

Republic of the Philippines OFFICE OF THE PRESIDENT COMMISSION ON HIGHER EDUCATION



CHED MEMORANDUM ORDER

No. <u>18</u> Series of 2016

SUBJECT: POLICIES, STANDARDS AND GUIDELINES FOR THE DOCTOR OF

MEDICINE (M.D.) PROGRAM

In accordance with the pertinent provisions of Republic Act 2382, otherwise known as the "Medical Act of 1959 as amended", and Republic Act No. 7722, otherwise known as the "Higher Education Act of 1994", in pursuance of an outcome-based quality assurance system as stipulated under CMO No. 46 s. 2012 and for the purpose of rationalizing medical education in the country with the end in view of keeping apace with the demands of national relevance and global responsiveness, the following Policies, Standards and Guidelines (PSGs) for the Doctor of Medicine Program are hereby adopted and promulgated by the Commission.

ARTICLE I

Section 1. Rationale

Based on the guidelines for the implementation of CMO No. 46 s. 2012, this PSG implements the "shift to competency-based standards/outcome-based education." It specifies the "program outcomes/core competencies" expected of Doctor of Medicine graduates "regardless of the type of higher education institution (HEI) they graduated from." However, in recognition of the spirit of learning outcomes/competency-based/outcome-based education and the typology of HEIs, this PSG also provides "flexibility and ample space for HEIs to innovate in the curriculum in line with the assessment on how best to achieve program outcomes in their particular contexts and respective missions.

ARTICLE II AUTHORITY TO OPERATE

Section 2. Government Authority

All higher education institutions (HEI) intending to offer the Doctor of Medicine program must first secure proper authority from the Commission in accordance with the existing rules and regulations and the provisions in this PSG. All HEIs with an existing Doctor of Medicine program are required to shift to a learning outcomes/competency-based/outcome-based approach as mandated by this PSG. Autonomous and deregulated institutions, State universities and colleges (SUCs), and local colleges and universities (LCUs), upon approval by their respective governing boards, should likewise strictly adhere to the provisions in this PSG, CMO No.40 s. 2008 "Manual of Regulations for Private Higher Education" and CMO No. 2 s. 2004 "New Procedures in the Processing of Applications of Government Authority to Operate Doctor of Medicine and Bachelor of Science in Nursing programs."

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ARTICLE III GENERAL PROVISIONS

The Articles that follow provides for the minimum standards and other requirements, which are expressed as a set of desired program outcomes as stated in Article IV Section 4. The minimum number of units of this curriculum is hereby prescribed under Section 13 of RA 7722 otherwise known as "Higher Education Act of 1994" and a brief description of the curriculum map is shown in Article V Section 7.1.

In addition, using a learner-centered and learning outcomes/competency-based approach, outcome-based education, the suggested curriculum delivery methods are shown in Article V Section 9. The description of course syllabi provided in Article V Section 10 contains some of these methods.

Based on the curriculum and the means of its delivery, these guidelines provide the physical resource requirements for the library, laboratories and other facilities and the human resource requirements in terms of administration and faculty as shown in Article VI.

The HEIs are allowed to design their curricula suited to their own contexts and missions, provided they can demonstrate that the same lead to the attainment of the required minimum set of outcomes, albeit by a different route. In the same vein, they have latitude in terms of curriculum delivery and in terms of specification and deployment of human and physical resources. The HEIs should ensure they can show that the attainment of the program outcomes and satisfaction of program educational objectives can be assured by the alternative means they proposed.

The HEIs can use the CHED Implementation Handbook for Outcomes-Based Education (OBE) and the Institutional Sustainability Assessment (ISA) available in CHED website, as a guide in making their submissions for Sections 4-10 of Articles IV and V of this PSG.

ARTICLE IV PROGRAM SPECIFICATIONS

Section 3. Program Description

3.1 Degree Name

Graduates of this program shall be conferred with the degree of Doctor of Medicine. Graduates may use the title "M.D." after their names, only after they have been issued the license to practice medicine by the Professional Regulations Commission. The degree of Doctor of Medicine is the primary educational qualification for the Physicians' Licensure Examination (PLE) in the Philippines which is equivalent to Level 7 of the Philippine Qualifications Framework (PQF) and International Standard Classification of Education (ISCEd).

3.2 Nature of the Field of Study

The Doctor of Medicine Program is at least a four (4)-year post baccalaureate program consisting of basic science and clinical courses. The medical schools may adopt different types of curricula like discipline-based, integrated, problem-based, community-based, competency-based and outcome-based or any other innovative designs, provided the program outcomes are achieved.



3.3 Program Educational Objectives (PEOs)

The main goal of the Doctor of Medicine program is to develop professional physicians for the Philippine healthcare system. The graduate of the Doctor of Medicine program is a primary care physician who can pursue general private medical practice after passing the Physician Licensure Examination (PLE).

With additional training, graduates of the MD program may pursue any of the following careers to include:

- · General medical practitioner
 - Local Government Unit Physician
 - School physician
 - Company/Corporate physician
 - Community Physician
- · Clinical specialist
- · Researcher/Medical Scientist/Innovator
- · Health Professions teacher
- · Health Administrator
- · Health Information Manager
- · Health Economist
- · Health Policy Maker

3.4 Allied Fields

All health science programs are considered to be allied fields of the Doctor of Medicine program.

Section 4. Program Outcomes

The minimum standards for the Doctor of Medicine program are expressed in the following minimum set of program outcomes and must be aligned with the mission, vision and goals of the institution:

- 4.1 Program outcomes Common to all disciplines and types of HEIs (CHED Implementation Handbook for OBE and ISA, 2013)
 - a. Articulate and discuss the latest developments in the specific fields of practice (as defined in the Philippine Qualifications Framework (PQF)
 - b. Communicate effectively and orally and in writing using both English and Filipino
 - c. Work effectively and independently in multi-disciplinary and multi-cultural teams
 - d. Act in recognition of professional, social, and ethical responsibility, and
 - e. Preserve and promote "Filipino historical and cultural heritage" (based on R.A. 7722)

Graduates of all higher education programs shall have the ability to:

- a. Work effectively in multi-disciplinary and multi-cultural teams
- b. Recognize professional, social and ethical responsibility
- c. Communicate orally and in writing using both English and Filipino effectively
- d. Engage in life-long learning and an understanding of the need to keep current of the developments in the specific field of practice according to the Philippine Qualifications Framework (PQF)
- e. Appreciate "Filipino historical and cultural heritage" as per RA 7722
- f. Work "independently and/or in teams of related fields with minimum supervision"



4.2 Program Outcomes based on HEI type (CHED Implementation Handbook for OBE and ISA, 2013)

a. Demonstrate a service orientation in one's profession among graduates of professional institutions

b. Participate in various type of employment, development activities, and public discourses, particularly in response to the needs of the communities one serves among graduates of colleges

c. Participate in the generation of new knowledge or in research and development projects among graduates of universities

 d. In addition to the above, graduates of State Universities and Colleges must have competencies to support "national, regional and local development plans" (RA 7722)

4.3 Program Outcomes common to all health-related professions

Graduates of medicine program shall have the following attributes common to all health-related professions:

- a. Demonstrate competence in handling health problems of individuals, families, communities
- b. Demonstrate higher order thinking skills, problem solving, decision-making, logical and critical thinking skills

c. Subscribe to professional, legal, and ethical practice

d. Work collaboratively within interprofessional and multiprofessional teams

e. Communicate proficiently

f. Engage in self-directed lifelong learning, and

g. Promote the use of health system approach in the delivery of service

4.4 Program Outcomes specific to the Doctor of Medicine program:

Program Outcomes	Operational Definition of Program Outcomes
1.Demonstrate clinical competence	Competently manage clinical conditions of all patients in various settings
2. Communicate effectively	Convey information, in written and oral formats, across all types of audiences, venues and media in a manner that can be easily understood
Lead and manage health care teams	Initiate planning, organizing, implementation and evaluation of programs and health facilities. Provide clear direction, inspiration and motivation to the healthcare team/community
4. Engage in research activities	Utilize current research evidence in decision making as practitioner, educator or researcher. Participate in research activities.
5. Collaborate within interprofessional teams	Effectively work in teams in managing patients, institutions, projects and similar situations
Utilize systems-based approach to healthcare	Utilize systems-based approach in actual delivery of care Network with relevant partners in solving general health problems



Program Outcomes	Operational Definition of Program Outcomes	
7. Engage in continuing personal and professional development	Update oneself through a variety of avenues for personal and professional growth to ensure quality healthcare and patient safety	
Adhere to ethical, professional, and legal standards	Adhere to national and international codes of conduct and legal standards that govern the profession	
9.Demonstrate nationalism, internationalism and dedication to service		
Practice the principles of social accountability	Adhere to the principles of relevance, equity, quality and cost effectiveness in the delivery of healthcare to patients, families and communities	

Section 5. Performance Indicators

The curriculum should contain performance indicators that measure whether terminal competencies have achieved the identified competency standards of each of the program outcomes. These performance indicators will serve as a basis for evaluation of student achievement through different points in the curriculum.

ARTICLE V CURRICULUM

Section 6. Curriculum Description

6.1 Mission and Vision

The medical school shall adopt a curriculum that is consistent with its Vision-Mission that should be made known to all its stakeholders. There should be mission statements that describe the educational process that shall produce a medical doctor who has achieved the required program outcomes and conform with the World Health Organization standards on multi-professional patient safety curriculum.

6.2 Duration

It shall be a full-time study of at least four (4) years, the fourth year of which shall be a complete 12-month rotating clinical clerkship undertaken mainly in the base hospital with Level III DOH classification with accredited residency training programs in medicine, surgery, pediatrics and OB- Gyn. The program should be at least 1,440 hours per year level for the first 3 years and 2,080 hours for the fourth year or clinical Clerkship for a total of 6,400 hours for the entire MD Program. Enhancements of clinical training may be undertaken in affiliate health facilities, both local and foreign hospitals with accredited training programs.

6.3 Minimum Curricular Content

The minimum curricular content regardless of the curriculum design shall include the following:

- Human Anatomy including Gross, Microscopic and Developmental Anatomy
- Human Physiology
- Biochemistry, Molecular Biology, Genetics and Basic Nutrition



- Pharmacology and Therapeutics including Alternative Medicine
- Microbiology, Parasitology and Immunology
- Internal Medicine including Geriatrics and Dermatology
- · General and Clinical Pathology and Oncology
- · Obstetrics and Gynecology including Women's Health
- · Pediatrics and Nutrition including child protection
- General Surgery and its divisions including Anesthesiology and Pain Management
 - · Orthopedics
 - · Otorhinolaryngology
 - Ophthalmology
 - Psychiatry and Behavioral Sciences
 - · Basic and Clinical Neurosciences
 - Family and Community Medicine including Public Health, Preventive Medicine and Health Economics
 - · Physical and Rehabilitation Medicine
 - · History and Perspectives in Medicine
 - · Research, Evidence-based Medicine and Medical Informatics
 - · Legal Medicine, Medical Jurisprudence and Forensic Medicine
 - · Radiology and other diagnostic imaging

6.4 Integrated topics

The minimum curricular content regardless of the curriculum design shall include the following topics that should be integrated in all medical courses:

- Bioethics, Professionalism and Good Clinical Practice
- · Patient Safety and Quality Assurance
- · Consultation Skills, Physical Diagnosis
- Andragogy
- Disaster Risk Reduction and Management
- · Leadership and Management
- Interprofessional Education

6.5 Medical Education Unit

The medical school shall have a committee/body/unit that shall develop, implement, monitor and evaluate the medical curriculum regularly. Stakeholders including the alumni and student representatives shall be consulted in the evaluation and development of the medical curriculum.

Section 7. Curriculum Design

For the guidance of all higher education institutions offering a medical program, a sample curriculum generic to all types of higher education institutions was developed as classified under CMO No. 46 s. 2012. Program outcomes and specific competency standards have likewise been developed and formulated.



Each HEI shall develop its own curricular goals aligned to its vision and mission, and shall prepare the syllabi for all courses based on their curriculum and means of its delivery including instructional designs. The courses under the medical curriculum shall be dependent on the curriculum model adopted by the HEI, namely:

- Subject/discipline-based
- Integrated, e.g. Organ-system, problem-based
- Community-oriented/community-based
- Other innovative curricula

7.1 The Curriculum Map

The curriculum map contains the program outcomes and the different courses per year level according to the degree of breadth and depth that these courses contribute to achieving the program outcomes. In the curriculum map, courses are categorized according to how program outcomes are covered in the course:

- I introduced (program outcomes are merely introduced in the course)
- P practiced (program outcomes are not just introduced but practiced in the course), and
- D- demonstrated (program outcomes are practiced, demonstrated and assessed in the course)

Medical schools are encouraged to design their respective curriculum mapping and based on the results, decide in terms on how each of the courses will be further revised, improved, or modified to be made consistent with the program outcomes.

7.2 Components

Depending on the curriculum model, the components of the medical degree program as represented in the curricular framework shall consist of the following:

- Basic Sciences
- Clinical Sciences
- · Other Courses and Elective

Section 8. Program of Study

The program of study implemented by the medical schools shall be dependent on the adopted curriculum model and the typology of the institution.

The Art and Science of Medicine as a noble profession shall be emphasized. Clinical science courses may be introduced in the basic science years. Early exposure of medical students to patient care and healthcare delivery system is recommended.

Methods of teaching interprofessional and multi-professional education shall be promoted. Leadership and management must be embedded in the curriculum. Equal emphasis should be given to ambulatory and hospital in-patient care, and to health promotion and maintenance and curative care. Furthermore, aside from focusing on individual patients, there should be equal emphasis in addressing population health needs.

Section 9. Curriculum Delivery

The medical school shall prepare a clear mechanism for curriculum delivery to achieve program outcomes and their competency standards.



Section 10. Syllabi for all courses

The medical school shall prepare instructional designs and syllabi for all courses. Each syllabus shall contain the following:

- · Course name/title/number
- · Course description
- Credit units with equivalent number of hours
- · Pre-requisite/s
- · Description of Students and their year level
- Instructional Settings/Venue
- Entry competencies required of students
- Program/Learning outcomes, competency standards, course objectives and learning objectives
- Teaching learning activities and instructional resources
- Suggested textbooks and references
- · Other Resources required
- · Assessment and evaluation

Section 11. Internship

- 11.1 Internship is the last phase of the basic training of the physician.
- 11.2 Satisfactory completion of the 12-month internship is a requirement for taking the Physician Licensure Examination (PLE).
- 11.3 The implementation of the Postgraduate Internship Program shall be supervised and monitored by the association of Philippine medical schools recognized by the Commission.

ARTICLE VI REQUIRED RESOURCES

Section 12. Academic Organization/Administration

The medical school shall have a clear description of its structure of governance.

The program in medical education leading to the Doctor of Medicine (M.D.) degree shall be conducted in an environment that fosters intellectual challenge and spirit of inquiry as characterized by the community of scholars that constitutes a college/university.

The medical school shall have a base hospital with Level III DOH classification with accredited residency training programs in medicine, surgery, pediatrics and OB-Gyn. An HEI which does not own its base training hospital shall be required to enter into a Memorandum of Agreement with an accessible, appropriately-accredited hospital in the same city/province. The school shall be responsible for planning, controlling and monitoring/evaluation of the activities of its students and faculty therein.

The institution must implement an organizational structure of the academe that reflects the design of the curriculum in order to efficiently implement the prescribed program outcomes for medical education. It is recommended that higher educational institutions be organized in such manner as to assure integration of the curricular components.



It is desirable that all medical schools shall have a Medical Education Unit composed of qualified academicians who shall be responsible for faculty development and training and other functions as designated by the dean.

The medical school shall establish linkages with medical practice and the healthcare system while engaging in a dynamic relationship with hospitals and government health facilities where the medical students undergo training. Moreover, there shall be a community-based health program where the students shall rotate and experience working with the community. The medical school shall enter into a Memorandum of Agreement with the identified community.

12.1 The Dean

The medical school shall be under the immediate administration and supervision of a Dean, who acts as its Chief Academic Officer of its own academic unit and who, by training and experience, is capable of interpreting the prevailing standards in medical education and possesses sufficient authority to implement them.

- a. Qualifications. The qualities and qualifications of the Dean:
 - must be a holder of Doctor of Medicine degree;
 - · must be a licensed physician with updated PRC ID;
 - preferably a holder of at least a master's degree in Health related discipline, Educational Management or Management/Administration;
 - with a minimum teaching experience of five (5) years in a College of Medicine and holds at least a rank of Associate Professor;
 - with a minimum administrative experience, at the least as Department Chair for three (3) years in a College of Medicine;
 - must be a member of good standing in an accredited professional or academic organization;
 - should be of good moral character.

The Dean shall be appointed by the Board of Trustees/ Regents or by the President/CEO of college or university. Upon appointment, the Dean should have a duly notarized employment contract or term of office on a full-time basis. The Dean shall not have any other appointment/s in any other medical school

b. Responsibilities of the Dean:

The duties and responsibilities of the Dean shall be, but not limited to, the following:

- uphold the organizational structure of the college of medicine;
- formulate, implement and evaluate short, medium and long-term plans of the college in consultation with stakeholders;
- recommend the appointment of the Associate Dean, College Secretary, Department Chairs and others, that may be deemed necessary, for the approval of the Board of Trustees/Regents;
- recommend the appointment and termination of the teaching and support staff;
- approve assignments of the faculty members as recommended by the corresponding Department Chair;
- make the necessary recommendations for periodic curricular improvement;



- · implement professional and personal development of the faculty;
- supervise and approve the admission of students as recommended by the Committee on Admission, which screens applicants based on criteria proposed by the committee and approved by the Board of Trustees/ Regents or the concerned authority;
- · promote student development plans;
- · promote research activities among faculty, students, and support staff;
- evaluate and recommend improvement in infrastructure, such as library and laboratory facilities;
- assist in securing/obtaining endowments/grants and the like, for research and/or educational purposes.
- prepare and recommend the annual budget of the college for approval by the Board of Trustees/Regents;
- · maintain harmonious relations with alumni;
- pursue opportunities for collaboration with other academic institutions, local and international;
- recommend disciplinary actions on erring students, faculty members and other school personnel after observing the due process required by law.
- promote social accountability of medical schools

12.2 Department Chair

a. Qualifications

The qualities and qualifications of the Department Chair are as follows:

- · must be a holder of Doctor of Medicine degree;
- · must be a licensed professional with updated PRC ID;
- preferably a holder of at least a master's degree in Health related discipline, Educational Management or Management/Administration;
- non-physician faculty member may qualify provided he/she is a holder of at least a master's degree in the health related discipline
- with a teaching experience of at least three (3) full-time years, or six (6) part-time years in a College of Medicine;
- with experience in academic committee work as Chair of at least three (3) years in the college
- · with a rank of at least Assistant Professor in a medical school
- must be a member of the specialty or academic society of good standing;
- preferably a board certified specialist, if applicable
- · should be of good moral character

b. Duties and Responsibilities of the Department Chair:

The Department Chair shall have, but not be limited to, the following duties and responsibilities:

- recruit and evaluate prospective staff of the department and recommend their appointment/promotion to the Dean based on set criteria;
- organize the department towards the attainment of the objectives of the medical education program in accordance with the policies set by the Board of Trustees/ Regents;



- review periodically or upgrade the curriculum and modules as well as teaching methods and evaluation techniques;
- coordinate and supervise all activities in the department including regular feedback on its progress and content;
- encourage the faculty and staff to participate in research activities.
- prepare the budget of the department for recommendation to the Dean;

Heads of clinical departments shall preferably have the following additional responsibilities:

- head the corresponding clinical department/services in its own training hospital;
- supervise the staff and student activities in the corresponding services of base training/affiliated hospitals.

Heads of departments shall not be allowed to hold administrative positions in any other academic institution, although they may be allowed to teach in the latter with the permission of the former.

Section 13. Faculty

- 13.1 The medical school shall have a strong teaching staff who are qualified to teach basic and clinical medical sciences. Appointment of the faculty members shall be based on academic and professional qualifications, teaching ability and/or research potentials.
- 13.2 The school shall have a staff recruitment policy which defines the type, responsibilities and balance of academic staff required to deliver the curriculum, as well as a faculty development program.
- 13.3 The qualities and qualifications of the faculty are as follows:
 - must be a holder of Doctor of Medicine degree;
 - must be a licensed professional with updated PRC ID;
 - preferably a holder of at least a master's degree in Health related discipline or Educational Management;
 - non-physician faculty member may qualify provided he/she is a holder of at least a master's degree in the health related discipline
 - must be a member of good standing in the accredited professional, specialty or academic society, as appropriate;
 - may teach in only one (1) medical school with full-time appointment or in two
 (2) medical schools with part-time appointments. A faculty member with full time appointment may teach in another medical school as a lecturer provided
 there is permission from the mother medical school.
- 13.4 New faculty members shall undergo training in teaching-enhancement programs of the college or its equivalent.
- 13.5 All faculty members are required to teach only in their respective areas of expertise.
 - 13. 6 Additional Requirements



- a. The medical school shall have a system for recruitment, promotion, retention and separation of faculty.
- b. The medical school shall have a faculty development program in place.
- c. The faculty may form an association to look after their welfare.
- d. In the absence of duly constituted departments, the dean will nominate and directly recommend faculty members for appointment.
- e. Each faculty member shall enjoy academic freedom within the purview of institutional policies and other rights and privileges granted by law.
- f. For new programs, there should be at least a faculty member with previous teaching experience in the same discipline for at least two (2) years.
- 13.7 The academic ranks and their corresponding minimum qualifications, in addition to existing rules and regulations of the institution, specifically, on pedagogic skills, are as follows:
 - a. A degree of Doctor of Medicine is equivalent to a general Master's degree for ranking purposes only (CHED Resolution en banc 038-2001)
 - b. The entry level rank of the faculty member is an Assistant Professor, except for teaching residents who will carry the rank of instructor.
 - c. At least one recently (not more than 5 years) published research as principal author in a peer-reviewed, scientific journal is required for promotion across ranks.
 - d. Minimum teaching experience:
 - · Assistant Professor none
 - Associate Professor at least 3 years as Assistant Professor
 - Full Professor at least 3 years as Associate Professor
 - a. Training –All medical faculty members should be certified as fellow /diplomate of their respective specialty or academic society.
 - b. A faculty member from another HEI may be appointed at any level of the academic ranks without passing through antecedent ranks if warranted/justified by the applicant's training, productivity including research publications, demonstrated ability, maturity or eminence in the particular field of study without violating existing college/university regulations.
 - c. Each department shall have a chair and a complement of faculty members necessary to effectively implement the curriculum.
 - d. In schools implementing the innovative curriculum in each section/unit/module there shall be a coordinator and a complement of faculty members with the necessary medical background possessing facilitative skills.
 - e. The definition of full-time faculty shall be left to the institution, provided however, that a minimum of twenty (20) hours per week is regularly rendered excluding administrative functions.
 - f. There should be at least one (1) full-time faculty member in each department.

Section 14. Library

14.1 The Medical Library Facility

- a. There shall be a medical library, established separately or as a section in the general library, within the medical school premises.
- b. The library shall have a seating capacity of at least 10% of student population at any given time.

14.2 Librarian

The medical school library shall be administered and operated by a qualified, competent librarian assisted by trained support personnel, adequate in number as the curricular programs, and the student population may require. The work assignments of the professional and support staff are commensurate with their qualifications and experience. The chief librarian should have a Master's degree in Library Science.

14.3 Book Collection:

The medical school library shall have a minimum of the following core book collection:

- a. Official textbooks 1 title per subject/discipline at 1 volume per 50 students of latest edition, aligned with the official prescribed textbooks of the Professional Regulatory Board of Medicine; 50% of the copies may be electronic
- b. Reference books at least ten (10) titles per subject/discipline not older than 10 years
- c. Journals (in print and/or online)
 - At least one (1) current subscription to peer-reviewed international medical journal per major subject or discipline.
 - At least ten (10) current peer-reviewed local medical journals listed in Western Pacific Region Index Medicus (WPRIM)
- d. Computer-based reference systems shall be provided and internet access shall be made available to students for a minimum of twenty (20) hours per semester.

Section 15. Facilities and Equipment

The medical school shall have adequate physical plant and other resources to support its various educational activities. It shall have not only classrooms but also laboratories needed for the program.

15.1 Classroom requirements.

The school shall provide appropriate physical space for the class size based on the following provisions:

- a. All students in the class should be comfortably seated
- b. The ventilation and temperature for the entire room should be conducive for learning and instruction.
- The audiovisual facilities should be clearly perceptible in all areas of the classroom

15.2 Laboratory requirements

- a. The laboratories shall have the necessary equipment to achieve the desired program outcomes based on the presented course syllabi and projected activities.
- b. It is not necessary that the facilities be highly sophisticated but they shall be adequate enough for the students to achieve the skills and competencies for specific learning objectives.
- c. It is a must for medical schools to have a skills laboratory before the students are exposed to actual patients.
- d. The facilities shall represent a variety of settings that are similar to the actual place of medical practice including community, ambulatory care facilities and in-patient care facilities.



15.3 Audio-visual equipment

The medical school shall have adequate audio-visual equipment and software necessary to achieve the desired program outcomes. These include film, slide and overhead projectors, film, tapes and CDs, charts, pictures and models.

Section 16. Base Hospital

- 16.1 The school must implement the major components of its clinical training program in the base hospital which should be at least a DOH-licensed Level III hospital with accredited residency training programs in medicine, surgery, pediatrics and OB-Gyn.
- 16.2 A base hospital can be utilized by only one (1) medical school.
- 16.3 The base hospital preferably, should be in the same city/province but MUST be within the region. Accessibility, safety of the students and faculty and a reasonable travel time should be considered.

Section 17. Students

17.1 Admission Policy and Selection:

The medical school must have admission policies including a clear description of the process of selection. The minimum criteria for admission should include:

- General Weighted Average Grade
- NMAT score

However, it is highly recommended that applicants undergo interview to assess non-academic qualities like:

- · Motivation to be a good physician
- · Social consciousness
- · Stress-tolerance
- Integrity

17.2 Standards for Admission

The Admission Committee shall implement the admission policies and standards set by College. Qualified applicants are recommended by the Committee for approval by the Dean.

17.3 Minimum Qualifications for Admission

Applicants seeking admission to the medical education program must have the following qualifications:

- a. Holder of at least a baccalaureate degree
- b. Must have taken the National Medical Admission Test (NMAT) not more than two(2) years from the time of admission, with a percentile score equivalent to or higher than that currently prescribed by the school or the Commission, whichever is higher;
- c. The applicant shall submit the following documents to the medical schools:



- Birth certificate and certificates of good moral character from two (2) professors in college
- · Official transcript of records
- Certified true copy of NMAT score

17.4 Certificate of Eligibility for Admission to Medical School

- a. On the basis of foregoing documents, the medical school is responsible for and accountable for the issuance of the Certificate of Eligibility for Admission to medical school.
- Foreign students must secure a Certificate of Eligibility from CHED Central Office prior to admission in any medical school in the country.
- c. Likewise, it is also the responsibility of the medical school to verify the authenticity of the NMAT score against the master list provided by the recognized testing center.

17.5 NMAT Score cut off

- a. An NMAT score cut-off of at least 40th percentile will be implemented by all higher education institutions offering medical program.
- Medical schools are hereby required to declare their NMAT cut-off score as part of their Annual Report (electronic and hard copy) to be submitted to CHED.

17.6 Transferees

The medical schools shall admit only transfer students with certificate of transfer credentials, provided that they are placed under probationary status for one (1) year.

17.7 Freshman quota:

- a. The medical school shall set a freshman quota subject to its carrying capacity based on its faculty resources and adequacy of teaching facilities available. The declared quota of the HEI shall be submitted to the Commission subject to validation
- b. No educational institution shall be established exclusively for foreign students. (Constitution Art. XIV, Section 4.)

17.8 Assessment of Students

- a. The school must define the methods used for assessment of student performance including standards for passing the assessment.
- The formative and summative assessment shall be consistent with the program outcomes.
- c. Comprehensive examinations shall be administered by the medical school at the end of second and fourth year.
- d. A copy of the examination result shall be included in the annual report to be submitted to CHED.

17.9 Student Support and Counseling

The school must provide student support including mentoring, counseling, immunization, healthcare, scholarships, and accident insurance whenever rotating outside the medical schools.



17.10 Student Representation

The school should state its policy on student representation and participation in the design, management and evaluation of the medical curriculum and other matters relevant to the students

Section 18. Instructional Standards

18.1 Curricular framework

The institution shall have a curricular framework which is consistent with its vision and mission.

18.2 Standard of Instruction

The medical college shall maintain a high standard of instruction to ensure the total effectiveness of medical students training for future professional practice.

18.3 Academic Setting

The teaching-learning activities shall be held in a variety of appropriate settings. These shall include adequately lighted, ventilated and equipped classrooms and laboratories, ambulatory care clinics, emergency unit and inpatient facilities, and industrial, community and family setting, etc. Overcrowding in the classroom, laboratory and other venues for instruction, needless to say, is not conducive to learning, and must not be allowed. For practicum in the clinical departments and Community and Family Medicine, the setting shall be as similar as possible to intended future places of practice.

18.4 Teaching Methods

Teaching methods shall utilize up to date techniques. Cases should reflect the disease on the top causes of morbidity and mortality of the country or region where the school is located.

18.5 Stakeholders.

The curriculum should be periodically evaluated by all stakeholders to ensure its relevance to the population health needs, changing patterns of medical practice, the social determinants of health, advances in medical science and innovations in medical education.

18.6 Assessment of Students.

The system of evaluation shall utilize appropriate methods of assessment of student competencies, knowledge, skills and attitude consistent with the desired program outcomes

18.7 Evaluation of Students.

The institution shall adopt a systematic plan of evaluation of student progress through the course. It should be consistent and congruent with the program outcomes, educational objectives and instructional methods set by the institution. Methods of formative and summative assessments including clinical examinations shall be developed and validated for this purpose.

18.8 Course Evaluation.

The students shall participate in evaluation of courses and teaching effectiveness of faculty.



18.9 Institutional Policies.

Institutional policies shall be made known to the medical students to serve as their guide in preparing for their courses.

18.10 Base Hospital.

The school must implement the major components of its clinical training program in the base hospital with Level III DOH classification with accredited residency training programs in medicine, surgery, pediatrics and OB-Gyn. A base hospital should be able to provide one (1) clinical material per clinical clerk at any given time. The base hospital must be located within the same geographical area specifically within the same city or province.

18.11 Faculty to Student Ratio per clinical department.

For every 100 students, there must be at least three (3) specialty-board certified faculty member in each of the four (4) major clinical departments.

18.12 Faculty to Student Ration per session.

For the various teaching-learning activities, the maximum faculty-student ratio is as follows:

Lectures	- 1:100*
Laboratory Sessions	- 1:25
Small-Group Tutorials (SGD)/ Preceptorships	- 1:10

^{*}a higher ratio maybe allowed if with adequate audio-visual facilities

18.13 Clinical Cases

Clinical materials should have the variety of patients that reflects the top common causes of morbidity and mortality in the country. A student should keep a personal log following a CHED-prescribed format on patients seen and procedures performed.

18.14 Patient load

Clinical materials shall be provided by the out-patient services with a load of at least fifty (50) patients per day and an in-patient service of one (1) occupied hospital bed per clinical clerk (4th year student) at any given time. Clinical materials are defined as patients who can be examined by medical students hands-on.

18.15 Affiliated Hospitals

To provide for adequate clinical exposure, other duly accredited hospitals/health facilities formally affiliated with the medical school may be utilized. However, the clinical program in such affiliated hospitals must conform with the course objectives set forth by the medical school. Consultants in the base or affiliate hospital who are participating in the teaching of medical students must receive appointment from the college and shall be assigned to directly supervise the students in the out-patient and in-patient services.

18.16 Obstetrics Cases

In Obstetrics, at least ten (10) maternity cases shall be followed through to delivery by each clinical clerk who must have actual charge of these cases under the supervision of a clinical preceptor.



18.17 Extension Services

The medical school shall provide extension services for instruction of medical students in Family and Community Medicine either independently or in cooperation with the Department of Health or other agencies.

18.18 Minimum number of Faculty

There should be at least twenty (20) full-time faculty members in a medical school at any time including faculty administrator. There should be at least one (1) full-time faculty member for every 50 students.

Section 19. Residence and Unit Requirements

19.1 Minimum Residence

No degree shall be conferred upon a student unless the last two (2) curriculum years of the medicine course were taken in the college which is to confer the degree.

19.2 Prerequisites.

Guidelines on pre-requisites shall be made part and parcel of the academic policies of the school. The rules on pre-requisite courses shall be strictly observed by medical institutions. No student shall be permitted to take up any subject until the pre-requisite courses are passed.

19.3 Promotions

No student shall be promoted to the next year level in case of an outstanding deficiency in the current year level. On a case to case basis and at the discretion of the Dean, a student who failed in a major subject may be given additional advanced minor loads, provided that the rules on pre-requisites are strictly observed.

19.4 Academic Dismissal

A student who fails in forty percent (40%) or more of the total annual academic load, in hours, at any year level shall be dropped from the rolls. A medical student who fails in the same subject/course twice at any year level shall be automatically dropped from the rolls. Medical schools may, however, prescribe a more stringent policy on dismissal due to academic deficiency.

19.6 New and transfer students shall be accepted only in the first semester of the academic year.

Section 20. Miscellaneous Provisions

20.1 Annual Report

The medical school shalf submit an annual report to CHED at the end of school year using the prescribed format.

20.2 Performance Evaluation

Performance of medical schools in the PLE and compliance with the existing standards for medical program shall be jointly monitored by CHED and PRC. Medical schools whose performance in the Physician's Licensure Examination is below the national passing average shall undergo consultancy visit by the accredited association of medical schools for technical assistance.



20.3 External Accreditation

Medical schools are encouraged to undergo external accreditation.

Section 21. CHED Evaluation for new Programs

21.1 Self Assessment tool

All higher education institutions intending to offer the Doctor of Medicine program must perform a Self-assessment/Study utilizing the CHED Monitoring and Evaluation tool for new program prior to submission of application.

21.2 Processing of Applications

All applications for new MD program shall be processed per provisions of CMO No. 2 s. 2004.

Section 22. Sanctions

22.1 Non-compliance with the provisions of this CMO, after due process, shall cause the Commission to impose sanctions. The sanctions for medical schools shall be based on the 3-year consolidated Physician Licensure Examinations (PLE) institutional performance and the outcome of the monitoring visits and shall adhere to the following guidelines.

22.2 Compliance of medical schools shall be based on the following major areas:

- a. Performance of their graduates in the Physicians' Licensure Examinations.
- b. The institutional passing average or performance of the graduates of medical schools in the PLE for the past three (3) years based on data provided by the Professional Regulatory Board of Medicine
- c. Outcome/result of the Joint CHED-PRC monitoring and evaluation activities
 - 1. Dean/Administration
 - 2. Faculty
 - 3. Curriculum and Instruction including Community program
 - 4. Students (Admission, Promotion and Retention)
 - 5. Base hospital and clinical materials
 - 6. Laboratory and physical facilities
 - 7. Library and Learning facilities
 - 8. Research

22.3 Overall Performance in the PLE

- a. The overall three-year PLE performance shall be computed as the Total number of First Time takers who passed the PLE divided by the total number of First time takers over the last three calendar years.
- b. Higher education institutions offering MD program whose overall three year performance in the PLE is fifty percent (50%) and below for the past three (3) consecutive calendar years (INITIALLY, for 2016, 2017, and 2018) shall be imposed sanctions based on the following:



Overall PLE Performance	Action/s	
30-50%	 Warning Admit only students with NMAT score of 50th percentile CHED monitoring visit in one (1) year 	
20-29%	 Probation Admit only students with NMAT score of 50th percentile CHED monitoring visit in 6 months 	
Below 20%	Phase out programStop admissions with gradual phase out	

22.4 Monitoring visits - Higher education institutions offering MD programs are subject to Joint CHED-PRC monitoring and evaluation. Sanctions for noncompliance shall be based on the following:

Non-Compliance with Areas of Evaluation in PSG	Action/s		
1 area	 Warning Admit only students with NMAT score of 50th percentile Revisit in 1 year Phase-out if non-compliant during the second visit 		
2 areas	 Probation Admit only students with NMAT score of 50th percentile Revisit in 6 months Phase out if non-compliant on the second visit 		
More than 2 areas	Phase out programStop admissions with gradual phase out		

ARTICLE VII QUALITY ASSURANCE

The policies, standards and guidelines is hereby issued to ensure high quality of medical education in the country. Medical schools are advised to undergo external accreditation.

Section 23. Continuous Quality Improvement

To ensure continuous quality improvement, HEIs are strongly encouraged to undergo quality assurance by an external accreditation body which conform with the minimum standards set by the World Federation for Medical Education (WFME).

For basic medical education programs which cannot qualify yet for external accreditation, the Commission, in coordination with the recognized association of



Philippine medical schools and recognized accrediting body will provide assistance to these schools to undertake self-study or self-assessment together with their developmental plans for improvement and will jointly work together until external accreditation becomes possible.

ARTICLE VIII TRANSITORY PROVISIONS

Section 24.

Higher education institutions that have previously been granted permit or recognition to offer the Doctor of Medicine program are required to fully comply with all the requirements set forth in this CMO within three (3) years after the date of effectivity. There shall be close monitoring of medical programs by the Commission.

ARTICLE IX REPEALING AND EFFECTIVITY PROVISIONS

Section 25. Repealing Clause

This order supersedes all previous issuances concerning medical education which may be inconsistent or contradictory with any of the provisions thereof.

Section 26. Effectivity Clause

This set of Policies, Standards and Guidelines shall take effect beginning Academic Year 2016-2017, fifteen (15) days after its publication in the Official Gazette or in a newspaper of national circulation.

Quezon City, Philippines, April 7, 2016

FOR THE COMMISSION:

PATRICIA B. LICUANAN, Ph.D.

Chairperson



Annexes

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Annex 1	International	Standard	Classification	of	Educational	Qualifications
	(ISCEd)					

Level	ISCEd 2011	Description	Corresponding ISCED 1997 level
0	Early childhood Education (01 Early childhood educational development)	Education designed to support early development in preparation for participation in school and society. Programmes designed for children below the age of 3.	None
0	Early childhood Education (02 Pre-primary education)	Education designed to support early development in preparation for participation in school and society. Programmes designed for children from age 3 to the start of primary education.	Level 0: Pre-primary education.
1	Primary education	Programmes typically designed to provide students with fundamental skills in reading, writing and mathematics and to establish a solid foundation for learning.	Lovel 1. Drimony advection or
2	Lower secondary education	First stage of secondary education building on primary education, typically with a more subject-oriented curriculum.	Level 2: Lower secondary education or second stage of basic education
3	Upper secondary education	Second/final stage of secondary education preparing for tertiary education and/or providing skills relevant to employment. Usually with an increased range of subject options and streams.	Level 3: Upper secondary education
4	Post-secondary non-tertiary education		Level 4: Post-secondary non- tertiary education



		labour market entry and/or tertiary education. The content is broader than secondary but not as complex as tertiary education.	
5	Short-cycle tertiary education	occupationally-specific and prepare for labour market entry. These programmes may also	Level 5B: First stage of tertiary education: typically shorter,
6	Bachelor or equivalent	provide intermediate academic and/or professional knowledge, skills and competencies leading to a first tertiary	Level 5A: First stage of tertiary education: largely theoretically based programmes intended to provide qualifications for gaining entry into more advanced research programmes and professions with higher skills requirements.
7	Master or equivalent	provide advanced academic and/or professional knowledge, skills and competencies leading to a second	Level 5A: First stage of tertiary education: largely theoretically based programmes intended to provide qualifications for gaining entry into more advanced research programmes and professions with higher skills requirements.
8	Doctoral or equivalent	concluding with the submission and defence	Level 6: Second stage of tertiary education (leading to an advanced research qualification).



	A. Program Outcomes, Competency Standards and Performance Indicators
Annex 2	B. Sample Program Outcomes and Curricular Goals
	C. Sample Competencies
	D. Sample Instructional Design
	E. Sample Course Syllabus

Annex 2 A. Program outcomes, competency standards, and performance indicators in medical degree program

indicators in me	dical degree program	
Program Outcomes/Learning Outcomes	Competency Standards	Performance Indicators
Competently manage clinical conditions of clients in various settings	Given a clinical situation in any setting/workplace, the medical graduate should be able to: 1. Establish effective rapport 2. Obtain accurate history 3. Perform thorough physical examination 4. Formulate appropriate diagnostic plan including alist of differential diagnosis and established clinical diagnosis 5. Develop a client-centered management plan 6. Maintain an accurate and complete medical record 7. Refer cases appropriately	 Comprehensive portfolio of graduates enumerating successful clinical cases and problems solved, clinical procedures performed, including those with complications and how they were resolved, Satisfactory performance in the licensure examination for physicians Certificate of satisfactory completion of clinical clerkship not only in the hospital but also in the community and appropriate specialized public health care facility.
2. Convey information, in written and oral formats, across all types of audiences, venues and media in a manner that can be easily understood	Given various settings and purposes, the medical graduate should be able to: 1. Listen actively to process information 2. Explain clearly relevant information to client and family 3. Secure client's cooperation and consent 4. Communicate effectively with other health professionals and stakeholders 5. Utilize information technology efficiently 6. Convey messages effectively using various forms of communication	 Submit actual communication, plan, lesson plan, presentation for public or lay forum, etc educating a given audience on selected health issues, Competently use information and communication technology in the presentations for better, and more convenient exchange
 3. A. Initiate planning, organizing, implementation, and evaluation of programs and health facilities, 3.B. Provide clear direction, inspiration, and motivation to the healthcare team/community 	Given a program to manage or a health team to lead, the medical graduate should be able to: 1. Initiate planning, organizing, implementation and evaluation of programs and health facilities. 2. Provide clear direction, inspiration and motivation to the healthcare team	1. Submission of actual organization and management plan implemented to address certain health issues or problems during formal medical education, 2. Actual statements of support, policy statements, and position papers calling on selected constituents to support given health issues



Program Outcomes/Learning Outcomes	Competency Standards	Performance Indicators
4. A. Utilize current research evidence in decision making as practitioner, educator or researcher 4.B. Participate in research activities.	Given different data and information, the medical graduate should be able to: 1. Critically appraise relevant literature 2. Apply research findings into practice appropriately Given a clinical dilemma, the medical graduate should be able to: 1. Formulate sound, relevant. and viable research questions 2. Consider an appropriate research design 3. Gather data systematically, 4. Apply appropriate statistical analysis, 5. Write a cohesive research paper, and 6. Disseminate research outputs	Present a comprehensive research portfolio Submit actual critical appraisals of relevant literature Submit copies of research projects, publications of completed, proposed, on going, etc.
5. Effectively work in teams with cophysicians and other professionals in managing clients, institutions, projects, and similar situations	Given different scenarios, the medical graduate should be able to collaborate appropriately with other healthcare providers and other health professional groups	Show certificates of membership to selected and relevant professional societies, Present a portfolio of cases referred and co-managed with other physicians and professionals
6. A. Utilize systems-based approach in actual delivery of care, 6.B. Network with relevant partners in solving general health problems	Given a clinical situation in any setting/workplace, the medical graduate should be able to: 1. Relate social determinants to health and illness, 2. Utilize each component of the health system for optimum care, and 3. Advocate for partnership with related government and non-government agencies	1. Identify relevant health care facilities in strategic geographic places for efficient delivery of care, 2. Enumerate lists of actual partners that have been involved in health care delivery from the national, to regional, and local levels
7. Update oneself through a variety of avenues for personal and professional growth to ensure quality healthcare and patient safety.	Given different scenarios in any workplace, the medical graduate should be able to: 1. Pursue lifelong learning and personal growth, 2. Acquire transferrable skills, and 3. Demonstrate integrity, compassion, gender sensitivity, resourcefulness	Proofs of active participation in a series of continuing professional development in relevant areas, Completion of formal or informal, short- or long-term training or studies to enhance clinical management
8. Adhere to national and international codes of conduct and legal standards that govern the profession.	 Demonstrate professionalism, Comply with ethical and legal standards, and Adhere to the Oath of Professionals and the Hippocratic Oath 	1. Proof of no pending administrative, legal, or medicolegal case 2. Service record to a relevant facility where professional practice is recognized 3. Membership in the official organizations of medical practitioners, civil or government service, etc.



Program Outcomes/Learning Outcomes	Competency Standards	Performance Indicators
9. Demonstrate love for one's national heritage, respect for other cultures and commitment to service	Given different scenarios in any setting/workplace, the medical graduate should be able to: 1. Demonstrate responsible citizenship, 2. Exhibit cultural competence, and 3. Serve with dedication	Certificates of participation in community and civic organizations, medical missions, etc. Submission of Statement of Assets and Liabilities Use of Official Receipts in clinics Evidence of other services rendered to the public, professional groups, etc. Proof of Filipino citizenship
10. Adhere to the principles of relevance, equity, quality, and cost effectiveness in the delivery of healthcare to patients, families, and communities	Given different scenarios in any setting/workplace, the medical graduate should be able to: 1. Address the health needs of the patients, family, and community providing health promotion, disease prevention, cure, and rehabilitation, 2. Utilize clinical practice guidelines, quality assurance methods to provide high quality care, 3. Deliver quality care to all patients regardless of socio-economic status, political affiliations, religious belief, ethnicity and gender, and 4. Utilize appropriate resources in the application of evidence-based data.	graduates enumerating successful clinical cases and problems solved, clinical procedures performed, including those with complications and how they were resolved 2. Proofs of involvement and active participation in various health or socially-relevant community endeavors,



Annex 2 B. Sample Program Outcomes and Curricular Goals

Pr	ogram Outcomes/Core Competencies	Sample Curricular Goals
1.	Competently manage clinical conditions of clients in various settings	 Correlate the clinical presentation with mechanism of illness Select the most appropriate diagnostic plan Formulate the most appropriate plan of management (pharmacologic & non-pharmacologic) Anticipate possible complications (disease-related and treatment-related) Educate patient and family regarding disease prognosis, management Formulate health and wellness plan for patient and families
2.	Convey information, in written and oral formats, across all types of audiences, venues and media in a manner that can be easily understood	Utilize available forms of communication Make use of information technology efficiently Practice effective and clear communication amongst learners, teachers and clients
3.	A. Initiate planning, organizing, implementation, and evaluation of programs and health facilities, B.Provide clear direction, inspiration, and motivation to the healthcare team/community	 Assume leadership role in any health care team he is situated Implement healthcare programs as planned Monitor process and outcomes of health programs
4.	A. Utilize current research evidence in decision making as practitioner, educator or researcher, B. Participate in research activities	 Critically appraise relevant literature Create a research proposal using information from critically appraised literature Correlate research findings with mechanisms of disease and management of illness
5.	Effectively work in teams with co- physicians and other professionals in managing clients, institutions, projects, and similar situations	Demonstrate the attributes of collaboration with co-learners Identify the relevant agencies in the health profession
6.	A. Utilize systems-based approach in actual delivery of care B.Network with relevant partners in solving general health problem	 Formulate an inventory of health care issues in the community diagnosis Identify the relevant health care agencies that exist in the community
7.	Update oneself through a variety of avenues for personal and professional growth to ensure quality healthcare and patient safety.	Exhibit the attribute of a motivated, self-directed learner Demonstrate the attributes of integrity, compassion, gender sensitivity, resourcefulness in the dealings with colearners, academic and non-academic staff Perform transferrable skills under supervision



Program Outcomes/Core Competencies	Sample Curricular Goals
8. Adhere to national and international codes of conduct and legal standards that govern the profession.	 Demonstrate professionalism with colearners, academic, non-academic staff and clients Apply ethical and legal standards on hypothetical cases Explain the Oath of Professionals and Hippocratic Oath
 Demonstrate love for one's national heritage, respect for other cultures and commitment to service. 	 Demonstrate the attributes of responsible citizenship, and cultural competence in dealing with co-learners, academic, non-academic staff and clients Exhibit cultural sensitivity in dealing with co-learners, academic, non-academic staff and clients Manifest the attribute of dedication to service
10. Adhere to the principles of relevance, equity, quality, and cost effectiveness in the delivery of healthcare to patients, families, and communities	 Use evidence-based data and appropriate technology in the delivery of comprehensive health care within socio-cultural context Formulate plan to make optimum health care available to all Recommend solutions to the most important health issues and disease problems



Annex 2 C. Sample Competencies

Goal	Learning objectives	Knowledge	Skills	Attitudes	
Explain relevant	At the end of year level 4, medical students in various settings should be able to:				
relevant information clearly	Explain to the patients & their family, the condition, diagnostic and management options, and prognosis	Epidemiology, pathophysiology, S/Sx, Dx, Mx (pharma & nonpharma, complications, prognosis, follow up	Hx, PE, Verbal & non-verbal communication skills, listening skills, synthesis of information, documentation	Honesty, compassion, empathy, cultura competence, sensitivity, resourcefulness, professionalism	
	Explain health issues relevant to a group in a community	Epidemiology, community dx & resources, current health issues, impact of diseases in the community, social determinants of health, health promotion, disease prevention, basic principles of teaching	Interpersonal skills, networking skills, teaching skills, tow to make information and communication materials		



Annex 2 D. Sample Instructional Design in Pediatrics (Level IV)

Program Outcome	Learning objectives	Content	Teaching- Learning Activities	Resou rces	Assessment
Clinical Competence	At the end of clinical rotation in Pediatrics, YL4 students should be able to explain to the patients & their family, the condition, diagnostic and management options, and prognosis	Diagnosis and management of common pediatric diseases Principles of communication with different pediatric age groups Basic principles of teaching Professional ethics Social determinants of health 1. Levels of prevention	Ward work Case discussion Conferences Bedside rounds Journal report	All clinical setting s Acces s to library and on-line collections Preceptors Video camer a	A. Formative 1. Bedside assessment 2. Video- recorded ward work 3. Self- assessment (reflection paper) B. Summative 1. OSCE 2. Written examination 3. Journal reports 4. Case presentation



Annex 2 E. SAMPLE COURSE SYLLABUS IN HUMAN PHYSIOLOGY

Please follow the outline below (with my edited version in the previous pages) in presenting the syllabus below.

- Course name/title/number
- Course description
- Credit units with equivalent number of hours
- Students
- Venue
- Entry competencies
- Learning objectives and learning outcomes
- · Teaching learning activities
- Suggested textbooks and references
- Other Resources required
- Assessment and evaluation

I. Course name/title/ number

II. Course Description

The study of the physiology of the cell, the nervous system, the muscular system, the cardiovascular system, blood and immunity, the respiratory system, the renal system, fluid electrolyte and acid-base balance, the gastrointestinal system and the endocrine system. Special topics like sports physiology, fetal and neonatal physiology, aviation, space and underwater physiology, and physiology of aging are also included.

It is handled by faculty members from various fields of medicine such as anesthesiology, cardiology, gastroenterology, hematology, infectious medicine, nephrology, obstetrics and gynecology, ophthalmology, pediatrics, pulmonology, surgery and toxicology.

- III. Credits: explain this further in terms of units: It is given eight (8) hours a week on a twice a week basis that covers lecture and laboratory sessions for a total of 276 hours a year or 8 credit units.
- IV. Explain venue and entry competencies: add here the year level: first year medical students

V. Learning Outcomes

Following the outcome-based curriculum, Human Physiology will be geared towards enabling the first year medical student to achieve the following learning outcomes with their corresponding level of emphasis:* please revise these based on the final list (refer to previous sections)

Learning Outcomes	Level of emphasis
1- Demonstrate clinical competence	Practiced
2- Communicate effectively	Practiced
3- Lead and manage health care teams	Introduced
4- Engage in research activities	Practiced



5- Demonstrate interprofessionalism	Introduced
7-Engage in continuing personal and professional development	Practiced
8-Adhere to ethical, professional and legal standards.	Practiced

^{*}Taken from Physiology curricular map (1P, 2P, 3I, 4P, 5I, 7P, 8P)

VI. Course Objectives

First year medical students who have completed this course should be able to:

- 1. Integrate the normal functions of the different organ systems of the body, the pathophysiologic mechanisms of diseases usually seen in the community and the physiologic principles involved in the treatment of these diseases.
- 2. Convey information, in written and oral formats to their classmates and faculty members utilizing different types of audiovisual resources.
- 3. Plan, organize and implement selected acquired physiologic principles through the different teaching-learning strategies like case discussions, small group discussions, and laboratory conferences.
- 4. Solve problems, and critically analyze given data from case studies and laboratory experiments.
- 5. Effectively work as a team with co-students, faculty staff and other professional in managing with assigned projects in Physiology.
- 6. Pursue lifelong learning and personal growth through self-directed learning
- 7. Develop attitudes and values essential for a primary health care physician

VII.Course Content

In order to facilitate learning in Human Physiology, the topics are clustered into blocks. There eight blocks and their focused topics are as follows:

Blocks	Focused topics			
Generalities	Cell physiology Nerve physiology (nerve, synapse, signal transduction, reflexes and autonomic nervous system) Muscle physiology (skeletal, cardiac and smooth)			
Gastrointestinal physiology	G.I. I (motility) G.I. II (secretions)			
Hematology and Immunology	Hematopoeises Hemostasis Immunology I (Innate) Immunology II (Adaptive)			
Cardiovascular physiology	Electrical properties (EKG) Heart as a pump I and II Hemodynamics Cardiovascular regulation Circulation to special regions of the body			
Respiratory physiology	Respiratory physiology I (oxygen delivery) Respiratory physiology II (ventilation and perfusion) Respiratory physiology III (work of breathing)			
Renal physiology	Renal I (Urine formation) Renal II (Urine concentration) Fluid and electrolytes Acid –base balance			



Endocrine physiology	Hypothalamus-pituitary Thyroid physiology Bone and parathyroid physiology Pancreas Adrenals Reproductive system
Special topics	Fetal physiology Geriatric physiology Aviation, space and underwater physiology Sports physiology Smoking

The Academic Year is divided into four shifting periods. Two blocks are taken during each shifting period.

VIII. Credit Units And Equivalent Hours

Topics/subtopics	T-L Strategies (hours)			Time Allotment (hours)	
	Lec	Lab	SGD/Figure Review/Self- Directed Learning/Worksho ps/ conferences	Written Examinati on	
Generalities	2.5	2	2.5	1.5	8.5
Nerve Physiology	7.5	3	7.5	2.5	20.5
Muscle Physiology	5	3	5	2.5	15.5
Hematology	5	3	8	2.5	18.5
Respiratory Physiology	7.5	3	14.5	3.5	28.5
Cardiovascular Physiology	15.5	3	25	5.5	49
Renal Physiology	10	3	17	3	33
Immunology	7.5	3	6.5	2	19
GI Physiology	7.5	3	4.5	3	18
Endocrine Physiology	15	3	15	4.5	37.5
Applied Physiology	9	0	16	3	28
Total	92	29	121.5	33.5	276 (8 units)



IX. Resources

Learning materials like reference books, journals and manuals are available in the medical library.

Computers are available in the Medical Informatics Center (MIC) where students gain access to internet, view Multimedia Teaching Aid Projects (MTAP) prepared by students of previous years.

Physiology@UST400 which contains 400 must know concepts in physiology; uploaded using the Blackboard System of the ELEAP can also be access at the MIC or at home.

The laboratory is equipped with the latest version of Powerlab/Lab Tutor 4 where students use it to perform experiments in a well-controlled environment. The results are automatically recorded and can be shared with students of different sections. Students used build-in computer programs to compute and analyze the data. Other laboratory equipments & apparatuses are constantly upgraded.

Official Textbook

Physiology (Updated Version) by Berne R, Levy M. Koeppen B, Stanton B, 6th edition, 2010

Reference Textbooks:

- 1. Essential Medical Physiology by Johnson L, 3rd edition, 2003
- 2. Basic Immunology by Abbas A & Lichtman A, 3rd edition updated, 2011
- 3. Vander's Human Physiology by Widmaier E, Raff H, Strang K, 12th edition, 2011
- 4. Medical Physiology by Boron W. Boulpaep E, 2nd (Updated edition), 2011
- 5. Textbook of Medical Physiology by Guyton A, Hall J, 12th edition, 2011
- 6. Review of Medical Physiology by Ganong W, 23rd edition, 2010

X. Evaluation

Written examination

- for each lecture topic
- pre-laboratory experiments
- pre- and post-laboratory conference
- pre- and post-laboratory synthesis part of case-based discussion.

Performance rating scale

- Small group discussion
- Figure review
- Case discussion
- MTAP presentation

Class attendance frequency

Laboratory Performance checklist

Online rating scale

- Self-directed learning - critical appraisal of online resources



Annex B: SAMPLE INSTRUCTIONAL DESIGN IN GASTROINTESTINAL PHYSIOLOGY Topic: GI Physiology

Student: 1st Year Medical Students

Venue: Plenary lecture: Rm 404; Individual SGD rooms, Physiology Laboratory Rm 216

Number of hours: 18 hours

Schedule: Sections A&C: M&W 7-11am; Sections B&D: T & Th 12-4pm

Module/unit Description: GI Physiology is taken up during the second semester. It consists of GI 1 on Cephalic, Oral and Esophageal Functions; GI 2 on Gastric, Intestinal and Colonic Phases of the Integrated response to a Meal and GI 3 on Liver and Gallbladder Physiology. Instructional activities include plenary lectures, Small group discussion, Figure Review activities, Case discussions and Laboratory experiments.

Entry competencies: prior knowledge in cellular processes, autonomic nervous system

Learning Outcomes: please refer to the new and final list of program outcomes Learning objectives: Students who have completed thus init should be able to:

1. Demonstrate competence and effective communications skills involving (1P,2P)

a. physiologic mechanisms governing the GIT systems

- correlation of clinical conditions that results from impaired GI physiologic processes
- Analyze a given GI physiologic data using information technology and other resources (4P)

3. Conduct self-directed learning on selected topics in GI Physiology (8P)

- Interact with fellow students, faculty staff and non-academic personnel tactfully, using appropriate language, speech patterns and nonverbal communication (2P, 3I, 5I)
- 5. Demonstrate a caring and respectful approach during classroom encounters (8P)

After the topic on GI Physiology, given the first year medical student should be able to:

Learning Objectives and Learning Outcomes addressed	Content	T-L Activities	Resources	Evaluation
Explain all the physiologic mechanisms involved in the Gr systems given a given case (1P,2P,4P,7P)	Physiologic mechanisms: secretion of enzymes, gastrointestinal motility, digestion, absorption, excretion GI physiologic events: chewing,	 Plenary lecture by faculty Small group discussion Review of figures Simulation exercises using multimedia resource: Four GI processes Case discussion self-directed learning- Critical 	1. Textbooks: - Berne & Levy 2. Classroom in large group setting 3. Case: Peptic Ulcer Disease 4. Laboratory equipment & facilities 5. Technical f	scale - SGD - Figure review - Case



	salivation, GI motility: from the esophagus to the rectum	appraisal of online resources	laboratory assistant	
Correlate clinical events with impaired physiologic processes (1P ,2P)	Common GI disorders: acid-related disorders, motility disorders, hepatobillary disorders	7. Small group discussion: GI 1 Physiology: Cephalic, Oral and Esophageal Functions GI 2 Physiology: Gastric, Intestinal and Colonic Phases of the Integrated response to a Meal GI 3 Physiology: Liver and Gallbladder Physiology		Performance rating scale - SGD Class attendance frequency
Collaborate as a group demonstrating the following attributes of teamwork, collaboration, and diligence in dealing with classmates, faculty and non-academic staff		8. Laboratory experiment : GI Motility 9. SGD 10. Case discussion		Laboratory Performance checklist Performance rating scale - SGD - Case discussion
(1P,5P,8P) Synthesize the GI laboratory results and other information during the GI post- laboratory conference into a comprehensive oral report. (1P, 2P, 4P)		11. Laboratory Conference		Performance rating scale - Laboratory conference
Present a collaborated multimedia teaching aid group presentation showing selected GI physiologic mechanisms (1P,2P,4P)		12. Multimedia Teaching Aid Project (MTAP) sessions		Performance rating scale - MTAP presentation



*Learning outcome: 1- clinical competence; 2- communication skill; 3- leadership and management; 4- management of research; 5- interprofessionalism; 7- personal and professional development; 8- ethical, professional and legal standards

Degree of emphasis: I- introduced; P- practiced; D- demonstrated

SMALL GROUP DISCUSSION (Sample Evaluation Tool)

Group Participation 60%	
Content knowledge 15%	
No state and the state of the s	
www	
□ = □	
Group participation 15%	
Sub	
www.	
С а и С <u>СССССССССССССССССССССССССССССССССС</u>	AND THE GOLD STATE OF STATE OF SELECTION
Communication skills 15%	
[[5][5][5][5][5]	
Group motivation 15%	
	1
	
Individual participation (Frequency	
of significant participation) 35%	
Attendance 5%	



Legend of Ratings:

Identified Program Outcomes shall be indicated by the corresponding numbers as shown below:

- 1. Demonstrate clinical competence
- 2. Communicate effectively
- 3. Lead and manage health care teams
- 4. Engage in research activities
- 5. Collaborate within interprofessional teams
- 6. Utilize systems-based approach to healthcare
- 7. Engage in continuing personal and professional development
- 8. Adhere to ethical, professional and legal standards.
- 9. Demonstrate nationalism, internationalism and dedication to service
- 10. Practice the principles of social accountability

Program Outcomes shall be categorized as shown below:

- I introduced (program outcomes are merely introduced in the course)
- P practiced (program outcomes are not just introduced but practiced in the course), and
- D- demonstrated (program outcomes are practiced, demonstrated and assessed in the course)

Sample Curricular Map for the Basic Sciences

Group of courses	Year I	Year II	Year III
1. Anatomy & Histology	1P, 2P, 3I, 4I, 5I, 7P, 8P		
2. Physiology	1P, 2P, 3I, 4P, 5I, 7P, 8P		
3. Biochemistry	1P, 2P, 3I, 4P, 5I, 7P, 8P, 9P		
4. Microbiology & Parasitology		1P, 2P, 3P, 4P, 5I, 7P, 8P, 10I	
5. Pathology		1P, 2P, 3P, 4P, 5I, 7P, 8P	1D, 2P, 3P, 4P, 5P, 7P, 8P
6. Pharmacology		1D, 2P, 3P, 4P, 5I, 6I, 7P, 8P, 9P, 10I	
7. Legal Medicine & Jurisprudence			1D, 2D, 3P, 4P, 5I, 6P, 7D, 8D, 9P, 10P



Sample Curricular Map for the Clinical Sciences

	Groups of courses	Year I	Year II	Year III	Year IV
1.	Medicine		1P, 3P, 2P, 4P, 5P, 6I, 7P, 8P, 9P, 10P	1D, 2D, 3P, 4D, 5D, 6P, 7D, 8D, 9P, 10P	1D, 2D, 3P, 4D, 5D, 6P, 7D, 8D, 9D, 10D
2.	Pediatrics		1P, 3P, 2P, 4, 5P, 6I, 7P, 8P, 9P, 10P		1D, 2D, 3P, 4D, 5D, 6P, 7D, 8D, 9D, 10D
3.	Obstetrics- Gynecology		1P, 2P, 3P, 4P, 5, 6I, 7P, 78, 9P, 10P	1D, 2D, 3P, 4D, 5D, 6P, 7D, 8D, 9P, 10P	1D, 2D, 3P, 4D, 5D, 6P, 7D, 8D, 9D, 10D
4.	Surgery: Ophthalmology, ENT, Anesthesiology, Orthopedics		1P, 2P, 3P, 4P, 5P, 6I, 7P, 8P, 9P, 10P		1D, 2D, 3P, 4D, 5D, 6P, 7D, 8D, 9D, 10D
5.	Preventive Medicine & Public Health	1P, 2P, 3I, 4P, 5I, 6I, 7P, 8P, 9I, 10I	1P, 2P, 3P, 4D, 5D, 6P, 7P, 8P, 9P, 10P		1D, 2D, 3D, 4D, 5D, 6D, 7D, 8D, 9D, 10D

Sample Curricular Map for Other Courses

	Groups of courses	Year I	Year II	Year III	Year IV
1.	Neuroscience*	1P, 2P, 3I, 4I, 5I, 7P, 8P	1P, 2P, 3P, 4P, 5P, 6I, 7P, 8P, 9P, 10P	1D, 2D, 3P, 4D, 5D, 6P, 7D, 8D, 9P, 10P	
2.	Psychiatry*		1P, 2P, 3P, 4P, 5P, 6I, 7P, 8P, 9P, 10P	1D, 2D, 3P, 4D, 5D, 6P, 7D, 8D, 9P, 10P	1D, 2D, 3P, 4D, 5D, 6P, 7D, 8D, 9D, 10D
3.	Leadership & Management, Health Policy & Health Laws*	2P, 3l, 4l, 5l, 6l, 7P, 8P, 9l, 10l	2P, 3P, 4l, 5l, 6l, 7P, 8P, 9l, 10P		2D, 3D, 4D, 5D, 6D, 7D, 8D, 9D, 10D
4.	Geriatrics		1P, 2P, 3P, 4P, 5P, 6I, 7P, 8P, 9P, 10P		1D, 2D, 4D, 5D, 6P, 7D, 8D, 9D, 10D
5.	Patient Safety*	1P, 2P, 3I, 4P, 5I, 6I, 7P, 8P, 9I, 10I	1P, 2P, 3P, 4D, 5D, 6P, 7P, 8P, 9P, 10P	5D, 6P,7P,	1D, 2D, 4D, 5D, 6D, 7D, 8D, 9D, 10D
6.	Disaster Risk Reduction and Management*	1P, 3I, 2P, 4P, 5I, 6I, 7P, 8P, 9I, 10I	1P, 2P, 3P, 4D, D, 6P, 7P, 8P, 9P, 10P		1D, 2D, 3P, 4D, 5D, 6D, 7D, 8D, 9D, 10D
7.	Interprofessional education*	31, 51, 101	5P, 10P	5P, 10P	5D, 10D

^{*} To be integrated into other subjects as appropriate



CHED-prescribed Student Logbook on patients seen and procedures performed Annex 4

Sample Student Logbook on Patients Seen and Procedures Performed

(page 1)

Semester, AY

Supervisor's Signature											
Monitor's Signature											
Procedures											
Diagnosis											
Department											
Name of Patient											
Date											



(page 2)

Sample Procedures Performed

Psychômotor Skills Outcomes

Procedural Skills for 4th year medical student:

Procedures Performed	ned Date	Venue	Subject		Super	Supervised	Signature of Supervisor
(example)	2		Mannequin Patient Yes	Patient	Yes	No	
Excision of skin cysts							
NGT Insertion							
IV insertion							
Suturing							
Folley catheter insertion							
Lumbar tap							
Circumcision							
Basic Life Support							
ACLS							
Normal Vaginal Delivery							
Immunization							
Breastfeeding counseling							
Tuberculin skin test							
PAP Smear							



Annex 5	Annual Report Form	n to CHED
	ORT FOR MEDICAL (M.I d at the End of the Scho	
Name of the Ins	titution:	
Address:		
Program:		Duration/No. of Years Date issued: Effectivity:
Government Re	cognition: Number	Date issued:
External Accred	itation: Accred	diting Agency:Effectivity:
Tel/Fax:	Email:	website:
Name of Dean:		
Date of Submiss	sion:	
. FACULTY PR	OEII E	
A. List of Facul	ty Members who are he	olders of MA/MS/PhD
Name of Facult	ty	MA/MS/PhD degree (year obtained)
B. List of Facu the Year Name of Facult		Specify Local / International Conference
C. List of Facul		cation(s) in Refereed Journals during the Year Specify Title & Journal
D. Total Numbe	Full Time	
	stitution have a Medic when?	al Education Unit? Yes No who is the head?



II. ADMISSIONS

A. Statement Policy on NMAT Score

(Please declare admission policy on NMAT Cut-off score set by the medical school)

B. Basis for Admission

Admission Requirement/s	Weight (%)	Minimum Rating Requirement to be Admitted, if any
General Weighted Average Grade (GWAG)		
NMAT Score		
Interview Score	The Marie	
Others		

C. Number of Students Admitted

1.	What is your	DECS,	Ministry	of	Education/CHED-APPROVED	quota	for	freshmen
	admission?							
2	What is your s	uggeste	d quota?					

Name	Gend	er	NMAT Score	Pre-Medical Progra	ım	
	Male	Femal e		Name of School	Course/ Program	GWAG

D. Summary of Admitted Students

	Total number											
D.2	Proportion	of	admitted	students	with	NMAT	Score	of	more	than	40th	percentile:
-	%											
D.3	Proportion o	fac	lmitted stu	dents with	Latin	Honors:				%		
D.4	Proportion %	of	admitted	students	who	are tra	nsferee	s f	rom o	ther r	nedic	al schools:

III. ENROLMENT DATA

Year	Female	Mala	No. of Stu	No. of Students						
Level	remale	ware	Regular	Irregular	On Leave	Togal de la				
1					FINE BUT STORY					
2										
3										
4	Part of the last									



B. List of Stude	nts per Year Level			
Year Level	Name of Students			
			Let Marian	
C. List of Irregu	lar Students			
Year Level				
D. List of Stude	nts who are on Leave-of-	Absence		
Year Level	Name of Students			
				Maria Balance
E. List of Stude	nts who Dropped out in th	ne College		
E. List of Stude Year Level	nts who Dropped out in the	ne College		
		ne College		
		ne College		
		ne College		
Year Level	Name of Students		d Year 4	
Year Level F. Results of Co	Name of Students omprehensive Examinatio		d Year 4	
Year Level	Name of Students omprehensive Examinatio			
Year Level F. Results of Co	Name of Students omprehensive Examinatio			
Year Level F. Results of Co	Name of Students omprehensive Examinatio			
Year Level F. Results of Co	Name of Students omprehensive Examinatio me of Student			
F. Results of Co Year Level Na	Name of Students Description of Students Description of Student N			
F. Results of Co Year Level Na V. GRADUATIO	Name of Students Description of Students Description of Student N	ns at Year 2 an	Score	
F. Results of Co Year Level Na V. GRADUATIO	Name of Students Description of Students Description of Student N	ns at Year 2 an	Score eral Weighted	Class Rank
F. Results of Co Year Level Na V. GRADUATIO	Name of Students Description of Students Description of Student N	ns at Year 2 an	Score	Class Rank
F. Results of Co Year Level Na	Name of Students Description of Students Description of Student N	ns at Year 2 an	Score eral Weighted	Class Rank

