

# UTTAR PRADESH UNIVERSITY OF MEDICAL SCIENCES

SAIFAI, ETAWAH



## OUTCOME BASED EDUCATION TRAINING AND IMPLEMENTATION MODULE

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# **OUTCOME BASED EDUCATION**

Outcome Based Education (OBE) is an Educational Theory that bases each part of an Educational system around outcomes (goals). It's not about what is taught but about what is learnt. It's learner centric /participant centric/ student centric approach to education. By the end of the Educational experience, each student should have achieved the set outcomes (goals). Making Education accountable & responsible. To asses Course Outcomes in terms of student Learning (Quality Assurance). Better than Traditional method which is teacher centric.

**For implementation of OBE (Outcome Based Education) there are three phases and they are as follows:**

## **1. PHASE-1 BEFORE THE COMMENCEMENT OF CLASSES**

- a. Development of PEO's
- b. Development of PO's
- c. Development of PSO's
- d. Development of CO's
- e. Mapping of CO's with assessment tools
- f. Preparation/Development of Course Handouts.

## **2. PHASE-2 DURING THE COURSE INSTRUCTION AND EVALUATION**

- a. Creation of question paper according to CO's.
- b. Calculation of CO's attainment after each internal examination for each subject/course
- c. Overall calculation of CO's attainment during all internals examinations for each subject of a particular program before final examinations.

## **3. PHASE-3 BEFORE FINAL EXAMINATIONS**

- a. Calculation of PSO's attainment for each Subject/ Course.
- b. Calculation of PSO's attainment for a particular program and accordingly for all the programs.

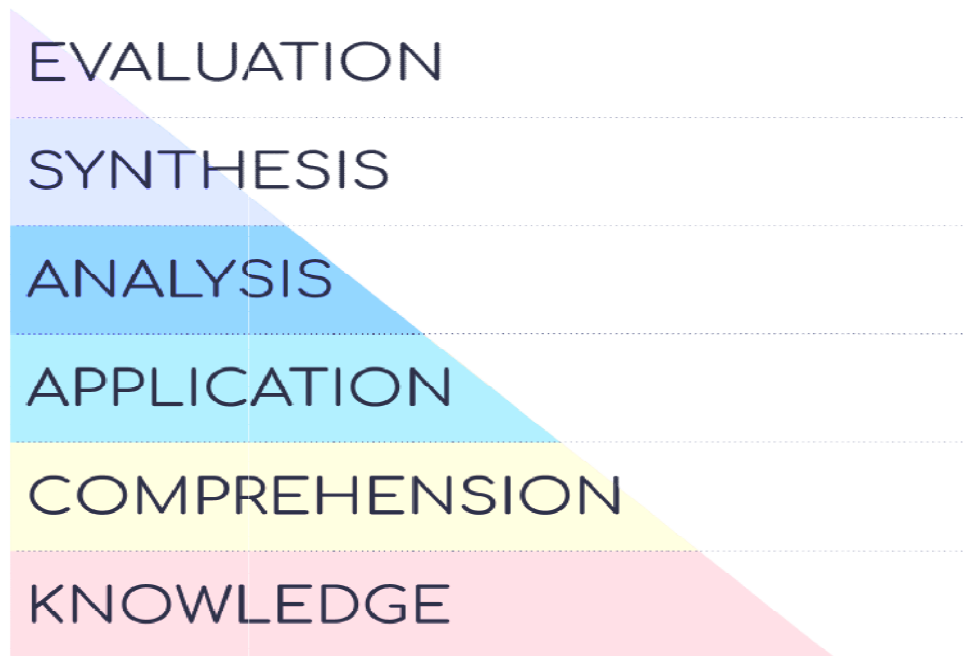
### Core Concept of OBE

- Starting with a clear picture of what ‘students will be able to do’...
- Organizing the curriculum, delivery and assessment to make sure learning happens...
- Base of OBE is Bloom’s Taxonomy.

### BLOOMS TAXONOMY

Bloom's taxonomy is a set of **three hierarchical models** used for classification of educational learning objectives into levels of complexity and specificity. The three lists cover the learning objectives in **cognitive, affective and psychomotor** domains. The **cognitive domain** list has been the primary focus of most traditional education and is frequently used to structure curriculum learning objectives, assessments and activities. The taxonomy was proposed in **1956 by Benjamin Bloom**, an educational psychologist at the University of Chicago.

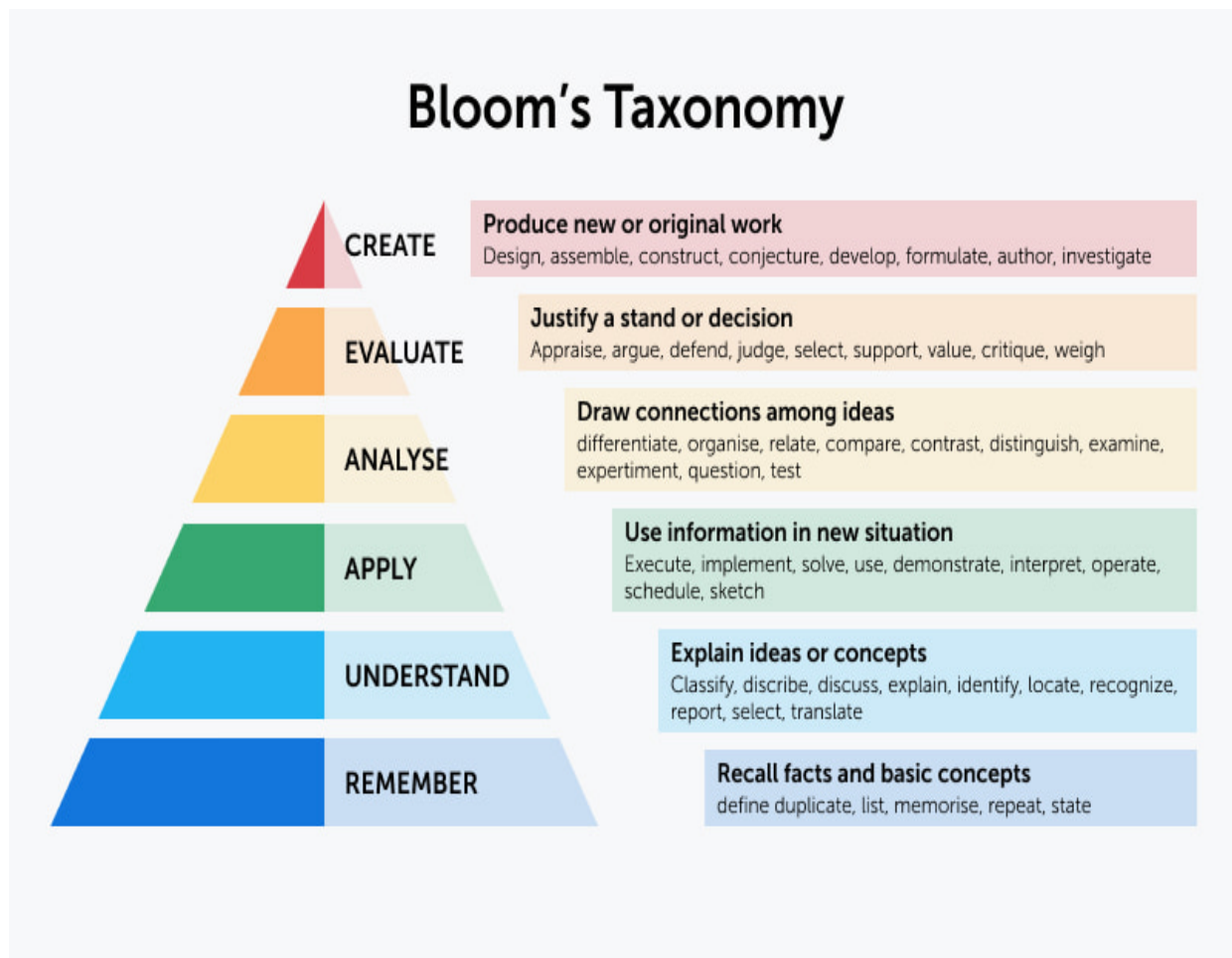
### Cognitive domain (knowledge-based)



## The Revised Taxonomy (2001)

A group of cognitive psychologists, curriculum theorists and instructional researchers, and testing and assessment specialists published in 2001 a revision of Bloom's Taxonomy with the title **A Taxonomy for Teaching, Learning, and Assessment**. This title draws attention away from the somewhat static notion of "educational objectives" (in Bloom's original title) and points to a more dynamic conception of classification.

The authors of the revised taxonomy underscore this dynamism, using verbs and gerunds to label their categories and subcategories (rather than the nouns of the original taxonomy). These "action words" describe the cognitive processes by which thinkers encounter and work with knowledge.



## **ACTION VERBS**

### **ACTION VERBS APPROPRIATE FOR COGNITIVE DOMAIN / KNOWLEDGE**

<b>Remember</b>	<b>Understand</b>	<b>Apply</b>	<b>Analyze</b>	<b>Evaluate</b>	<b>Create</b>
Define	Choose	Apply	Analyze	Appraise	Arrange
Identify	Cite examples of	Demonstrate	Appraise	Assess	Assemble
List	Demonstrate use of	Dramatize	Calculate	Choose	Collect
Name	Describe	Employ	Categorize	Compare	Compose
Recall	Determine	Generalize	Compare	Critique	Construct
Recognize	Differentiate between	Illustrate	Conclude	Estimate	Create
Record	Discriminate	Interpret	Contrast	Evaluate	Design
Relate	Discuss	Operate	Correlate	Judge	Develop
Repeat	Explain	Operationalize	Criticize	Measure	Formulate
Underline	Express	Practice	Deduce	Rate	Manage
	Give in own words	Relate	Debate	Revise	Modify
	Identify	Schedule	Detect	Score	Organize
	Interpret	Shop	Determine	Select	Plan
	Locate	Use	Develop	Validate	Prepare
	Pick	Utilize	Diagram	Value	Produce
	Report	Initiate	Differentiate	Test	Propose

	Restate		Distinguish		Predict
	Review		Draw conclusions		Reconstruct
	Recognize		Estimate		Set-up
	Select		Evaluate		Synthesize
	Tell		Examine		Systematize
	Translate		Experiment		Devise
	Respond		Identify		
	Practice		Infer		
	Simulates		Inspect		
			Inventory		
			Predict		

# **PHASE -1**

**BEFORE THE COMMENCEMENT OF CLASSES**



## **TERMINOLOGY USED IN OUTCOME BASED EDUCATION**

### **1. Program Educational Objective (PEOs):**

PEOs are the statements that describe the expected achievements of graduates within first few years of their graduation from the program. The PEOs, may be guided by global and local needs, vision of the Institution, long term goals etc. PEOs should include accomplishments of all three Professional bodies: **Employee, Employer and Higher education**. There could be 4-5 PEOs.

### **2. Program Outcome (POs):**

POs are statements about the knowledge, skills and behavior attributes the graduate of a formal education program should have on completion of program. POs are defined by Accreditation Agencies of the country (council Like MCI, INC, PCI).

#### **Example:**

**The Learning and abilities or skills that a student would have developed by the end of Post Basic B.Sc. Nursing Programme.**

**PO1:** Demonstrate values, knowledge, skills and attitudes appropriate to the profession and also respect for the dignity of each individual and for human diversity.

**PO2:** Apply critical thinking skills and professional decision making required for basic and advance practice.

**PO3:** Practice within the framework of code of ethics, professional conduct and acceptable standards of nursing practice within the legal boundaries.

**PO4:** Participate effectively as members of the health team in health care delivery system.

**PO5:** Utilize information, communication and other relevant technologies effectively.

**PO6:** Demonstrate proficiency in written, verbal and digital skills at individual and collaborative levels.

**PO7:** Explore research as evidence for enhancing and changing practice.

### **3. Program Specific Outcomes (PSOs):**

The focus is on the specialization part of the Program. These are in addition to core POs of the program. Generally PSOs are 4-5.

#### **Example:**

**The Learning and abilities or skills that a student would have developed by the end of Two years Post Basic B. Sc Nursing Programme.**

**PSO1:** Understanding concepts of physical, biological, behavioral and nursing sciences.

**PSO2:** Applying nursing process approach for individual and family care and various settings.

**PSO3:** Utilization of comprehensive nursing care skills for promotion, prevention and restoration of optimum health.

**PSO4:** Developing professional competency in providing holistic nursing care.

**PSO5:** Creating evidence based practice through research in nursing profession.

### **4. Course Outcome (COs):**

COs are specific to a Program/ Field/ Discipline. Each course has about 4-5 COs, which are designed to meet PSOs / POs. The Course Outcomes are stated in such a way that they can be actually measured.

#### **COs Formulation:**

- Decide on learning outcome for the course.
- Identify the skill/Knowledge/attitude to be taught in the course.
- Use Bloom's Taxonomy to create COs
- Create COs using
  - action verb of higher or Lower order Thinking
  - COs Should be attainable measurable/specific/time bound

#### **Check list**

- Does CO begin with action verb?
- Is CO stated in terms of student performance (learning) rather than teacher performance?

**Example:**  
**COURSE CODE PBN201**

**Post Basic B.Sc. Nursing II Year**

**Course outcomes:** At the end of the course, the students will be

**CO-1** Understanding the concepts and relationship of sociology with Health and Nursing and there importance.

**CO-2** Applying the positive attitude towards individual family and community

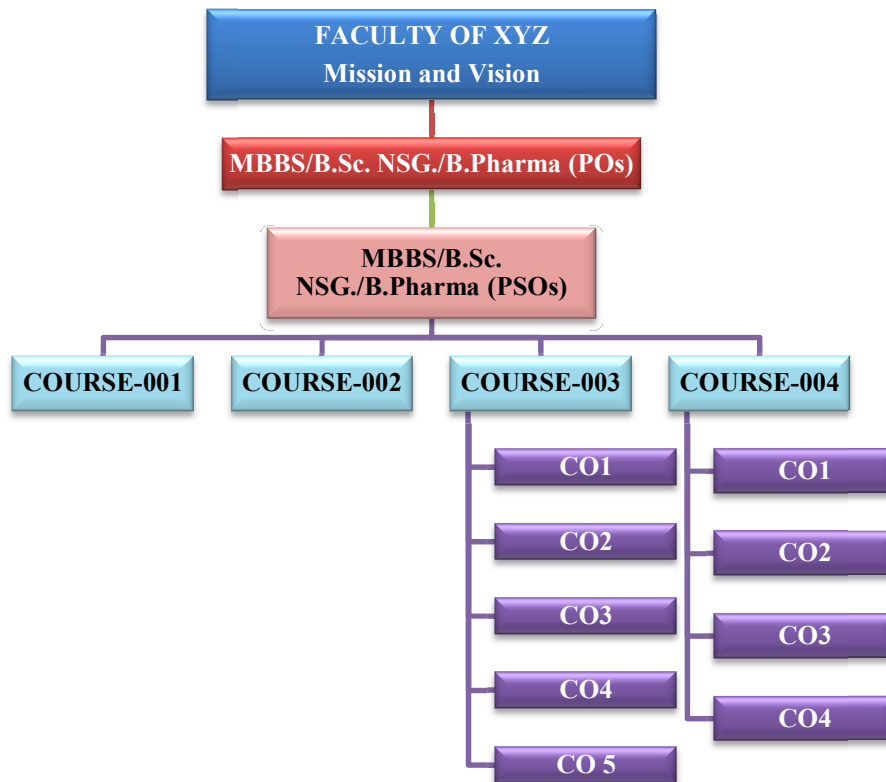
**CO-3** Demonstrating the skills in sociological concepts that are applicable in nursing

**CO-4** Analyzing the enable role of sociology in nursing and sociological relation to community.

**CO-5** Train a professional nurse to collaborate with health care team

**CO-6** Evaluating the effective use of sociology in holistic nursing care in Hospital and community

**PROCESS**



## CO-PSO Mapping (Course Articulation Matrix)

- Map all the COs with POs and PSOs
- If the action verb of a CO matches with the action verb of PO/PSO, it has 50% correlation, and content also matches it will be more than 80%, it is strong correlation =3
- If only action verb matches, Correlation is moderate =2
- If only content matches, Weak Correlation =1
- If action Verb and content do not match, No correlation

### Example:

CO/PSO Mapping	CO1. Understanding the concepts and relationship of sociology with Health and Nursing and there importance.	CO2. Applying the positive attitude towards individual family and community.	CO3. Demonstrating the skills in sociological concepts that are applicable in nursing.	CO4. Analyzing the enable role of sociology in nursing and sociological relation to community.
PSO1: -Understanding concepts of physical, biological, behavioral and nursing sciences.	<b>3</b>	—	—	<b>1</b>
PSO2:-Applying nursing process approach for individual and family care and various settings.	—	<b>3</b>	—	<b>1</b>
PSO3: - Utilization of comprehensive nursing care skills for promotion, prevention and restoration of optimum health.	—	—	<b>2</b>	—
PSO4: -Developing professional competency in providing holistic nursing care.	<b>1</b>	—	<b>1</b>	—
PSO5: - Creating evidence based practice through research in nursing profession	—	—	<b>2</b>	—

## COs Mapping with Assessment Tools

- Identify Assessment tools
- Plan assessment tools according to COs.
- All the COs Should be covered at least twice.
- COs covered in Internal-1 &2 should be covered in Internal3.

### Example:

Course Outcomes	INT-1	INT-2	INT-3	Assignments	External Exams
CO1	✓		✓	✓	✓
CO2	✓	✓	✓	✓	✓
CO3		✓	✓	✓	✓
CO4				✓	✓

# **COURSE HANDOUT**

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**XYZ UNIVERSITY**

**ABC COLLEGE**



**COURSE: INTRODUCTION TO NURSING  
EDUCATION**

**COURSE CODE: PBN204**

**PROGRAMME: POST BASIC B.SC. NURSING (SECOND  
YEAR) BATCH xyz-123**

**(49 Sessions Each Session for 60 Minutes)**

**FACULTY: MR. PRAMOD KUMAR**

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# Post Basic B.Sc. Nursing-II yr

## INTRODUCTION TO NURSING EDUCATION

**Course Code: PBN204**

### **Course Perspectives:**

The course is designed to assist students in developing expertise and in- depth understanding in the field of Nursing Education. It would help students to appreciate holistic life style of individuals, families & groups and develop skills to function as Nurse Educator. It would further enable student to function as an educator, manager and researcher in the field of nursing. The course is divided into 8 units.

- a. Introduction to education
- b. Teaching learning process
- c. Methods of teaching
- d. Educational media
- e. Methods of assessment
- f. Management of School of Nursing
- g. Guidance and counselling
- h. In-service education

### **The Programme Specific Outcome:**

**The Learning and abilities or skills that a student would have developed by the end of Two years**

#### **Post Basic B. Sc Nursing Programme.**

**PSO1:** Understanding concepts of physical, biological, behavioral and nursing sciences.

**PSO2:** Applying nursing process approach for individual and family care and various settings.

**PSO3:** Utilization of comprehensive nursing care skills for promotion, prevention and restoration of optimum health.

**PSO4:** Developing professional competency in providing holistic nursing care.

**PSO5:** Creating evidence based practice through research in nursing profession.

**The Course learning outcomes (COs).** On completion of the course the students will be able to:

**CO-1** Understanding the concepts, principles, philosophies and functions in nursing education

**CO-2** Applying different types of instructional media and methods in teaching learning process along with the tool and techniques for assessment of knowledge, skill, and attitude.

**CO-3** Analyzing the existing nursing educational programs, their problems, in nursing education

**CO-4** Evaluating the administration of nursing curriculum and management of nursing educational institutions

**CO-5** Demonstrating the principles and steps of guidance and counselling

**CO-6** Creating a plan for in-service and staff development program in various nursing education

**Course Outline:** Introduction to education, Teaching learning process, Methods of teaching, Educational media, Methods of assessment, Management of School of Nursing, Guidance and counselling, In-service education.

Session No	Content	Pedagogy	References	Session outcome (Bloom's Taxonomy)	Course Outcome (COs)
1	Introduction to education: Meaning of education, aims, function and principles.	Lecture cum discussion	R1, R2, R4	L1, L2	CO1
2	Philosophy of education: •Factors influencing development of philosophy of Nursing Education.	Lecture cum discussion	R1, R2, R4	L1, L2	CO1
3	Teaching learning process	Lecture cum discussion	R1, R2, R4	L1, L2	CO1
4	Nature and characteristics of learning.	Lecture cum discussion	R1, R2, R4	L1, L2	CO1
5	Principles and maxims of teaching	Lecture cum discussion	R1, R2, R4	L1, L2,	CO1
6	Formulating objectives.	Lecture cum discussion	R1, R2, R4	L2, L3	CO1
7	Lesson planning	Lecture cum discussion	R1, R2, R4	L2, L3	CO1
8	Methods of teaching: Teaching methods	Lecture cum discussion	R1, R2, R3	L2, L3	CO1
9	• Lecturer • Discussion • Demonstration	Lecture cum discussion	R1, R2, R3	L2, L3	CO1
10	• Group discussion • Project • Role play	presentation	R1, R2, R3	L2, L3	CO1
11	• Panel discussion	Lecture cum discussion	R4,R5,	L2, L3	CO1

	<ul style="list-style-type: none"> <li>• Symposium</li> <li>• Seminar</li> </ul>				
12	<ul style="list-style-type: none"> <li>• Field trip</li> <li>• Workshop</li> <li>• Exhibition</li> </ul>	Lecture cum discussion	R4,R5,	L2, L3	CO1
13	<ul style="list-style-type: none"> <li>• Programmed instruction</li> <li>• Computer assisted learning.</li> </ul>	Lecture cum discussion	R4,R5,	L2, L3	CO1
14	<p>Clinical teaching methods:</p> <ul style="list-style-type: none"> <li>• Case methods</li> <li>• Case presentation</li> </ul>	Lecture cum discussion	R4,R5,	L2, L3	CO1
15	<ul style="list-style-type: none"> <li>• Nursing rounds and reports</li> <li>• Bedside clinic</li> </ul>	Lecture cum discussion	R4,R5,	L2, L3	CO1
16	<ul style="list-style-type: none"> <li>• Conference (individual and group)</li> <li>• Recording of interaction process.</li> </ul>	Presentation	R4,R5,	L2, L3	CO1
17	Educational media	Lecture cum discussion	R4,R5,	L1, L2	CO2
18	Communication Process: Factors Affecting Communication	Lecture cum discussion	R4,R5,	L1, L2	CO2
19	Purpose and Types of Audio-Visual Aids	Lecture cum discussion	R4,R5,	L1, L2	CO2
20	Graphics aids: Chalk-board, Charts, Graphs, Poster, FlashCards	Lecture cum discussion	R3,R5,	L2, L3	CO2
21	Flannel graph / Khadigraph, Bulletin, Cartoon	Lecture cum discussion	R3, R4, R5	L2, L3	CO2
22	Three Dimensional Aids: Objects, Specimen, Models, Puppets.	Lecture cum discussion	R3,R4,	L2, L3	CO2
23	Printed Aids: Pamphlets and Leaflets	Lecture cum discussion	R2,R4	L2, L3	CO2
24	Projected Aids: Slides, Films and	Lecture cum	R2,R4,	L2, L3	CO2

	Television, VCR	discussion			
25	VCP, Overhead Projector, Camera, Microscope	Lecture cum discussion	R2,R4,	L2, L3	CO2
26	Audio Aids: Tape Recorder, Public address system, Computer.	Lecture cum discussion	R2,R4,	L2, L3	CO2
27	Methods of assessment	Lecture cum discussion	R2,R4,	L1, L2,L4	CO2
28	Purpose and Scope of evaluation and assessment	Lecture cum discussion	R2,R4, R5	L1, L2	CO2
29	Criteria for selection of assessment techniques and methods	Lecture cum discussion	R2,R4,	L1, L2	CO2
30	Assessment of knowledge: essay type question, SAQ (short answer questions).	Lecture cum discussion	R2,R4,	L1, L2, L3	CO2
31	MCQ (multiple choice questions).	Lecture cum discussion	R2,R4,	L1, L2, L3	CO2
32	Assessment of skills: observation, check list. Practical examination Viva, objective structured clinical examination	Lecture cum discussion	R2,R4,	L1, L2, L3	CO2
33	Assessment of attitude: Attitude scale	Lecture cum discussion	R2,R4, R3	L1, L2, L3	CO2
34	Management of School of Nursing.	Lecture cum discussion	R2,R4,	L1, L2, L3	CO3
35	Planning of school of Nursing, organization.	Lecture cum discussion	R2,R4, R5	L1, L2, L3	CO3
36	Recruitment of teaching staff, budget, facilities for the school, student selection and admission procedure, administrative planning of students	Lecture cum discussion	R1,R2, R3	L1, L2, L3	CO4

37	welfare services for students, maintenance of schools records, preparation of annual reports, INC guidelines for schools of Nursing	Lecture cum discussion	R1,R2, R3	L1, L2, L3	CO4
38	Guidance and counselling	Lecture cum discussion	R1,R2, R3	L1, L2, L3	CO5
39	Basic principles of guidance and counselling	Lecture cum discussion	R1,R2, R3	L1, L2, L3	CO5
40	Organization of guidance and counselling services.	Lecture cum discussion	R1,R2, R3	L1, L2, L3	CO5
41	Counselling process	Lecture cum discussion	R1,R2, R3	L1, L2, L3	CO5
42	Managing disciplinary problems	Lecture cum discussion	R1,R2, R3	L1, L2, L3	CO5
43	Management of crisis	Lecture cum discussion	R1,R2, R3	L1, L2, L3	CO5
44	In-service education.	Lecture cum discussion	R1,R2, R3	L1, L2	CO6
45	Introduction to nature and scope of in-service education programme	Lecture cum discussion	R1,R2, R3	L1, L2	CO6
46	Principles of adult learning.	Lecture cum discussion	R1,R2, R3	L1, L2	CO6
47	Planning for in-service programme	Lecture cum discussion	R1,R2, R3	L1, L2	CO6
48	Techniques, and methods of staff education programme	Lecture cum discussion	R1,R2, R3	L1, L2	CO6
49	Evaluation of in- service programme	Lecture cum discussion	R1,R2, R3	L1, L2	CO6

L1= Remembering, L2= Understanding, L3= Applying, L4= Analyzing, L5= Evaluating and L6= Creating.

**F. Evaluation Scheme: Faculty led Continuous Evaluation**

Class participation and attendance	5%
Individual Assignment	5%
Activities, seminar and others	5%
CT-1, CT-2 & CT3 (Best 2)	10%
End Term Exam	75%
<b>Total</b>	<b>100%</b>

**(ii) Alignment/Mapping of COs & PSOs (Course Articulation Matrix)**

**(a) CO Mapping with Assessment tools**

Course outcomes	Quizzes	Assignment	Project	CT1	CT2	CT3	Term Project	Term Exam
CO1	✓			✓		✓		✓
CO2	✓	✓		✓		✓		✓
CO3		✓	✓	✓		✓		✓
CO4					✓	✓		✓
CO5					✓	✓		✓
CO6					✓	✓		✓

**(b) Mapping /Alignment of Cos with PSOs (Programme Articulation Matrix)**

Programme Outcomes	CO1	CO2	CO3	CO4	CO5	CO6
PSO1	3					
PSO2		3				
PSO3		2	2			
PSO4				2	2	
PSO5						2

1 indicates the strength of co-relation between CO and PSO is Weak, 2= strength of co-relation between CO and PSO is Medium, 3= strength of co-relation is High

## **G. Term – End Project: Guidelines**

The project would be undertaken in the group. Each group size would have maximum 5 students. The group would choose AV Aid preferably belonging to the area of Nursing Education.

The project would essentially include the followings:-

- Identify the Appropriate Teaching Aid.
- Preparation of the teaching aid using principles of preparation
- Demonstration on how to use the teaching Aid

## **H. Student's roles & responsibilities**

**Guidelines: All students must read these guidelines carefully and understand them fully.**

- All students must be seated in the class within 05 minutes of the commencement of the session. The class room will be bolted from inside after this time period.
- You are expected to read all topics/cases etc. before coming to the class.
- All students are expected to participate actively in discussions that take place in the class room.
- You will have to maintain 80% attendance in the class. Leave shall be granted only with prior permission for urgent & essential work only.
- You will submit all types of assignments within given time frame.
- You will work in team & contribute to the team functions.
- You will be asked to teach in your class and in UG classes as presentations.
- You will undertake field and real time projects.
- You will actively engage yourself in all activities in community postings. Any absence will be dealt with separately according to the code of conduct.
- You will come in the class properly dressed and neatly trimmed or tied hair and clean shaven (Boys). The dress code is: as defined during the time of admission recommended by the nursing college administration.

**Reference Books:**

- R1.** Hedgerken Loretta E, *Teaching and Learning in School of Nursing*, J.B. Lippincott Co.,
- R2.** Tomyay de Rheba, Thompson, *Strategies for Teaching Nursing*, Willey Medical Publisher, 1982, New York.
- R3.** R. Sudha Nursing Education Principles And Concepts, Jaypee Publication, 2013
- R4.** K P Neeraja, Textbook of Nursing Education, Jaypee Publication, 2009
- R5.** B.T Basavanthappa, Nursing Education, Jaypee publication, 2009



<b>COURSE CODE PBN204</b>	<b>Skill Enhancement Course-05</b> <b>Post Basic B.Sc. Nursing II Year</b> <b>INTRODUCTION TO NURSING EDUCATION NURSING I (P)</b>	<b>75 Hours</b>
<b>PRACTICUM</b>	<p>Each student should:</p> <ol style="list-style-type: none"> <li>1. Conduct five planned teaching using different methods and media.</li> <li>2. Prepare different types of teaching aids.</li> <li>3. Plan, organize and conduct in-service education programme</li> <li>4. Conduct at least one counseling session.</li> <li>5. Prepare rotation plans.</li> </ol> <p>Text book</p> <ol style="list-style-type: none"> <li>1. Hedgerken Loretta E, <i>Teaching and Learning in School of Nursing</i>, J.B. Lippincott Co.,</li> </ol> <p><b>Reference Books</b></p> <ol style="list-style-type: none"> <li>2. Tomyay de Rheba, Thompson, <i>Strategies for Teaching Nursing</i>, Willey Medical Publisher, 1982, New York.</li> </ol> <p>* Latest editions of all the suggested books are recommended.</p>	

**Note: Above given course handout is an example to understand. However the course handout for a particular course can be prepared as per the above given format.**

# **PHASE -2**

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**DURING THE COURSE INSTRUCTION**

## QUESTION PAPER CREATION

- Design a question paper based on COs learning level
- Question paper creation will be according to the COs -Assessment mapping.
- Questions should be arranged according to the COs.

### Example:

#### UTTAR PRADESH UNIVERSITY OF MEDICAL SCIENCES

Class: XYZ 2023-24

Subject: SOCIOLOGY

Sr. No.	Questions	Marks	CO
<b>UNIT- 5</b>	<b>SOCIAL PROCESS</b>		
1	Explain the social process?	10	CO1
2	What is conflict?	5	CO2
3	Difference between accommodation and assimilation	5	CO2
<b>UNIT- 6</b>	<b>SOCIAL CHANGE</b>		
1	Explain the social change?	10	CO1
2	Explain Nature and process of Social Change	10	CO2
3	What is culture lag?	5	CO2
4	What are the factors influencing cultural change?	5	CO3
<b>UNIT- 7</b>	<b>SOCIAL PROBLEM</b>		
1	What is social problem? List down social problem and explain any 4 social problems?	10	CO1
3	What is poverty?	5	CO2
4	Rights of womens and children?	5	CO2
5	Explain Child labour?	5	CO3
6	Explain Child abuse delinquency?	5	CO3

**Note:** Number of Questions and format of question paper will depend upon the maximum marks. Above given format can be taken as an example to design the paper.

## CO ATTAINMENT

### Key points for COs Attainment

- The assessments should be in alignment with the COs learning level.
- Faculty need to set threshold for each Question in test or external of his/her course (In the initial stage we will take it as 50%) which is relevant to CO attainment.
- Enter marks in Excel Sheet Question wise and Calculate the CO Attainment.

### Attainment Criteria

#### (Threshold value 50%)

- If **75% or more** student scored  $\geq$  Threshold value in a CO, attainment is substantial = **3**
- If **60-74%** have scored  $\geq$  Threshold value in a CO, attainment is moderate = **2**
- If **50-59%** have scored  $\geq$  Threshold value in a CO, attainment is low = **1**
- If less than **50%** have scored below Threshold value in a CO, attainment is nil = **0**

**EXAMPLE:** *Kindly refer next page*

# UTTAR PRADESH UNIVERSITY OF MEDICAL SCIENCES

COURSE/YEAR : PBBSc NURSING, 2nd YEAR

SUBJECT/CODE: SOCIOLOGY(PBBN201)

S.No.	Course Outcomes (COs)		CO1	CO2		CO3	CO4	CO5	CO5	CO5	CO5	
	Assessments		INTERNAL-1/2/3									
	Questions		Q1	Q2	Q3	Q7	Q8	Q4	Q5	Q6	Q9	
	Max. Marks:		5	5	5	10	10	5	5	10	10	
	Name	Enrollement										
1	ABC	123	4	4	4	9	9		4		9	
2	ABC	123	2		2	5.5		2	2.5	6	5	
3	ABC	123		3	3.5		5.5	4	3	7	7	
4	ABC	123	3	4		6	6	4	4		7	
5	ABC	123			2	3	2	2	2			
6	ABC	123	1				1		2	1	1	
7	ABC	123	4.5	4.5		8.5		4.5	8	8	7	
8	ABC	123		2	3		5	3	3	4	5	
9	ABC	123	2	2	2	5		4		3	5	
10	ABC	123	2		2	3		3	2		2	
11	ABC	123		3	3	6	4	2	4	3		
12	ABC	123										
13	ABC	123	4	4		6		3		5	7	
14	ABC	123	1	1		2			1		1	
15	ABC	123	4		3.5	6	8	3.5	3	7		
16	ABC	123		4	4	6	8	4	4	6		
17	ABC	123	2		3		5	3	2	4	4	
18	ABC	123	2	2		2		2	3		1	
19	ABC	123		3	3	5	6	2			5	
20	ABC	123	2		2		1	2	3	3	1	
21	ABC	123		2	3	6	5	3			6	
22	ABC	123		3	3		3	4	2	2	2	
23	ABC	123	1	1		1				1		
24	ABC	123	4	3.5	3.5	4.5	5.5		3.5		7.5	
25	ABC	123	2	2	3		2				2	
26	ABC	123	4.5	4.5	4.5		8	4.5		8	9	
27	ABC	123	3		3	7	6	3	3		7	
28	ABC	123	2	2	2	3	1	2			2	
29	ABC	123	3		3.5	7		3.5	4	7	8	
30	ABC	123	4	4.5		8	8	3.5	3	7		
31	ABC	123		3.5	3.5	6	6	3.5	3.5		6	

32	ABC	123	4	4.5	4.5	6		4		7	5	
33	ABC	123	3		3	6.5		3	3.5		6.5	
34	ABC	123	3	3.5	3.5			3		2	5	
35	ABC	123	3.5	3.5	3	2		5	3		3	
36	ABC	123			4	6		5	4	3	2	5
37	ABC	123	3.5	3.5	3.5	8		8	3.5			7
38	ABC	123	2	2		6		6	2.5	2.5	6	
39	ABC	123			3			2	3.5	3.5		2
40	ABC	123	4.5	4.5	4.5	9		8	4.5			8
41	ABC	123	3	3	3	4		4		3		1
42	ABC	123	3	3		4		4	2	3	3	
43	ABC	123			4	5		4.5	3.5	3.5	3.5	4
44	ABC	123	3.5	3.5	3	2		5		3		3
45	ABC	123	3	3.5	3.5			3		3	2	3
46	ABC	123	2		3	5.5			2	2.5	6	5
47	ABC	123	3		3.5	7			3.5	4	7	8
48	ABC	123	3		3	6		6		4		4
49	ABC	123	2	2		6		6	2.5	2.5	6	
50	ABC	123			3	2		2	3.5	3.5		2
51	ABC	123	3		3	6.5		6.5	3	3.5		6.5
52	ABC	123			3			2	3.5	3.5		2
53	ABC	123	3		3.5	6.5		6.5	3.5	3.5		6.5
54	ABC	123			4	6		5	4	3	2	5
55	ABC	123	1	1		2				2		3
56	ABC	123	3		3.5	7			3.5	4	7	8

Threshold value 50%

Number of students above threshold value	25	25	22	37	59	30	30	26	26	33	37	15	27	112
students Attempted	40	40	33	43	76	43	43	41	41	42	44	29	46	161

CO ATTAINMENT	CO1	63%
ATTAINMENT LEVEL	2	

CO2	78%	CO3	70%	CO4	63%
3		2		2	

CO5	70%
2	

- 3, If 75% or more students have scored >= Threshold Value(Substantial Attainment)
- 2, If 60% to 75% students have scored >= Threshold Value(Moderate Attainment)
- 1, If 50% to 60% students have scored >= Threshold Value(Low Attainment)
- if 50% or less students have scored >= Threshold Value(No Attainment)

**Note:** Above calculations are just an example to explain that how to calculate the CO attainment for a Single internal exam of a particular course. If a course is having three internal exams then the CO attainment calculation will be done for all the three internal exams separately after each exam and then overall compilation of CO attainment should be done before the term exams.

## Overall CO Attainment Calculation of particular Course

UTTAR PRADESH UNIVERSITY OF MEDICAL SCIENCES

COURSE/YEAR : PBBSc NURSING, 2nd YEAR

SUBJECT/CODE: SOCIOLOGY(PBBN201)

S.No.	Course Outcomes (COs)		CO1							CO2					CO3						CO4			CO5												
	Assessments		CT1				CT2	CT3			CT1		CT2	CT3	CT1		CT2	CT3	CT1	CT2	CT3	CT1	CT2			CT3										
	Questions		Q1	Q2	Q8	Q9	Q1	Q3	Q4	Q5	Q6	Q7	Q5	Q7	Q2	Q3	Nil	Q3	Q4	Q6	Q7	Q1	Q9	Nil	Q8	Nil	Nil	Q4	Q5	Q6	Q9	Q2	Q8			
	Max. Marks:		5	5	5	5	5	5	5	5	10	10	5	10	5	5	Nil	5	5	10	10	5	10	10				5	5	10	10	5	10			
	Name	Enrollment																																		
1	ABHISHEK NEGI	TNR2002002					4	4.5	4		7	6			4	4				9	4	5		9			4		9	4.5						
2	AKASH KUMAR	TNR2002004					2		3		5	6				2				5.5	4	5					2	2.5	6	5	4					
3	ANSHIKA GUPTA	TNR2002005		4	8				2.5	2.5	6	6		4	7	3	3.5		4	4	8		2		5.5		4	3	7	7	2	4				
4	ANSHIKA YADAV	TNR2002006					3	4	4	3	6	6			4					6				6			4	4		7	4	6				
5	ARPIT KUMAR	TNR2002007							3	3	5	5				2					3	2		2			2	2			2	5				
6	ASNA	TNR2002008					1	2	2	1		3												1				2	1	1		2				
7	AYUSHEEKA KRISHNAN PATEL	TNR2002009	3		8	7	4.5							4		4.5			4	4	7	8.5					4.5	8	8	7						
8	BABLU YADAV	TNR2002010						3	3	3	7	6				2	3					4		5			3	3	4	5		8				
9	BHAVANA RANA	TNR2002011					2									2	2				5						4		3	5						
10	BHUPENDRA SINGH	TNR2002012		2	4	4	2		2.5	2.5	6	6		2	4		2			2	3	2					3	2		2	2	4				
11	CHANDRAWATI	TNR2002013	1	4	7	6				3		5	6		3	5	3	3			3	6	4	6		4		2	4	3		4				
12	CHEENU SHARMA	TNR2002014						4	3.5	3.5	3.5	5																						4.5		
13	CHHAYA RANI	TNR2002015	3	4	7		4		3		5	6			5	4			1	3	6	6	4	7			3		5	7	4					
14	DEEN DAYAL	TNR2002016	2	1	2	3	1		3		5	6		3		1				2	2	4	5					1		1	4					
15	DURGESH CHAUHAN	TNR2002017	4	3	7		4								8		3.5		4	4	8	6			8			3.5	3	7						
16	HIMANSHI	TNR2002018	4	4	9			4.5	4		7	7			8	4	4		4	4	7	6	4	6		8		4	4	6		4.5				
17	JAGRTI SINGH	TNR2002019					2	3.5	3.5	3.5		6					3						6		5		3	2	4	4	3.5	6				
18	JOLLY	TNR2002021					2	3	2	4	3	6				2					2							2	3		1	3	5			
19	JYOTI MOURYA	TNR2002022							2.5	2.5	6	6				3	3				5	2			6			2		5	2	6				
20	KAMAL	TNR2002023					2	3	3.5	3.5		2					2						2		1			2	3	3	1		3			
21	KARNIKA	TNR2002024						4.5	4		7	7				2	3				6	4	6		5			3		6	4.5					
22	KM SHIVANI VARSHNEY	TNR2002025	3		7			2	2	3	3			4	6	3	3			3.5	4	8.5		2	1	3		4	2	2	2		2			
23	KOMAL GUPTA	TNR2002026		2		6	1	3	2	4	3	6			3	1				1	3	4	1						1		3	4				
24	KOMAL MAURYA	TNR2002027	4	4.5	7.5	6	4		4.5	3	7	8				3.5	3.5			4	3.5	8.5	4.5	4		5.5		3.5		7.5	4.5	8				

25	LALIT RAJPOOT	TNR2002029	2	2.5	3.5		2	3	2	4	3	6
26	LALITA	TNR2002030	4.5	4.5	7.5		4.5	3.5	3.5	4	7	7
27	MAHIMA GUPTA	TNR2002031	3	4		9	3	3.5	3.5	3	7	6
28	MANJU DWIVEDI	TNR2002032	1		1		2				2	2
29	MANSI GUPTA	TNR2002033					3	3	3	3	4	
30	MEGHA SINGH	TNR2002034					4	3.5	3.5	4	7	7
31	MEHNAAZ BI	TNR2002035	3			8			3.5	3	6	7
32	MINAKSHI GANGWAR	TNR2002036					4		3.5	4	7	8
33	PALLAVI THAKUR	TNR2002038	3.5		7	6	3	3.5	3.5	4	8	8
34	PAYAL	TNR2002040	4	4	4		3	4	4	3.5		6
35	POOJA	TNR2002041					3.5	3.5	3.5	3.5		6
36	POOJA SINGH	TNR2002042	4.5			7		4	4	3	2	6
37	PRACHI CHAUHAN	TNR2002043					3.5	3.5	3.5			8
38	RITU RANI	TNR2002044	2.5	3	5	5.5	2	3	3	3		6
39	ROHIT YADAV	TNR2002045		1		3		3	3	3		6
40	RUCHI	TNR2002046	3		4		4.5	3.5		3.5		4.5
41	RUCHI YADAV	TNR2002047	4.5	4.5	9		3		3.5	3	7	8
42	SALEEM BABU	TNR2002048	2	3	5	5	3					
43	SANDHYA VERMA	TNR2002049	3.5		7	7			4	4	3.5	5
44	SANJAY YADAV	TNR2002050					3.5	3.5	3.5	4	6	6
45	SHIVANI SRIVAS	TNR2002051	4		8		3	3.5	3.5	4	7	7

		2	3									
	8	4.5	4.5									
3.5	7		3									
		2	2									
			3.5									
		4.5										
3	7	3.5	3.5									
		4.5	4.5									
			3									
	5	3.5	3.5									
		3.5	3									
3	7		4									
		3.5	3.5									
3.5	6.5	2										
3	3		3									
3	5	4.5	4.5									
4.5	9	3	3									
3		3										
3	6		4									
		3.5	3									
4	6	3.5	3.5									

		3	2									
4.5	4	7		4								
	3.5	6	7	4								
2		3	3	1								
			7	2	5							
			8	3	8							
3	3	8	6	4								
			6	4								
3.5	4	7	6.5	3	8							
4	3	6			6							
			2	6								
3.5	3.5	6.5	6		5							
			8	3.5	7							
	3		6	3	6.5							
2					6.5							
3	3	5	9	4	7.5							
4.5		8	4	4								
	3	5	4									
3.5	4		5	4	4							
			2	3	8							
4.5	4.5	8		3	8							

	2											
	8											
	6											
	1											
	6.5											
	3											
	5											
	5											
	8											
	6											
	2											
	8											
	4											
	4.5											
	5											
	3											

				2	3	5						
	4.5		8	9		8						
	3	3		7		8						
	2			2	1							
	3.5	4	7	8		7						
	3.5	3	7									
	3.5	3.5		6	4.5	8						
	4		7	5	4.5	8						
	3	3.5		6.5								
		3	2	5	3.5	6						
		3		3	3.5	6						
	4	3	2	5		5						
	3.5			7	3.5	8						
	2.5	2.5	6			6.5						
	3.5	3.5		2	3	6.5						
	4.5			8	3.5	5.5						
		3		1	4.5	8						
	2	3	3									
	3.5	3.5	3.5	4		4.5						
		3		3								
		3	2	3								





## Overall CO Attainment Matrix of particular Course

Based upon above calculations:

Course Code	Course outcome	% of student attained CO	CO Attainment Level
SUBJECT001	CO1	80%	3
	CO2	80%	3
	CO3	80%	3
	CO4	63%	1
	CO5	71%	2

- If **75% or more** student scored  $\geq$  Threshold value in a CO, attainment is substantial = **3**
- If **60-74%** have scored  $\geq$  Threshold value in a CO, attainment is moderate = **2**
- If **50-59%** have scored  $\geq$  Threshold value in a CO, attainment is low = **1**
- If less than **50%** have scored below Threshold value in a CO, attainment is nil = **0**

### Note:

- Above given example is for one course/subject. Overall CO Attainment calculation should be done for all the courses/subjects in that particular program.
- Overall CO Attainment matrix should be prepared only after the completion of all the internal exams and before the final examinations.

# **PHASE -3**

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**BEFORE THE FINAL EXAMINATION**

## PO's/PSO's ATTAINMENT

- Align the entire COs Attainment against the COs-POs/PSOs mapping of your course.
- Apply formula to calculate the POs/PSOs attainment.
- Take the Average POs Attainment of your course and Hand over it to program coordinator.

### **EXAMPLE:**

#### COs-PSOs Mapping of SUBJECT001

Program Outcomes	CO1	CO 2	CO3	CO4
PSO 1	3	-	-	1
PSO 2	-	3	-	1
PSO 3	-	-	2	-
PSO 4	1	-	1	-
PSO 5	-	-	2	-

**Note: This mapping will be done prior to commencement of a Course/Subject and should be available in course handouts**

### Attainment of PSO.

- Align the entire COs Attainment against the COs-POs/PSOs mapping of your course.
- Apply formula to calculate the POs/PSOs attainment.

**Formula: - (Attainment Level\*CO relationship)/3**

Course	CO's	Attainment Level	PSO1	PSO2	PSO3	PSO4	PSO5
SUBJECT001	CO1	3	3			1	
	CO2	3		3			
	CO3	1			2	1	2
	CO4	1	1	1			

- Attainment of CO 1 for PSO1=  $(3*3)/3= 3$
- Attainment of CO 1 for PSO 4= $(3*1)/3 =3/3=1$
- Attainment of CO2 for PSO 2=  $(3*3)/3= 3$
- Attainment of CO3 for PSO 3=  $(1*2)/3= .67$
- Attainment of CO3 for PSO 4=  $(1*1)/3= .33$
- Attainment of CO3 for PSO 5=  $(1*2)/3= .67$
- Attainment of CO4 for PSO 1=  $(1*1)/3= .33$
- Attainment of CO4 for PSO 2=  $(1*1)/3= .33$

### **PSOs Attainment of SUBJECT001:**

**Based upon above calculations:**

Course	CO's	PSO1	PSO2	PSO3	PSO4	PSO5
SUBJECT001	CO1	3		-	1	-
	CO2	-	3	-	-	-
	CO3	-	-	.67	.33	.67
	CO4	.33	.33	-	-	-
Average Attainment		1.66	1.66	.67	1.33	.67

**Note: Above calculation is the example for one course/Subject. PSO's attainment calculation should be done for all the courses/subjects in a particular program before the final examinations.**

### Final PSOs Attainment of a program

Course Number	Program Outcomes				
	PSO1	PSO2	PSO3	PSO4	PSO5
SUBJECT001	1.66	1.66	.67	1.33	.67
SUBJECT 002	-	2.1	2.4	1.8	1.34
SUBJECT 003	2.2	2.6	1.7	2.6	1.4
SUBJECT 004	-	2.1	1.9	2.2	1.7
<b>Final PSO Attainment (AVG)</b>	<b>1.93</b>	<b>2.63</b>	<b>2.09</b>	<b>1.98</b>	<b>1.59</b>

3 is the maximum value, 60% of the maximum value is 1.8 For a PSO is said to be attained if the average attainment value is 1.8 then that PSO is attained Here PSO1, PSO2, PSO3, & PSO4 has attained the 60% value

**Note:** Above calculation for PSO's attainment is just an example for all the Courses/Subjects in a particular program. Based upon above example the final PSO's attainment should be done for all the Programs.

## **Key points:**

1. There should be an **Academic Coordinator for Curriculum** in every Faculty (Medical, Nursing, Pharmacy, Paramedical).
2. There should be a **program coordinator** for every program (MBBS/B.Sc. Nursing/B.Pharm).
3. There should be a **Course/Subject Coordinator** for each Course/Subject
4. PO's and PSO's should be prepared for each program (MBBS/B.Sc. Nursing/B.Pharm.) and should be the part of Curriculum/Syllabus. Hence PO's and PSO's can be prepared by Program Coordinator.
5. CO's should be prepared by the Course/Subject In charge.
6. Course/Subject In charge should handover the prepared CO's to Program coordinator and Program coordinator should handover PO's and PSO's to Academic Coordinator.
7. Academic coordinator should compile and arrange the PO's, PSO's, CO's of each program and these should be part of Curriculum/Syllabus for each program.
8. Course Handouts should be prepared by Course/Subject In charge.
9. Calculation of CO's and PSO's of a particular Course/Subject should be done by the Course/Subject Incharge and after calculations handover to Program coordinator should be done.
10. Calculation of PSO's attainment of all the course/Subject for a particular program(MBBS/B.Sc. Nursing/B.Pharm) should be done by program coordinator.
11. Finally the result of PSO's attainment for all the programs should be submitted to academic coordinator by all the program coordinators.



## ANNEXURES

### Overall CO Attainment Matrix of particular Course

#### CO Attainment for Subject001

Course Code	Course outcome	% of student attained CO	CO Attainment Level
<b>SUBJECT001</b>	CO1		
	CO2		
	CO3		
	CO4		
	CO5		
	CO6		

- If **75% or more** student scored  $\geq$  Threshold value in a CO, attainment is substantial = **3**
- If **60-74%** have scored  $\geq$  Threshold value in a CO, attainment is moderate = **2**
- If **50-59%** have scored  $\geq$  Threshold value in a CO, attainment is low = **1**
- If less than **50%** have scored below Threshold value in a CO, attainment is nil = **0**

**Course/Subject  
Incharge**

**Program coordinator**

### Attainment of PSO for SUBJECT001

Course	CO's	Attainment Level	PSO1	PSO2	PSO3	PSO4	PSO5
SUBJECT001	CO1						
	CO2						
	CO3						
	CO4						
	CO5						
	CO6						

**Formula: - (Attainment Level\*CO relationship)/3**

<input type="checkbox"/> Attainment of CO 1 for PSO1=	
<input type="checkbox"/> Attainment of CO 1 for PSO 2=	
<input type="checkbox"/> Attainment of CO1 for PSO 3=	
<input type="checkbox"/> Attainment of CO1 for PSO 4=	
<input type="checkbox"/> Attainment of CO1 for PSO 5=	
<input type="checkbox"/> Attainment of CO 2 for PSO1=	
<input type="checkbox"/> Attainment of CO 2 for PSO 2=	
<input type="checkbox"/> Attainment of CO2 for PSO 3=	
<input type="checkbox"/> Attainment of CO2 for PSO 4=	
<input type="checkbox"/> Attainment of CO2 for PSO 5=	
<input type="checkbox"/> Attainment of CO 3 for PSO1=	
<input type="checkbox"/> Attainment of CO 3 for PSO 2=	
<input type="checkbox"/> Attainment of CO3 for PSO 3=	
<input type="checkbox"/> Attainment of CO3 for PSO 4=	
<input type="checkbox"/> Attainment of CO3 for PSO 5=	

<input type="checkbox"/> Attainment of CO 4 for PSO1=	
<input type="checkbox"/> Attainment of CO 4 for PSO 2=	
<input type="checkbox"/> Attainment of CO4 for PSO 3=	
<input type="checkbox"/> Attainment of CO4 for PSO 4=	
<input type="checkbox"/> Attainment of CO4 for PSO 5=	
<input type="checkbox"/> Attainment of CO 5 for PSO1=	
<input type="checkbox"/> Attainment of CO 5 for PSO 2=	
<input type="checkbox"/> Attainment of CO5 for PSO 3=	
<input type="checkbox"/> Attainment of CO5 for PSO 4=	
<input type="checkbox"/> Attainment of CO5 for PSO 5=	
<input type="checkbox"/> Attainment of CO 6 for PSO1=	
<input type="checkbox"/> Attainment of CO 6 for PSO 2=	
<input type="checkbox"/> Attainment of CO6 for PSO 3=	
<input type="checkbox"/> Attainment of CO6 for PSO 4=	
<input type="checkbox"/> Attainment of CO6 for PSO 5=	

**Program Coordinator**

**PSOs Attainment of SUBJECT001:**

Based upon calculations:

Course	CO's	PSO1	PSO2	PSO3	PSO4	PSO5
SUBJECT001	CO1					
	CO2					
	CO3					
	CO4					
	CO5					
	CO6					
Average Attainment						

**Program Coordinator**

**Course/Subject Incharge**

### Final PSOs Attainment of a program

Course Number	Program Outcomes				
	PSO1	PSO2	PSO3	PSO4	PSO5
SUBJECT001					
SUBJECT 002					
SUBJECT003					
SUBJECT004					
SUBJECT005					
SUBJECT006					
SUBJECT007					
SUBJECT008					
SUBJECT009					
SUBJECT010					
<b>Final PSO Attainment (AVG)</b>					

3 is the maximum value, 60% of the maximum value is 1.8 For a PSO is said to be attained if the average attainment value is 1.8 then that PSO is attained

Program Coordinator

Academic  
Coordinator

DAEN