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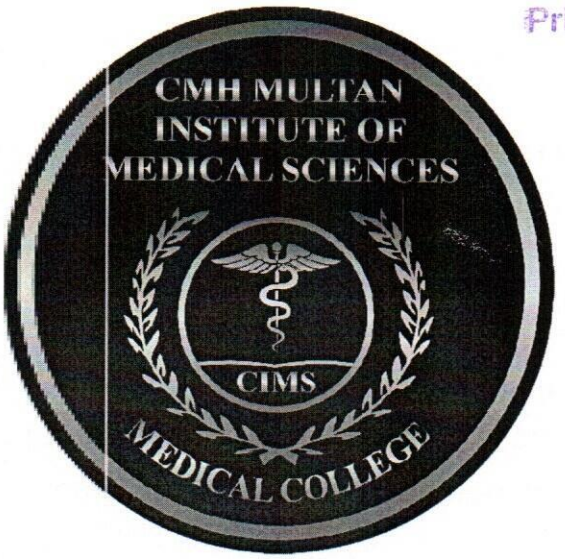

Curricular Document

(MBBS PROGRAM)

CIMS Medical College (CMC) Multan

Preamble

CIMS Medical College (CMC) Multan is an affiliated college of the National University of Medical Sciences (NUMS).

The institute takes pride in aligning the NUMS vision with the CMC Multan Mission statement.

VISION OF NUMS

The vision of the National University of Medical Sciences is to improve the quality of life through education, research, innovation, and healthcare, thereby, contributing to endeavours to make Pakistan and this world a better place to live in.

VISION OF CMC MULTAN

The CMC Multan envisions both national and international eminence as an academic institution in undergraduate, postgraduate, and continuing professional education, basic and clinical research, clinical practice, and responsiveness to its global community service.

MISSION OF CMC MULTAN

CMC Multan is committed to pursue excellence in the academic and practical training of its learners by providing them with holistic opportunities through community collaboration in medical education. It is our mission to produce inspired lifelong learners, exceptional clinicians, educators, advocates, leaders, and researchers to improve the lives of the communities we serve through excellence in learning, discovery, and healing.

GOALS OF CIMS MULTAN

CIMS Multan vows to undertake the intellectual, practical, humane, and disciplinary development of its learners to achieve this mission.

Our goal is to produce lifelong learners who contribute to their community by being expert healthcare professionals, researchers, and leaders of tomorrow.

This document outlines the policy and SOPs of the CMC Multan institutional curriculum for the MBBS program and is aligned with the NUMS curricula and curricular policies.

Disclaimer: The document is subject to change based on periodic program evaluation

CMC Multan Integrated Modular MBBS Curriculum is developed by the Department of Medical Education (DME) with the involvement of all stakeholders (including faculty and students) and is in line with the institute's vision and mission.

This document strictly follows the guidelines of NUMS and PM&DC.

MBBS PROGRAM CURRICULUM POLICY

Curricular Philosophy:

The standards of the CMC Multan MBBS curriculum are aligned with those mandated by NUMS for all of its constituent and affiliated colleges and therefore the program outcomes are similar.

Guidelines and outlines are provided by NUMS for the development of curriculum and the institutional curriculum is customized to the resources and logistics of CIMS Medical College. (CMC)

Implementation:

The minimum duration of an MBBS degree is 5 years (~6000 contact hours).

Module-Based Curriculum:

MBBS curriculum has System-Based Modules where all outcomes are delivered with clinical relevance and horizontal and vertical correlation wherever possible. The curriculum is at Level 7 of Harden's ladder of integration.

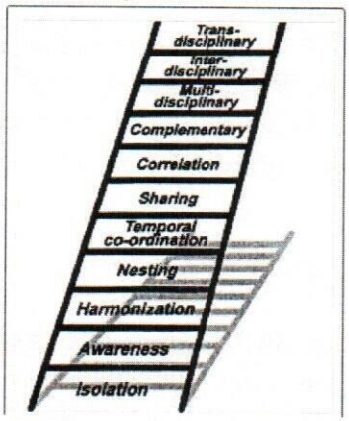

Figure 1: Harden's ladder

Modular planning:

The planning, development, and implementation of modular curriculum is done via modular teams. Each modular team is headed by a Module Coordinator and team members from respective departments of each academic year.

The modules are further divided into three blocks per academic year (10 – 12 weeks each). A class assessment is scheduled after each module as an integrated modular class test.

The overall responsibility of all the modules in a block lies with the Course Coordinator.

Duration of each academic year:

Each academic year consists of a minimum of 32 and a maximum of 36 weeks (inclusive of exams) and active teaching (on-campus and online).

Additionally, 4 weeks of preparation for the Annual Professional Examinations are provided at the end of each teaching session and the Annual Professional Examinations are conducted by NUMS according to university-provided schedules.

The overall distribution of pre-clinical and clinical themes

Basic Sciences Years – Years 1 & 2

Anatomy, Physiology, Biochemistry, Behavioral sciences, English, Islamic, and Pakistan Studies are the main subjects taught in years I & 2. These are flanked by longitudinal themes like communication skills, leadership, study skills, and research. Dedicated time for self-directed learning (SDLs) is also scheduled within the academic program.

During the first two years, the focus is teaching and learning of normal structure, function, and biochemical characteristics of the human body. The outcomes are delivered with clinical relevance in an integrated manner.

Throughout small group discussions (SGDs), like Case-Based Learning (CBLs), practical demonstrations. For hands-on training in the skills lab, cadaveric dissections and the dissection hall are used. The large group interactive format (LGIF) with clinical relevance is strategically scheduled throughout the academic session for consolidation and connection of the knowledge, skills, and attitude domains.

Pre-Clinical Years – Years 3 & 4

Subjects: The pharmacological and therapeutic aspects of clinical management, medico-legal relevance to patient care, and abnormal structure and functions of the human body with details of disease processes and microbial interactions are taught in the subjects of Pharmacology, Forensic Medicine, and Pathology & Microbiology in the 3rd year. In year four, students are facilitated for community outreach,

emphasizing the importance of prevalent community ailments and their management. The part of special Pathology includes histopathology, hematology, and chemical pathology for extensive training in the understanding of the disease processes.

Field visits: Students are required to do field visits including community research activities.

Research project: During the fourth year, completing a research project is also a subject requirement of their academic training in basic sciences.

Clinical Years – 4 & 5

Subjects: The clinical subjects of Ophthalmology and Otorhinolaryngology are components of teaching and learning in the fourth year. In final year Medicine and Allied (Emergency Medicine, Psychiatry, and Dermatology), Surgery, and Allied (Trauma, Anesthesia, and Orthopedics), Gynecology /Obstetrics, and Pediatric Medicine are the main examining subjects.

Contact hours: All clinical subjects have LGIS, CBLs, and clinical rotations in relevant subjects according to the NUMS/ PM&DC contact hour's requirements and guidelines.

Clinical clerkship: The students undergo outpatient and inpatient ward rotations in all clinical subjects. The clinical clerkship (rotation) is scheduled in years 3, 4 and 5.

Teaching learning strategies: Bedside teaching, case-based discussion (CBD), case presentations, CPCs, Journal Clubs, seminars, and conferences are the main T/L strategies.

Additional learning opportunities:

Students are allowed electives of their choice in any national or international medical college (the Electives Policy is explicitly laid out separately)

Educational strategies:

The main strategies employed are Large Group Interactive Format Lectures (LGIF), Small Group Discussions (SGDs) including Case-Based Learnings (CBLs), practical sessions, demonstrations, tutorials, bedside teaching, case-based discussions (CBDs), case presentations, clinical-pathological conferences (CPCs), and Journal Clubs and, community health visits.

Co-Curricular activities: The co-curricular activities are designed along the exit outcomes of the MBBS program. Students are encouraged to align all their co-curricular activities according to the theme/ subject-wise LOs of each subject.

Assessment categories:

MBBS students are continuously assessed throughout the academic year. These assessments may be formative or summative.

a. Formative Assessment:

Formative assessment is a systematic process to continuously gather evidence about learning. Student performance in these assessments is used to identify a student's current level of learning and to adapt lessons to help the student reach the desired learning goal.

Formative Assessment is carried out throughout the blocks and clinical rotations using various strategies at the discretion of departments.

Assessment strategies: Strategies can include, written (SEQs, MCQs), oral, or practical (OSCE/OSPE), clinical assessments (Long and short cases), assignments, and quizzes, which may be conducted online or on paper.

b. Summative Assessment:

These are the assessments that are used to make informed decisions about students' progress, promotion, and graduation. Summative assessment decisions are based on both internal assessment scores and end-of-year assessment scores.

Internal assessment: Internal assessments contribute 20%, each for theory and practical, towards the cumulative score of 100% of the year.

Internal assessments include End of Block (EOB) exams, ward tests, and pre-annual exams.

External assessment: The details of examinations of the university for each Annual Professional Exam are present in the NUMS assessment policy.

Assessment Plan for Longitudinal Themes

The content of longitudinal themes is incorporated in internal assessments and the annual professional assessments wherever addressed.

Ethics, Professionalism, Leadership, and Communication Skills are assessed in all years as a part of OSPE/OSCE and viva exams.

Infection control and patient safety are assessed in Medicine and Allied.

The research is assessed in Year 4 as a community-applied research project and publication in an indexed journal.

*additional topics/ themes are continuously updated as per yearly curricular evaluations.

Curricular Evaluation:

The curriculum is evaluated via the collaboration of the Institutional Curriculum Committee (ICC), DME, and L-QEC yearly by compiling an Internal Evaluation report of each block and the whole course.

A final feedback and evaluation report generated will recommend curricular changes that will be incorporated, and students and faculty will be informed.

This is based on feedback from students and faculty on forms provided by L-QEC NUMS.

ADMINISTRATION OF THE COURSE:

Dept. of Medical Education (DME) at CMC Multan is the think tank for guidance and implementation of all curricular activities in collaboration with the coordinators from ICC, and, respective basic, pre-clinical, and clinical departments.

Core competencies of the program:

- Medical Knowledge
- Clinical & Procedural Skills
- Patient Care
- Interpersonal and communication skills
- Ethics and Professionalism
- Research
- Leadership

MBBS Program Learning Outcomes (PLOs)

At the end of the MBBS program, the CIMS Multan learners will be able to:

- Apply knowledge and skills of basic and clinical health sciences for the prevention, diagnosis, and management of common diseases
- Practice the highest standards of patient
- Exhibit ethical and professional principles for health care delivery to the community
- Demonstrate knowledge and skills to effectively communicate with colleagues, patients, and other stakeholders
- Demonstrate effective leadership and management skills
- Perform research to contribute to national and international publications and for the benefit of the society

Learning Outcomes – Year-wise:

By the end of Year 1, the learners should be able to

- Associate the anatomical and physiological knowledge of cell, hematology, immunology, neuromuscular, bone, cardiovascular, and respiratory systems to the biochemical principles.
- Apply the knowledge and skills of longitudinal themes to the relevant concepts of basic sciences.

By the end of Year 2, the learners should be able to

- Associate the anatomical and physiological knowledge of GIT & metabolism, renal, neurosciences, Genetics, Craniocervical, Special senses, Endocrinal, and reproductive systems to the biochemical principles
- Apply the knowledge and skills of longitudinal themes to the relevant concepts of basic sciences.

By the end of Year 3, the learners should be able to

- Apply the knowledge of pharmacokinetics and therapeutic aspects of clinical significance, along with the genetic and molecular mechanisms of drugs in a clinical context
- Apply the general pathophysiological principles to disease patterns
- Apply principles of the judiciary in clinical surroundings
- Perform basic clinical skills e.g. history-taking and bedside manners
- Apply the knowledge and skills of longitudinal themes to the relevant concepts of pre-clinical sciences

By the end of Year 4, the learners should be able to

- Apply knowledge and demonstrate skills of application of the pathological processes of disease
- Correlate the pathophysiology of the body systems with the various treatment models available
- Recognize all health promotion and disease prevention strategies in a national and international context
- Collect, analyze, and, interpret the basic medical research data to produce and publish research papers
- Apply anatomical and physiological knowledge of Eye and ENT to their common and basic pathological conditions and their management.
- Perform basic clinical skills relevant to pre-clinical sciences
- Apply the knowledge and skills of longitudinal themes to the relevant concepts of pre-clinical and clinical sciences

By the end of Year 5, the learners should be able to

- Diagnose, investigate, and treat the basic medical and surgical conditions
- Devise the management plan for patients in the cultural and contextual background of the community they work in
- Perform basic clinical procedures at the appropriate level
- Manage life-threatening conditions and end-of-life conditions
- Demonstrate understanding of longitudinal themes and their application relevant to concepts addressed in all five years.

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