

COMPETENCY BASED DYNAMIC CURRICULUM FOR 2nd BHMS PROFESSIONAL COURSES

(Applicable from Batch 2022-2023 onwards for 5 years or until further notification
by National Commission for Homoeopathy whichever is earlier)



HOMOEOPATHY EDUCATION BOARD NATIONAL COMMISSION FOR HOMOEOPATHY MINISTRY OF AYUSH, GOVERNMENT OF INDIA

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PREAMBLE TO THE COMPETENCY BASED DYNAMIC CURRICULUM

The National Commission for Homoeopathy (NCH) has undertaken major revisions in the educational regulations in the last year and has devised a new Syllabus to ensure that the student who completes the homoeopathic undergraduate course grows into a homoeopathic physician who is informed and capable of performing as a professional with competency to deliver services as required for addressing the health needs of the person and society at large. It is based on the premise that a correct adherence to homoeopathic principles and knowledge imparted will enable the physician to deliver results in all aspects of health, viz. preventive promotive, curative and rehabilitative.

There is a significant change in the approach and contents in the newly designed curriculum, with the intention of making it more coherent for the present and future needs of society. The designing of curriculum is based on the sound theories of educational methodology as applicable for the health professionals' education, and therefore, the outcomes are quite transparent and achievable.

The Homoeopathic Education Board (HEB) is obliged by the NCH Act 26 (b) to “develop a competency based dynamic curriculum for Homoeopathy at all levels in accordance with the regulations made under this Act, in such manner that it develops appropriate skill, knowledge, attitude, values and ethics among the graduates, postgraduate and super-specialty students and enables them to provide healthcare, to impart medical education and to conduct medical research”.

Competency based medical education (CBME) has been around in the medical world for more than three decades. It has undergone several revisions and adaptations through this period which has placed the NCH in an advantageous position to learn from the varied experiences of curriculum formulation, implementation and assessment.

It should be emphasized that the switch over to CBME involves a sea change in the understanding of the processes and outcomes for which all stakeholders need to be adequately sensitized and the teachers trained to minimize the difficulties inevitable in any transition. The following four pillars need a special mention to grasp the nature of the change being brought about (Frank Jason R, et al 2010).

1. The focus is on ensuring that the end user of the health care services is benefited. Hence it is important that the outcomes of the training are defined in clear terms so that the teacher, the student and the community are aware of what can be expected from the training.
2. The second logical focus is on bringing the abilities of the physician to the level when the outcomes defined above are realized. This involves the definition of the competencies required in the discharge of various functions of the physician. This would involve certain domains of competencies to be achieved. This coupling of the outcome and abilities leads automatically to the third pillar.
3. We have been used to consider all training as time bound as the BHMS course is 5 1/2 years duration. But when we realize that the rate of mastering different abilities would vary from student to student, we should de-emphasize the fixed period of training and instead look at how the student can be helped to master the specific competency.
4. The fourth pillar becomes the student herself/himself. The entire education and training become learner centered and hence the teacher takes a great effort in defining the outcomes, competencies, teaching and learning methods and most important of all, assessment which is predominantly formative and hence intends to shape the evolving capacities of the learner.

While formulating the competency based dynamic curriculum (CBDC) for the homoeopathy undergraduate, we must bear in mind the central role that homoeopathy philosophy and the principle of holistic care plays in the therapeutic actions of the homoeopathic interventions. This is a distinctive aspect which has hardly received the attention it deserves despite Hahnemann's clear recommendations in the first six Aphorisms of the

Organon. The revised syllabus has brought this change and the formulation of the competency based curriculum provides an opportunity to incorporate this approach at all levels of teaching and training. The implications lie in bringing about a sensitive and effective integration (horizontal/vertical/spiral) of all aspects of the syllabus throughout the five and half years of the undergraduate course.

There are five compelling factors that form the fulcrum to drive the change (Harris Peter, et al, 2010):

1. Design of curriculum: This needs careful attention due to its novelty. Homoeopathy, as a holistic discipline resting on the foundations of philosophy, needs a holistic approach from the first year itself. Several novel situations will need to be envisaged and catered to. And yet, a number of issues will remain. This is the dynamic nature of the enterprise, and we must be prepared to accept the well-known adage: Change, the only constant!
2. Teacher training: Our teachers have discharged the role of information providers and the teaching-learning process calls for a transformation in the role of the teacher (Sidhu Navdeep S. et al 2022). The future will need them to wear multiple hats and hence they will need to develop competencies viz. planner, facilitator, assessor, education manager, role model, etc, to be effective for these roles.
3. Assessment: Assessment practices must be based on a robust platform of validity, reliability, and objectivity, so that the tools of assessment blend fluidly with the academic flow. In this background, the focus is to shift the assessment approach from the monopoly of summative assessment to a significant allowance for formative assessment, which are supportive for learning and correction on-the-go.
4. Student issues: Along with the parents and the community, a significant re-orientation is called for while changing it from that of a ‘last-minute’ sprinter to a long range ‘racer’! All stakeholders should be on the same page so that the processes can operate in a well-oiled manner. Glitches are to be expected when a largely ‘rights’ based social mind set has to shift gears to adopt a competency oriented one. Understanding that change needs patience and good will go a long way to make the latter orientation a way of life.
5. Systems: All educational systems from the colleges to universities need to incorporate the multiple changes within their systems. We are used to consider results as ‘pass’ and ‘fail’ with the latter carrying the stigma. While there is an expressed need to wish to cater to all categories of learners – fast, normal, slow – the need to bring about changes in the systems is not so readily accepted. The institutions need to develop as ‘learning organisations’ that spur the ‘growth mind-set’ of its members – the teachers, students, and all those who are in the loop of curricular or co-curricular management.

The HEB considers the CBDC as a work in progress. Considerable thoughts and efforts are invested into the design and planning of the curriculum. But as has been mentioned above, this is a pioneering work and would always benefit from suggestions that spring from critical thinking and reflection subsequent to sincere attempts in implementation.

The next sections provide details of operational clarity to implement the program. Training of teachers is the key component which will make all the difference. The NCH is committed to make it happen and the cooperation of all stakeholders is earnestly solicited.

References

1. Frank Jason R, et al (2010) Competency-based medical education: theory to practice, *Medical Teacher*, 32:8, 638-645, DOI: 10.3109/0142159X.2010.501190
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I - STEPS TAKEN TO FORMULATE HOMOEOPATHY CBDC MANUAL

In this section we will detail the process undertaken in the formulation of this manual. The account will be of use to the users viz. the academicians, teachers and students to better grasp the significance of the effort and the role that each would have to play. The subsequent section will outline the correct use of the manual in order to derive the maximum benefit.

I- Defining National Goals and Programme Outcomes

The process of identifying competency is a complex one. Defining the outcome clearly helps in defining the relevant competency thus enabling a person acquiring it with relative ease. In case of the medical graduate, the outcome or goal is determined by the health care needs of the community as perceived by the statutory authorities and the ability of the particular health care system to respond to this need. India has a pluralistic health tradition and the community accesses the several health care systems to fulfil their multiple health needs. Scientific evidence is generally relied upon to determine and differentiate the role of each system in providing health care. This, however, may not always be forthcoming to the required degree of precision.

Considering the above, the NCH has formulated broad national goals which a Homoeopathic graduate would be expected to be able to achieve.

NATIONAL GOALS:

At the end of undergraduate program, the homoeopathic medical student should be able to: a.

- a. Recognize the strength of homoeopathy, its applicability and limitations in health care of society and the individual.
- b. Integrate Homoeopathy along with conventional line of treatment for effective delivery of health care.
- c. Recognize the purpose of the National Health Policy and “Health for all” as a national goal and health right of all citizens and undergo training to achieve the realization of this social responsibility
- d. Develop a scientific temper, acquire educational experience for proficiency in profession and promote healthy living based on the tenets of homoeopathy.
- e. Become an exemplary citizen by observing medical ethics and fulfilling social and professional obligations so as to respond to national aspirations.
- f. Achieve competence in the practice of homoeopathy with holistic approach, encompassing promotive, preventive, curative and rehabilitative aspects of common

diseases.

- g. Establish Homoeopathy as an evidence-based system of medicine & practice it with zeal so that it stands at par to other scientific healing methods.

The above goals, though desirable, are broad. To realize them, the student entering into the undergraduate homoeopathic programme needs to be equipped with a set of competencies which would fall in the domains of knowledge, skills and attitudes. The broad goals need to be defined in specific actionable terms which will form the Programme outcomes. These will enable all the stakeholders to be clear of the nature of functioning expected from the homoeopathic physician at the end of the training. Accordingly, the team of resource persons worked together to formulate Programme Outcomes

PROGRAMME OUTCOMES:

At the end of the programme of the undergraduate studies, the homoeopathic physician must

- 1) Develop the knowledge, skills, abilities and confidence as a primary care homoeopathic practitioner to attend to the health needs of the community in a holistic manner
- 2) Correctly assess and clinically diagnose common clinical conditions prevalent in the community from time to time
- 3) Identify and incorporate the socio-demographic, psychological, cultural, environmental & economic factors affecting health and disease in clinical work
- 4) Recognize the scope and limitation of homoeopathy in order to apply Homoeopathic principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community
- 5) Be willing and able to practice homoeopathy as per medical ethics and professionalism.
- 6) Discern the scope and relevance of other systems of medical practice for rational use of cross referrals and role of life saving measures to address clinical emergencies
- 7) Develop the capacity for critical thinking, self-reflection and a research orientation as required for developing evidence based homoeopathic practice.
- 8) Develop an aptitude for lifelong learning to be able to meet the changing demands of

clinical practice

- 9) Develop the necessary communication skills and enabling attitudes to work as a responsible team member in various healthcare settings and contribute towards the larger goals of national health policies such as school health, community health and environmental conservation.

Defining the Programme outcomes is a crucial step since this allows us to derive the competencies the homoeopathic graduate should possess at the end of the period of training. Care is taken to ensure that the National goals are covered as much as possible by the various aspects of the Programme Outcomes. Further, the annual course objectives for each academic year will be formulated separately based on the Courses studied and the nature of clinical or community activities undertaken each year. Accordingly, the corresponding competencies for the respective years have been defined.

Domains of Competencies for Homoeopathic Medical Graduate

The training of undergraduates in homoeopathy is now based on the philosophy of enabling competencies. The graduates are expected to demonstrate professional competencies as required and relevant for basic homoeopathic practice. In this background, the domains of performance need to be clearly projected for mapping the professional performance for both training and assessment.

Therefore, drawing on the proposals made in the ACGME, and CanMEDS documents, a taxonomy of competencies for homoeopathic graduates is proposed with six domains – knowledge & scholarship; patient care; homoeopathic orientation, communication skills, practice-based learning& improvement; and professionalism.

A detailed clarity on the six domains of competencies is provided as follows:

I. Knowledge and Scholarship

To acquire relevant and optimal levels of knowledge of the basic, clinical, and behavioural sciences, and apply these in the context of patient care.

1. Describe the normal structure and function of the human body and each of its major organ systems.
2. Recognise the altered structure and function of major organ systems that are seen in common diseases and conditions.
3. Relate the clinical, laboratory, and radiologic manifestations of common disease

and conditions.

4. Correlate the behavioural, psychosocial, genetic, and cultural factors associated with the origin, progression, and treatment of common diseases and conditions.
5. Identify the epidemiological dimensions of common diseases and conditions within a defined population.

II. Patient care

To provide individualised therapeutic and individualised and community-wide preventive care for a range of conditions.

1. Gather accurate, complete, and unbiased information through history taking, physical examination, and laboratory & imaging data.
2. Interpret the symptoms and correlate them with the outcomes of physical examination, and laboratory & imaging data.
3. Prioritise the outcomes of interpretation to prepare the basis for patient care decisions.
4. Plan for the management of therapeutic care on the basis of disease state, patient individuality, and the psycho-social influencers.
5. Plan for a community-based preventive care on the basis of socio-cultural, and health belief paradigms.
6. Engage the patients, family / care givers, and the community members to empower them for therapeutic / preventive care.
7. Provide evidence-based information for the patient and community to introspect and develop self-sufficiency for continued care.

III. Homeopathic orientation

To make evidence-based decisions that are anchored into the spirit of homeopathy for both individual and community care, and for therapeutic and preventive care.

1. Relate the patient's history, physical examination, and laboratory & imaging data for developing a picture of homeopathic diagnosis.

2. Position the case in Hahnemann's disease classification.
3. Identify the operating school of philosophy in the case.
4. Assess the prognostic possibilities as per Duke's hypothesis.
5. Track the progress of disease and specify its current state.
6. Select the prescription approach as materia medica-based, therapeutics-based, or repertory-based.
7. In the case of repertory-based prescription, select the appropriate repertorisation medium.

8. Identify the similimum including the potency and dosage.
9. Assess the remedy reaction as per Hering's Law or Direction of Cure, and Kent's 12 Observations.
10. Manage the case in line with principles of homeopathy.

IV. Communication Skills

Shall be able to communicate and interact effectively with patients, their families and members of the inter-professional healthcare team.

1. Practice empathic and patient-centered interviewing and communication.
2. Obtain an accurate and complete medical history considering the patient's culture, beliefs, personal preferences and level of health literacy.
3. Communicate effectively, both orally and in writing, with patients, families and members of the healthcare team / other healthcare professionals.
4. Function as a member of a healthcare team, collaborating effectively with other healthcare professionals in caring for patients.

V. Practice-Based Learning and Improvement

Develop the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning

1. Recognize strengths, deficiencies and limitations in their knowledge and skills.
2. Articulate the goals for self-regulated learning and improvement.
3. Perform learning activities that address gaps in the knowledge, skills and / or attitudes.
4. Use information technology to optimize learning.
5. Demonstrate commitment to continuously improve knowledge, skills and/or attitudes by incorporating formative evaluation and feedback into daily practice.
6. Participate in the education of patients, families, trainees, peers and other health professionals.
7. Obtain information about individual patients, populations of patients or communities of patients to improve care.
8. Practice life-long learning skills by continually identifying, analysing and implementing new knowledge, guidelines, standards, technologies, products or services.

VI. Professionalism.

Demonstrate a commitment to upholding professional duties guided by ethical principles.

1. Demonstrate respect for patients by using the appropriate form of address, attending to a patient's comfort, displaying appropriate attire and grooming, and honouring a patient's privacy and right to make decisions.
2. Demonstrate responsibility in actions by being punctual, managing emotions when confronted with adversity and confrontation, and recognizing personal and peer impairments.
3. Demonstrate honour and integrity by being honest about role and experience level, admitting mistakes and shortcomings, appropriately attributing sources of ideas and data, and respecting boundaries between patients, peers, and educators.
4. Demonstrate reverence for human life, understanding that sympathy for suffering is a fundamental concern of the medical profession and that the needs of the patient are paramount and should govern a physician's actions.
5. Demonstrate knowledge of the principles that govern ethical decision-making and rules and regulations regarding healthcare delivery, incorporating them into clinical practice and research

Teachers implementing this curriculum shall use these guardrails to guarantee that the curriculum implementation is firmly on track, and is transparent for monitoring and verification of progress.

This now equips us to chart the competencies against the expanded functions of the homoeopathic physician in each of the areas mentioned above. The components of each of the areas has been expanded to include all actions which the trained student would be expected to undertake.

This also helps us to zero down on the tasks which the homoeopathic student would need to be trained to perform. With this background, we should be able to approach the Manual which is being issued for 2nd, 3rd and 4th BHMS. It will be noted that the 6 domains of competencies will be aligned with the specific learning objectives for each item of learning.

Considerable fresh thought has gone into the framing of this document of CBDC for 2nd, 3rd and 4th BHMS. The existing templates were unable to satisfy the very foundations on

which homoeopathic practice rests and have been extensively elaborated and modified in the Preamble to the CBDC for 2nd, 3rd and 4th BHMS. The two features which may be emphasized here are:

1. Close adherence to homoeopathic philosophy and principles at every stage of education and training
2. This in turn demands a rare amount of integration at horizontal, vertical and spiral forms

The next section will deal with how the Competency table was formulated and how it should be used.

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<http://dx.doi.org/10.2304/eeerj.2010.9.1.56>
3. General Medical Council (2017) Generic professional capabilities framework accessed at https://www.gmc-uk.org/-/media/documents/generic-professional-capabilities-framework--2109_pdf-70417127.pdf on 5th December 2022
4. Arora Aman (2020) Building Generic Competencies Model Conference: International Conference on Recent Trends and Innovations in Business Management, Social Sciences and Technology - NCIBM 2020, New Delhi accessed at <https://www.researchgate.net/publication/345001112> on 5th December 2022

II- UNDERSTANDING THE COMPETENCY TABLE

The Competency Table has been designed keeping in mind the domains of competencies required by the learner to attain the overall Program Outcomes (PO) as well as Course Outcomes (CO) of all courses.

A. Methodology in preparation of the Competency Table

The following methodology was adopted in preparing the Competency table for each course (or subject) of 2nd, 3rd and 4th year of the BHMS program once the National Goals, Programme Outcomes, and domains of competencies were identified:

- ❖ Course Outcomes (CO) were identified for each course (or subject) that were in alignment with the National goals and Programme Outcomes (PO)
- ❖ Finalizing the syllabus or the list of topics which will help to achieve not only the Course Outcomes (CO) but also the overall Program Outcomes (PO)
- ❖ Aligning the competencies from the 6 domains with the content.
- ❖ Identifying the Learning Objectives and Specific Learning Objectives (SLO) for each topic.
- ❖ Identifying the level of Miller's Pyramid for each Specific Learning Objectives (SLO) ❖ Classifying each Specific Learning Objective (SLO) as per Bloom's Taxonomy and Guibert's Level
- ❖ Defining the priority of each Specific Learning Objective (SLO) into 'Must know' or 'Desirable to know' or 'Nice to know' categories
- ❖ Choosing the appropriate Teaching Learning method/s and media and the assessment method/s required for achieving each objective or outcome
- ❖ Identifying the Horizontal, Vertical and Spiral Integration with other courses (or subjects) required for holistic understanding of the topic

We will now illustrate how the Competency table is to be read with respect to the Community Medicine Course (subject)

Illustrative Diagrammatic Representation of Competencies Table with example of the Community Medicine Course

Competency No	Concepts of Health, Disease Causation & Prevention and Homoeopathy									
	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilber	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ	

1

2

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Table 1: Description of the Competencies table

S.No	Description
1	Unique number of the competency /outcome (Hom UG CM I-T 2.1) Hom UG CM I-T 2.1 to be read as Homoeopathy Under Graduate Program, Community Medicine course 3rd BHMS, Theory Component Unit , Topic 2.followed by serial number of the Specific Learning Objectives (SLO)
2	Domain of Competency covered by the topic- Domain Competency: KS-Knowledge and Scholarship PC- Patient care HO- Homoeopathic orientation CS- Communication Skills PBL- Practice-Based Learning and Improvement PRF- Professionalism
3	Mapping of the Level of Specific Learning Objectives (SLO) to Miller's Pyramid Knows (K)/ Knows How (KH)/ Shows How (SH)/ Does (D)
4	Content to be covered from the topic
5	Description of Specific Learning Objectives (SLO) for the topic
6	The Blooms Domain addressed by the Specific Learning Objectives (SLO)- Cognitive (C) or Affective (A) or Psychomotor (P) Domain and Mapping of the Specific Learning Objective (SLO) to Guilbert's Level of Learning in the Cognitive or Affective or Psychomotor Domain
7	Assigning priority to Specific Learning Objective (SLO) as per Must know (MK) or Desirable to know (DK) or Nice to know (NK) areas
8	Teaching Learning methods and media for each SLO
9	Assessment methods for each SLO classified under formative and summative assessment
10	Vertical or horizontal integration with other courses to improve understanding. If the subject is taught for more than 1 year, it must be integrated spirally in all the years.

III. USING THE COMPETENCY TABLE

A Competency Based Dynamic Curriculum necessitates that each topic in a course (or subject) be elaborated in terms of the outcomes that are to be achieved by the learner at the end of the particular topic. This in turn will help the learner to achieve the competencies at the course and overall, at the program level.

1. Linking the Specific learning Objective (SLO) to the competencies and Miller's Level

Concepts of Health, Disease Causation & Prevention and Homoeopathy										
Competency No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilber	Priority	T-L/M/I	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

Each Specific learning Objective (SLO) will help the learner to acquire the required domains of competencies (abilities that a basic homoeopathic doctor would be trusted to have acquired as a consequence of his / her learning).

The Specific learning Objective (SLO) also indicates at what level the competency is defined in the Miller's Pyramid which in the above example is at the level of 'Knows' and 'Knows How' – the ability to recall facts and ideas and the domain of competency covered is Knowledge and

Scholarship.

2. Specific learning Objective (SLO) for each topic

Concepts of Health, Disease Causation & Prevention and Homoeopathy										
Competency No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilber	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

Specific Learning Objectives (SLOs) start with the "Action Verb" as per the Domain and level and describe what students should know or be able to do at the end of a learning session.

3. Bloom/ Guilbert's level of SLO

Concepts of Health, Disease Causation & Prevention and Homoeopathy										
Competency No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	T-L/M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM 1-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM 1-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

The SLOs are written as per the Blooms Domain (Cognitive or Affective or Psychomotor) under which they are categorized.

In the above example three Specific Learning Objectives (SLOs) have been described that belong to the Cognitive domain.

They are then mapped to Guilbert's Level of Learning in the Cognitive or Affective or Psychomotor Domain.

In the above example, the first two SLOs belong to level-II of Guilbert's level of learning under cognitive domain whereas the third SLO belongs to level-I of Guilbert's level of learning under cognitive domain.

4. Priority of Learning of SLO

Concepts of Health, Disease Causation & Prevention and Homoeopathy										
Competency No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilber	Priority	T-L/M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term “Health” as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

The priority of learning is represented as 'Must know', 'Desirable-to-know', and 'Nice-to-know'. Prioritization is a critical component of curriculum design because it classifies the specific learning objectives on the basis of their importance and usefulness for the ultimate professional standards. The priority of learning is objectively assigned by a formula that gives weightage on the basis of multiplying 'frequency and impact' of the learning for professional needs.

In the above example, all the three SLOs are 'Desirable to Know'.

5. Teaching Learning methods and media for each topic

	Concepts of Health, Disease Causation & Prevention and Homoeopathy									
Competency No	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilber	Priority	T.L.M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term “Health” as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

The Teaching- Learning methods and media have been identified that are most suitable to the Specific Learning Objectives (SLOs) formed for each topic and as per the Domain of each of the Specific Learning Objectives (SLOs).

In the above example, Lectures, Small Group Discussions are the Teaching- Learning methods to be adopted for achieving the SLO. The media could be projectors, models, whiteboard etc.

The Teaching Learning Methods and media will vary as per the Specific Learning Objectives (SLO) and the Domains they cover.

6. Assessment methods for each topic

Concepts of Health, Disease Causation & Prevention and Homoeopathy										
Competency No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilber	Priority	T-L/M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ, SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ,	

The Assessment methods have been identified that are most suitable to the Specific Learning Objectives (SLOs) formed for each topic and as per the Domain of each Specific Learning Objectives (SLOs) to assess the learner.

In the above example, MultipleChoice Questions(MCQ), Short Answer Questions(SAQ), Viva Voce and Quiz are the assessment methods to be adopted for assessing the SLO. The Assessment Methods will vary as per the SLO and the Domain it covers.

They are further classified into formative and summative assessment methods.

Formative assessment methods will be used at the end of every topic to assess whether the student has achieved the desired SLOs and give feedback. In the above example, MCQ's, Viva, Quiz are the formative assessment methods to be used to assess the particular SLOs.

Summative assessment methods will be used to assess the student on a particular topic for internal assessment and the Final University Examination. In the above example, MCQ's, SAQ's are the summative assessment methods that would be used to assess whether the student has achieved these SLOs.

7. Integrated Learning

Concepts of Health, Disease Causation & Prevention and Homoeopathy										
Competency No.	Domain of Competency	Miller	Content	Specific Learning Objectives	Bloom/Guilbert	Priority	T-L M/M	Assessment		Integration
								Formative	Summative	
Hom UG CM I-T 2.1	KS	KH	Concept of health	Discuss the history of health Discuss the biomedical, ecological, psychological, and spiritual dimensions of holistic health	C-II	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ SAQ	Organon of Medicine
Hom UG CM I-T 2.2	KS	K	Health	Define the term "Health" as per WHO.	C-I	DK	1. Lecture 2. Small Group Discussion	MCQ Viva Quiz	MCQ	

Horizontal or Vertical Integrated Learning with other subjects is required for a holistic understanding of the topic from different points of view.

In the above example, the above topic should be integrated with Organon of Medicine for better understanding of the topic.

Spiral integration is required as the subject will be taught in II, III and IV BHMS.

Legend: Abbreviations

Sr. No	Acronym	Description
1.	PO	Programme outcomes
2.	CO	Course outcomes
3.	ACO	Annual Course Objectives
4.	SLO	Specific Learning Objective
5.	KS	Knowledge and Scholarship
6.	PC	Patient Care
7.	HO	Homoeopathic Orientation
8.	CS	Communication Skills
9.	PBL	Practice Based Learning and Improvement
10.	PRF	Professionalism
11.	K	Knows
12.	KH	Knows How
13.	SH	Shows How
14.	D	Does
15.	C-I/II/III	Cognitive Domain- Guilbert's Level I/II/III
16.	P-I/II/III	Psychomotor Domain- Guilbert's Level- I/II/III
17.	A-I/II/III	Affective Domain- Guilbert's Level I/II/III
18.	MK	Must Know
19.	DK	Desirable to Know
20.	NK	Nice to Know
21.	MCQ	Multiple Choice Question
22.	SAQ	Short Answer Question
23.	LAQ	Long Answer Question
24.	OSPE	Objective Structured Practical Examination
25.	OSCE	Objective Structured Clinical Examination

IV- Glossary of terms used in the template.

Goals

These are broad outcomes expected of a student at the end of the course of studies. These are to be contrasted with Objectives/Outcomes which are more specifically and narrowly defined.

Programme

A range of learning experiences offered to students in a formal manner over a period of one- to four years leading to certificates/ diplomas/ degrees. Examples: BA (Economics) BSc (Physics). All possible formal degree Programmes are identified by UGC. BHMS is one such Programme

Programme Outcome

Programme Outcomes (POs) are what knowledge, skills and attitudes a graduate should have at the time of graduation. The Programme Outcomes of professional disciplines are identified at national level by the concerned accrediting agency. In this case, it would be the National Commission of Homoeopathy which would be involved.

Course

Course for the purpose of this Manual represents a subject e.g. Anatomy. In homoeopathic education some of the courses extend over several years e.g. Materia Medica. The relevance of this is in the formulation of Course Outcome

Course Outcome

Course Outcomes are statements that describe what students should be able to do at the end of a course. Where a Course extends over a number of years, it is necessary to define distinct Course Outcomes over the entire teaching programme of the subject. These will vary in depth and extent of the coverage of the subject.

Annual Course Objectives (ACO)

Annual course objectives are overarching goals or outcomes that educators set for an academic course to guide teaching, learning, and assessment for the particular year. These objectives serve as a roadmap for both teachers and students, outlining what is expected to be achieved by the end of the year in the course. They typically encompass the essential knowledge, skills, and competencies that students should acquire within the specified timeframe.

Competency

An observable ability of a health professional, integrating multiple components such as knowledge, skills, values, and attitudes. Since competencies are observable, they can be measured and assessed to ensure their acquisition.

Content:

Content is the group of sub-topics to be covered under each broad topic.

Millers Levels:

Miller's Pyramid is a diagrammatic representation of the convergence of learning. It maps the pathway of learning to show a person gains the ability and competence in a series of increasingly progressive phases of learning.

The broad base of this pyramid - 'Knows' – has the ability to recall facts and ideas that form the bedrock of professional requirements. 'Knows How' is the next phase of learning, where the students gain the insight into the relationships between the various units of 'knows' and can relate them meaningfully to reach the 'knows how' capacity. These phases would largely be in the Cognitive Domain of Bloom's Taxonomy of Learning Objectives.

Learning is not just about knowing and knowing how, but also to enable that the 'know how' is put into practice. This is the third phase of Miller's Pyramid – the 'Shows How'. During this phase of learning, the student is able to demonstrate the reasoning ability that he / she has acquired in controlled or real situations. This ability also includes the psychomotor dimension of Bloom's Taxonomy. The summit of pyramid, i.e., 'Does' also includes the emotional aspect

of learning in the form of values, attitudes, communication, etc, that denote the ‘Affective Domain’ of Bloom’s Taxonomy.

The Miller’s Pyramid is a valuable tool to represent the increasing levels of competencies that the students need to acquire, and also a framework to assess the level of competency that is achieved. Interestingly, the framework focuses on what the learner would be doing, rather than on what the teacher would be doing.

Specific Learning Objectives:

Specific Learning Objectives / Outcomes (SLOs) describe what students should know or be able to do at the end of a learning session, that they couldn't do before. These are written and communicated in a ‘low context communication style’, that is to say, whoever reads the SLO would have the same understanding that the person who wrote it had. That is, there would be no communication gap.

That is the reason why the SLOs are written specifically and exclusively as units of learning in one of the domains of Bloom, and further at one of the levels of Guilbert. This will ensure that the learning that is expected is clearly communication among all those who refer to it, including those who set the assessment and evaluate the student performance. Further, the SLOs are ALWAYS written with an ACTIVE verb, so as to make the statement observable and measurable.

Bloom’s domain:

Bloom’s Taxonomy of Educational Objectives is a tool for classifying learning under the categories of ‘knowledge’, ‘skill’, and ‘attitude / value / communication’, represented by the technical terms ‘Cognitive’, ‘Psychomotor’, and ‘Affective’ domains respectively. Each of these domains distinguish the dimension of learning in a particular area. The importance of such classification is that it offers a clear model for both teaching and students’ assessment.

Guilbert’s level:

Guilbert’s Hierarchy is a tool that describes the various levels of learning that can be mapped and managed in the Bloom’s domains of learning – cognitive, psychomotor, and affective. This tool also has the additional benefit to identify the appropriate teaching – learning methods / media, and also the assessment strategies.

In the 'knowledge' domain Guilbert's approach to learning proceeds from recall of facts to understanding / interpreting the different sets of data, and finally to the ability to make decisions and solve problems on the basis of the understanding / interpretation. This simple three-step process builds a sequential order of learning; it clearly brings out that decisions shall be made

NOT on the basis of facts alone, but through a process of understanding and interpretation. The 'skill' domain builds the learning from the stage of observing and imitation to gaining control over the skills and culminating in automatism of the skill. In simple terms, any skill will be learnt initially by observing its performance, and imitating the same in the sequential order. In the next phase, the learner tries to gain control over the skill initially under the supervision, and ultimately will be able to perform it independently.

Learning in the affective domain proceeds from the stage where the learner is open and receptive to the stimulus or trigger situation, responding to it in a desirable manner, and finally internalizing the responses.

Priority of learning:

The priority of learning is represented as 'Must know', 'Desirable-to-know', and 'Nice-to-know'. Prioritization is a critical component of curriculum design because it classifies the learning outcomes on the basis of their importance and usefulness for the ultimate professional standards. The priority of learning is objectively assigned by a formula that gives weightage on the basis of 'frequency and impact' of the learning for professional needs.

TL Method / Media:

The teaching-learning (TL) methods and media are the vehicles that enable the acquisition of stated outcomes. Teaching method is simply 'what the teacher does or what the teacher enables the students with', such as giving a lecture, conducting a demonstration, or facilitating a group discussion. Teaching-learning media is 'what the teacher or the students use' to enable the learning; with examples such as a board, or projector, or model, or specimen, among others.

The teaching-learning methods and media are specific to the domains and levels in the domains. It must also be remembered that learning is a continuum, and a range of methods and media would be appropriate in the different phases in the continuum of learning.

Assessment:

Assessment of learning is an important component of curriculum. This measures the

performance of the students in comparison to the expected outcomes of learning. Therefore the specific learning outcomes must be stated and communicated clearly and objectively to all the stakeholders of education. Assessment strategy is based on the domain and the level of domain in which the outcome is to be measured. Assessment could be judgemental for the extent and quality of outcomes, when it is called ‘assessment of learning’, or it could also be supportive for learning, when it is called as ‘assessment for learning’. There are two major approaches to assessment – formative, and summative. The tools of assessment are provided in the annexure.

Formative Assessment:

Formative assessment is NOT judgmental, in that it does not brand the learner as ‘pass’ or ‘fail’. The formative assessments measure the extent and quality of learning with reference to the expected learning outcomes, so that the students can be given feedback to improve on their performance. The formative assessments promote mastery learning, that is to say, each student achieves the stated level of mastery of performance because of the feedback and support. Formative assessment is also called as continuous assessment.

Summative Assessment:

Summative assessment has the mandate to judge the achievement of the learner at the end of a period of learning, and label him / her as ‘pass’ or ‘fail, assign a rank, approve for eligibility to be promoted or eligibility to be admitted to a course. These assessments also serve as quality check to ensure that those who are being certified conform to a minimum standard of professional competence.

Objective Structured Practical Examination:

The Objective Structured Practical Examination (OSPE) is a type of assessment commonly used in medical education. It's designed to evaluate a student's practical skills and competencies in a structured and standardized manner.

In an OSPE, students rotate through a series of stations, each presenting a different task or scenario. These stations typically involve procedural techniques, or interpretation of diagnostic tests. At each station, students are assessed based on predefined criteria and checklist.

Objective Structured Clinical Examination:

The Objective Structured Clinical Examination (OSCE) is a widely used method of assessing clinical skills in medical education. It's designed to evaluate various competencies such as clinical reasoning, communication skills, physical examination techniques, and professionalism in a standardized and objective manner.

In an OSCE, candidates rotate through a series of stations, each representing a different clinical scenario or task. At each station, candidates are typically required to interact with simulated patients, perform specific clinical tasks, or respond to clinical questions within a set time frame, usually ranging from 5 to 15 minutes per station.

Scenarios can cover a wide range of clinical contexts, including history-taking, physical examination, clinical decision-making, counseling, and procedural skills. Trained assessors evaluate candidates based on predefined criteria, often using structured checklists or rating scales to provide consistent and objective feedback.

Integration:

Integration of learning is an essential requirement for aligning various data points of knowledge and skills for getting a holistic understanding and enabling a unified performance. Integration can be achieved at various dimensions and at various levels.

The dimensions of integration could be temporal in the form of Horizontal, Vertical, or Spiral. Horizontal integration is the alignment of learning on a longitudinal timeline, where the comparable contents of various subjects in the same term or year are integrated.

Vertical integration is seen in the subjects that build on the pre-existing knowledge and skills of another subject. For example, the integration between clinical subjects like Practice of Medicine with the para-clinical subjects such as pathology.

Spiral integration is where a subject is recurring at various levels in the same course. For example, Materia medica is learnt from the first to final BHMS, and the focus of the subject is not the same in each year. There would be iteration of the same knowledge from different perspectives and capabilities across the different phases of BHMS.

The levels of integration represent the increasing approximation of knowledge from different

subjects, so as to reach an approximation of fusion. The attempt to integration may begin with arranging the comparable contents of different subjects at the same cross sections of timeline. Further, there could be positioning the content of one subject into another subject to bring some kind of co-existence. Still further, the contents can be seamlessly merged to create an aligned learning content. Such integrative efforts can bring about holistic learning for a meaningful homeopathic capacity-building.