semester

Srinivas
PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44,
 V.V. Nagar, 518218 (A.P)

C105-Communication Skills C106- Remedial Biology C106- Remedial Mathematics C107- Human Anatomy and Physiology Lab C108- Pharmaceutical Analysis – I Lab C109- Pharmaceutics – I Lab C110- Pharmaceutical Inorganic Chemistry Lab C111-Communication Skills Lab C112- Remedial Biology Lab	perception to understand the concepts and to solve the problems positively while making pharmaceutical formulations.	Exit Interview survey Alumni survey	High (3)	End of the Course/Program
C201 Human Anatomy and Physiology-II C202- Pharmaceutical Organic Chemistry – I C203- Biochemistry C205- Computer Application in Pharmacy		Internal/External evaluation /group Tasks/rubrics	Medium (2)	End of semester
C206- Environmental Sciences C207- Human Anatomy and Physiology – IILab C208- Pharmaceutical Organic Chemistry – I Lab C209- Biochemistry Lab C210- Computer Application in Pharmacy Laboratory C301- Pharmaceutical Organic Chemistry – II C302- Physical Pharmaceutics – I C303- Pharmaceutical Microbiology	Assimilate and develop analytical skills using advanced equipment to design and evaluate pharmaceutical products, also to assess their quality.	Exit Interview survey Alumni survey	High (3)	End of the Course/Program

C304- Pharmaceutical Engineering-I				
C305- Pharmaceutical Organic Chemistry – II				
C306- Physical Pharmaceutics – I Lab				
C307-Pharmaceutical Microbiology				
C308- Pharmaceutical Engineering				
C402-Medicinal Chemistry – I				
C403-Physical Pharmaceutics – II				
C405-Pharmacognosy and Phytochemistry – I				
C406-Medicinal Chemistry – I				
C407-Physical Pharmaceutics – II				
C409-Pharmacognosy and Phytochemistry – I				
C502-Industrial Pharmacy – I				
C503-Pharmacology – II				
C504-Pharmacognosy and Phytochemistry – II				
C505-Pharmaceutical Jurisprudence				
C506-Industrial Pharmacy – I				
C507-Pharmacology – II				
C601-Medicinal Chemistry – III				
C602-Pharmacology – III				
C603-Herbal Drug Technology				
C604-Biopharmaceutics and				

Pharmacokinetics C605-Pharmaceutical Biotechnology C606-Quality Assurance C607-Medicinal Chemistry – III C608-Pharmacology – III C609-Herbal Drug Technology C701-Instrumental Method of Analysis C702-Industrial Pharmacy – II C703-Pharmacy Practice C704-Novel Drug Delivery System C705-Instrumental Method of Analysis C801-Biostatistics and Research Methodology C802-Social and Preventive Pharmacy Project Work				
---	--	--	--	--

Program Specific Outcome 2: Utilize and manage resources from natural, semi synthetic and synthetic origin to develop real time products with utmost benefit and safety. Promote and empower the healthy living in the community by various means of awareness and health strategies.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
C103-Pharmaceutics – I C108-Human Anatomy and Physiology	Utilize and	Internal/External	Medium (2)	End of semester

C108-Pharmaceutical Analysis – I Lab	manage resources	Lab evaluation/rubrics		
C109-Pharmaceutics – I Lab	from natural, semi	Exit Interview survey	High (3)	End of the Course/Program
C202-Pharmaceutical Organic Chemistry – I	synthetic and synthetic	Alumni survey		
C204-Pathophysiology	origin to			
C205-Computer Application in Pharmacy	develop real time products			
C208-Pharmaceutical Organic Chemistry – I	with utmost benefit and			
C209-Biochemistry	safety.			
C302-Physical Pharmaceutics – I				
C306-Physical Pharmaceutics – I				
C307-Pharmaceutical Microbiology				
C402-Medicinal Chemistry – I				
C403-Physical Pharmaceutics – II				
C405-Pharmacognosy and Phytochemistry – I				
C407-Physical Pharmaceutics – II				
C409-Pharmacognosy and Phytochemistry – I				
C502-Industrial Pharmacy – I				
C505-Pharmaceutical Jurisprudence				
C507-Pharmacology – II				
C602-Pharmacology – III				
C603-Herbal Drug				


Technology C604-Biopharmaceutics and Pharmacokinetics C605-Pharmaceutical Biotechnology C607-Medicinal Chemistry – III C608-Pharmacology – III C703-Pharmacy Practice C704-Novel Drug Delivery System C801-Biostatistics and Research Methodology C802-Social and Preventive Pharmacy Project Work				
---	--	--	--	--

Program Specific Outcome 3: Acquire and develop entrepreneurship and administration skills to establish community pharmacy, learning and training centers for the long term well being of society.

Courses considered	Performance Criteria	Method of Assessment/Source for data Collection	Target for Performance	Duration of Data Collection
C102-Pharmaceutical Analysis – I C103-Pharmaceutics – I C108-Human Anatomy and Physiology C109-Pharmaceutics – I Lab C201-Human Anatomy and Physiology – II C202-Pharmaceutical Organic Chemistry – I C205-Computer Application	Acquire and develop entrepreneurship and administration skills to establish community	Internal/External Lab evaluation/rubrics Exit Interview survey Alumni survey	Medium (2) High (3)	End of semester End of the Course/Program

inPharmacy	pharmacy			
C207-Human Anatomy and Physiology – II				
C208-Pharmaceutical Organic Chemistry – I			Medium (2)	
C209-Biochemistry		Internal/External		End of semester
C301 Pharmaceutical Organic Chemistry – II		Lab evaluation		
C302-Physical Pharmaceutics – I		/rubrics		
C303-Pharmaceutical Microbiology		Exit Interview survey	High (3)	End of the Course/Program
C304-Pharmaceutical Engineering		Alumni survey		
C305-Pharmaceutical Organic Chemistry – II				
C306-Physical Pharmaceutics – I				
C307-Pharmaceutical Microbiology				
C401-Pharmaceutical Organic Chemistry – III				
C402-Medicinal Chemistry – I				
C403-Physical Pharmaceutics – II				
C404-Pharmacology – I				
C405-Pharmacognosy and Phytochemistry – I				
C408-Pharmacology – I				
C409-Pharmacognosy and Phytochemistry – I				
C501-Medicinal Chemistry-II				
C502-Industrial Pharmacy – I				
C503-Pharmacology – II				

C504-Pharmacognosy and Phytochemistry – II				
C505-Pharmaceutical Jurisprudence				
C506-Industrial Pharmacy – I				
C507-Pharmacology – II				
C508-Pharmacognosy and Phytochemistry – II				
C602-Pharmacology – III				
C603-Herbal Drug Technology				
C604-Biopharmaceutics and Pharmacokinetics				
C605-Pharmaceutical Biotechnology				
C607-Medicinal Chemistry – III				
C608-Pharmacology – III				
C609-Herbal Drug Technology				
C702-Industrial Pharmacy – II				
C703-Pharmacy Practice				
C704-Novel Drug Delivery System				
C705-Instrumental Method of Analysis				
C801-Biostatistics and Research Methodology				
C802-Social and Preventive Pharmacy				
Project Work				


PRINCIPAL
 Dr. K.V.S.R. Institute of Pharmacy
 Opp: Dupadu R.S. N.H.-44.
 KURNOOL-518218 (A.P)

Attainment Levels set by the Department for Direct Survey:

Measurement of Course attainment levels for Internal Examinations:

- ❖ Attainment Level 1: If the percentage of course outcome attainment is in between 40% to 54.99% (inclusive).
- ❖ Attainment Level 2: If the percentage of course outcome attainment is in between 55% to 69.99% (inclusive).
- ❖ Attainment Level 3: If the percentage of course outcome attainment is above 70 % (inclusive).

Measurement of Course attainment levels for University Examinations:

- ❖ Attainment Level 1: If the percentage of course outcome attainment is in between 40% to 54.99% (inclusive).
- ❖ Attainment Level 2: If the percentage of course outcome attainment is in between 55% to 69.99% (inclusive).
- ❖ Attainment Level 3: If the percentage of course outcome attainment is above 70 % (inclusive).

Overall Direct Assessment including Internal and University Examinations:

- ❖ Weightage to University Examinations: 75%
- ❖ Weightage to Internal Examinations: 25%

Attainment of Indirect survey (Exit Interview and Alumni Feedback):

- ❖ Attainment Level 1: If the Average of Exit Interview and Alumni Survey feedback is less than 65%
- ❖ Attainment Level 2: If the Average of Exit Interview and Alumni Survey feedback is Greater than 65% and but less than 75%
- ❖ Attainment Level 3: If the Average of Exit Interview and Alumni Survey feedback is Greater than 75%

Overall Attainment including Direct and Indirect Survey:

- ❖ Weightage to Direct Survey: 80%
- ❖ Weightage to Indirect Survey: 20%

Measurement of Program Outcome Attainments at Course Level:

Tools:

- a. Course outcome attainment levels
- b. CO-PO matrix

S. Anuradha
PRINCIPAL
Dr. K.V.S.R. Institute of Pharmacy
Opp: Dupadu R.S. N.H.-44,
KURNOOL-518218 (A.P)

Process:

Program outcome at course level is calculated by taking the average of arithmetic multiplication of course outcomes attainment levels and CO-PO matrix.

Measurement of Program Outcome Attainment at Program level:

Tools:

Direct Assessment: Program Outcomes Attainments at Course Level of all courses for the Program

Indirect Assessment Tools: Alumni feedback and exit interview

Process:

Program Outcome attainment = 80% of Direct Assessment + 20% of Indirect Assessment


PRINCIPAL
Dr. K.V.S.R. Institute of Pharmacy
Opp: Dupadu R.S. N.H.-44,
KURNOOL-518218 (A.P)