



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



CHED MEMORANDUM ORDER (CMO)
NO. 21
Series of 2013

**SUBJECT : MODEL EMBEDMENT OF TVET COMPETENCIES/ QUALIFICATIONS IN THE
LADDERIZED BACHELOR OF SCIENCE IN RESPIRATORY THERAPY PROGRAM**

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In accordance with the pertinent provisions of Republic Act (RA) No. 7722 otherwise known as the “Higher Education Act of 1994,” and by virtue of Resolution No. 474-2013 of the Commission En Banc dated June 11, 2013, the model embedment of Technical and Vocational Education and Training (TVET) Training Regulation (TR) in the Bachelor of Science in Respiratory Therapy Program is hereby adopted and promulgated by the Commission.

**ARTICLE I
AUTHORITY TO OPERATE**

Section 1 Authority to Operate

All Private Higher Education Institutions (PHEIs) with recognized Bachelor of Science in Respiratory Therapy (BSRT) granted by the Commission on Higher Education (CHED) and by the respective Governing Boards in the case of chartered State Universities and Colleges (SUCs), Local Colleges and Universities (LCUs) intending to offer ladderized BSRT shall submit to CHED the necessary documents required by CMO No. 43 series 2008, Implementing Guidelines of Executive Order No. 694 entitled “Enabling Higher Education Institutions to Opt to Ladderize their Education Programs Without Need for Issuance of Permit from the Commission on Higher Education and the Technical Education and Skills Development Authority.”

**ARTICLE II
CURRICULUM**

Section 2 Curriculum Description

The model embedment of BSRT curriculum with embedded TVET qualifications shall be adopted as the minimum requirement and shall be built as prescribed in “CMO No.09, S. 2007 – Policies and Standards for Bachelor of Science in Respiratory Therapy Program” for the completion of the ladderized BSRT program. The TVET qualifications embedded in this curriculum include but not limited to the following:

TVET Qualification/s

- | | |
|-----------------|---|
| Track 1: | Health Care Services NC II |
| Track 2: | Emergency Medical Services NC II |

Section 3 Curriculum Outline

The curriculum outline is divided into four (4) components namely: General Education Courses, Basic Respiratory Therapy Courses, and Practicum / Work Integrated Learning.

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Identified relevant TVET Competencies / Qualifications for BS Respiratory Therapy are embedded in General Education and additional courses.

Section 4 Faculty Qualifications and Other Requirements

HEIs which intend to offer the ladderized BSRT program should satisfy the requirements as prescribed in CHED Memorandum Order No.09, S. 2007 and TESDA Training Standards requirements (curriculum design, training delivery, laboratory facilities, equipment and tools, faculty/trainer qualifications as indicated in the specific Training Regulations) as prescribed in CMO No. 43, s. 2008.

Section 5 Recognition of TESDA National Certificates in CMO No. 09 series 2007

HEIs may accept a holder with valid relevant TESDA National Certificates who wish to pursue BSRT program. Such certificates may be given credit units upon verification by the concerned HEIs. Further, the Transcript of Records shall reflect the grade of "Passed" and TESDA NC level.

Section 6 Model program of study

The institution may enrich the sample/model program of study depending on the needs of the industry, provided that all prescribed courses required in the curriculum outline are offered and pre-requisite and co-requisite are **complied with**. Please refer to **ANNEX I**.

**ARTICLE III
GENERAL REQUIREMENTS**

Section 7 The general requirements for the Bachelor of Science in Respiratory Therapy Program are contained in **CMO 09, S. 2007**.

**ARTICLE IV
MONITORING AND EVALUATION**

Section 8 Upon effectivity of this Memorandum Order, the CHED and TESDA will initially conduct an evaluation of the HEIs that will offer the ladderized program prior to implementation. Thereafter, the CHED and TESDA representatives shall jointly monitor and evaluate or do compliance audit to ensure compliance with the minimum requirements. Compliance audit shall be done at least once every two years.

**ARTICLE IV
SANCTIONS**

Section 9 For violations of this Order, the Commission may impose such administrative sanction as it may deem appropriate pursuant to the pertinent provisions of Republic Act No. 7722, in relation to Section 69 of BP 232 otherwise known as the Higher Education Act of 1982, and **Section 143 of the Manual of Regulations for Private Schools (MORPHE)**, and other related laws.



**ARTICLE V
SEPARABILITY AND REPEALING CLAUSE**

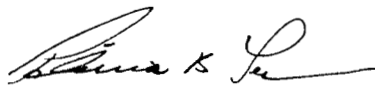
Section 10 Any provision of this Order, which may hereafter be held invalid, shall not effect the remaining provisions.

**ARTICLE VI
EFFECTIVITY CLAUSE**

Section 11 This CMO shall take effect starting 1st semester of SY 2013-2014, after publication as required by law.

Quezon City, Philippines July 9, 2013

FOR THE COMMISSION:



PATRICIA B. LICUANAN, Ph. D.
Chairperson



MODEL EMBEDMENT OF HEALTH CARE SERVICES IN BACHELOR OF SCIENCE IN RESPIRATORY THERAPY

FIRST YEAR 1st SEMESTER

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | TVET modules | | | Theory | Practicum |
|--|-----------|----------|-----------|------------|---|------------------|------------|----------|-----------|
| | | | | | Units of Competency | Nominal Duration | Total Hrs. | Hrs / Wk | Hrs / Wk |
| English 1 (Communication Arts 1) | 3 | 0 | 3 | 54 | <i>Participate in workplace communication(Basic)</i> | | | | |
| Filipino 1 (Sinig ng Pakikipagtalastasan) | 3 | 0 | 3 | 54 | | | | | |
| Mathematics 1 (College Algebra) | 3 | 0 | 3 | 54 | | | | | |
| Natural Science 1 (Zoology w/ STS) | 2 | 1 | 3 | 90 | | | | | |
| Philippine History | 3 | 0 | 3 | 54 | | | | | |
| Physical Education (Physical Fitness, Calisthenics & Gymnastics) | 2 | 0 | 2 | 36 | | | | | |
| NSTP 1 | 3 | 0 | 3 | 54 | <i>Implement and monitor infection control policies and procedures (Common)</i> <i>Apply basic first aid (Common)</i> | | | | |
| Health Care Services 1 | 0 | 2 | 2 | 108 | <i>Prepare and maintain beds (CORE)</i> <i>Maintain high standards of patient services (Common)</i> <i>Practice occupational health and safety procedures (Basic)</i> | | | | |
| Total : | 19 | 3 | 22 | 504 | TVET Total : | | | | |

*Suggestions/Comments: Health Care Services 1-6 Lab units = Practicum hours (for tuition purposes) ratio 1:2

2nd SEMESTER

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | TVET modules | | | Theory | Practicum |
|-------------------------------------|-----------|----------|-----------|------------|---|------------------|------------|------------|------------|
| | | | | | Units of Competency | Nominal Duration | Total Hrs. | Hrs / Week | Hrs / week |
| English 2 (Communication Art 2) | 3 | 0 | 3 | 54 | <i>Work in a team environment (Basic)</i> <i>Practice career professionalism (Basic)</i> | | | | |
| Filipino 2 (Pagbasa at pagsulat) | 3 | 0 | 3 | 54 | | | | | |
| Mathematics 2 (Plane trigonometry) | 3 | 0 | 3 | 54 | | | | | |
| Sociology/Anthropology | 3 | 0 | 3 | 54 | | | | | |
| Chemistry (General & Inorganic) | 2 | 1 | 3 | 90 | | | | | |
| Physical Education 2 (Folk Dancing) | 2 | 0 | 2 | 36 | | | | | |
| NSTP 2 | 3 | 0 | 3 | 54 | <i>Collect and maintain linen stocks at end-user locations (Core)</i> <i>Assist in client/patient mobility (Core)</i> <i>Assist in transporting clients/patients (Core)</i> <i>Assist in bio-psychosocial support care of clients/patients (Core)</i> <i>Handle waste in a health care environment (Core)</i> | | | | |
| Total : | 19 | 1 | 20 | 396 | TVET Total : | | | | |



SECOND YEAR

1st SEMESTER

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | TVET modules | | | Theory | Practicum |
|----------------------------------|-----------|----------|-----------|------------|---|------------------|------------|----------|-----------|
| | | | | | Units of Competency | Nominal Duration | Total Hrs. | Hrs / Wk | Hrs / Wk |
| Mathematics 3 (Basic Statistics) | 3 | 0 | 3 | 54 | | | | | |
| Rizal | 3 | 0 | 3 | 54 | | | | | |
| Human Anatomy and Physiology | 3 | 1 | 4 | 108 | | | | | |
| Physical Education 3 | 2 | 0 | 2 | 36 | | | | | |
| Medical Terminology | 2 | 0 | 2 | 36 | | | | | |
| General Psychology | 3 | 0 | 3 | 54 | <i>Respond effectively to difficult/challenging behavior (Common)</i> | | | | |
| Total : | 16 | 1 | 17 | 342 | TVET Total : | | | | |

2nd SEMESTER

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | TVET modules | | | Theory | Practicum |
|---|-----------|----------|-----------|------------|---------------------|---------|-------|----------|-----------|
| | | | | | Units of Competency | Nominal | Total | Hrs / Wk | Hrs / Wk |
| Basic computer concepts | 2 | 1 | 3 | 90 | | | | | |
| Physics (College Physics) | 3 | 1 | 4 | 108 | | | | | |
| Health Economics w/ Taxation & Land Reform | 3 | 0 | 3 | 54 | | | | | |
| Biochemistry | 3 | 0 | 3 | 54 | | | | | |
| Political Science (Phil. Gov't. & New Constitution) | 3 | 0 | 3 | 54 | | | | | |
| Philosophy of Man | 3 | 0 | 3 | 54 | | | | | |
| Logic | 3 | 0 | 3 | 54 | | | | | |
| Physical Education 4 (Games and Recreation) | 2 | 0 | 2 | 36 | | | | | |
| Total : | 22 | 2 | 24 | 504 | TVET Total : | | | | |

Health Care Services NC II will be issued by TESDA upon passing the certification process



MODEL EMBEDMENT OF EMERGENCY MEDICAL SERVICES IN BACHELOR OF SCIENCE IN RESPIRATORY THERAPY

FIRST YEAR 1st SEMESTER

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | TVET modules | | | Theory | Practicum |
|--|-----------|----------|-----------|------------|--|------------------|------------|----------|-----------|
| | | | | | Units of Competency | Nominal Duration | Total Hrs. | Hrs / Wk | Hrs / Wk |
| English 1 (Communication Arts 1) | 3 | 0 | 3 | 54 | Participate in workplace communication (Basic) Deliver basic ambulance communication skills (Core) | | | | |
| Filipino 1 (Sining ng Pakikipagtalastasan) | 3 | 0 | 3 | 54 | | | | | |
| Mathematics 1 (College Algebra) | 3 | 0 | 3 | 54 | | | | | |
| Natural Science 1 (Zoology w/ STS) | 2 | 1 | 3 | 90 | | | | | |
| Philippine History | 3 | 0 | 3 | 54 | | | | | |
| Physical Education (Physical Fitness, Calisthenics & Gymnastics) | 2 | 0 | 2 | 36 | | | | | |
| NSTP 1 | 3 | 0 | 3 | 54 | Implement and monitor infection control policies and procedures (Common) Apply basic first aid (Common) | | | | |
| | | | | | Practice Occupational Health and Safety Procedures (Basic) Perform basic life support (Core) (Assessment and management of emergency situation) Manage request for ambulance service (Core) Manage ambulance operations (Core) Transport emergency patients (Core) Transport non-emergency patients (Core) Coordinate emergency resources (Core) | | | | |
| Total : | 19 | 1 | 20 | 396 | TVET Total : | | | | |

2nd SEMESTER

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | TVET modules | | | Theory | Practicum |
|-------------------------------------|-----------|----------|-----------|------------|---|------------------|------------|------------|------------|
| | | | | | Units of Competency | Nominal Duration | Total Hrs. | Hrs / Week | Hrs / week |
| English 2 (Communication Art 2) | 3 | 0 | 3 | 54 | Maintain high standard of patient services (Common) Work in a team environment (Basic) Practice career professionalism (Basic) | | | | |
| Filipino 2 (Pagbasa at pagsulat) | 3 | 0 | 3 | 54 | | | | | |
| Mathematics 2 (Plane trigonometry) | 3 | 0 | 3 | 54 | | | | | |
| Sociology/Anthropology | 3 | 0 | 3 | 54 | | | | | |
| Chemistry (General & Inorganic) | 2 | 1 | 3 | 90 | | | | | |
| Physical Education 2 (Folk Dancing) | 2 | 0 | 2 | 36 | | | | | |
| NSTP 2 | 3 | 0 | 3 | 54 | CORE | | | | |
| | | | | | Drive vehicle / ambulance under Allocate ambulance service resources Supervise on-road operations Maintain life support equipment Implement safe and access and extrication procedures in an emergency Deliver intensive pre-hospital patient care (Core) Manage routine scene (Core) | | | | |
| Total : | 19 | 1 | 20 | 396 | TVET Total : | | | | |



SECOND YEAR

1st SEMESTER

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | TVET modules | | | Theory | Practicum |
|----------------------------------|-----------|----------|-----------|------------|---|------------------|------------|----------|-----------|
| | | | | | Units of Competency | Nominal Duration | Total Hrs. | Hrs / Wk | Hrs / Wk |
| Mathematics 3 (Basic Statistics) | 3 | 0 | 3 | 54 | | | | | |
| Rizal | 3 | 0 | 3 | 54 | | | | | |
| Human Anatomy and Physiology | 3 | 1 | 4 | 72 | | | | | |
| Physical Education 3 | 2 | 0 | 2 | 36 | <i>Deliver pre-hospital patient care (Core)</i> | | | | |
| | | | | | <i>Manage the scene of an emergency (Core)</i> | | | | |
| | | | | | <i>Manage scene of special sports event (Core)</i> | | | | |
| Medical Terminology | 2 | 0 | 2 | 36 | | | | | |
| General Psychology | 3 | 0 | 3 | 54 | <i>Respond effectively to difficult/challenging behavior (Common)</i> | | | | |
| Total : | 16 | 1 | 17 | 306 | TVET Total : | | | | |

2nd SEMESTER

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | TVET modules | | | Theory | Practicum |
|--|-----------|----------|-----------|------------|---------------------|------------------|------------|----------|-----------|
| | | | | | Units of Competency | Nominal Duration | Total Hrs. | Hrs / Wk | Hrs / Wk |
| Basic computer concepts | 2 | 1 | 3 | 90 | | | | | |
| Physics (College Physics) | 3 | 1 | 4 | 108 | | | | | |
| Health Economics w/ Taxation & Land Reform | 3 | 0 | 3 | 54 | | | | | |
| Biochemistry | 3 | 0 | 3 | 54 | | | | | |
| Political Science (Phil. Govt. & New Constitution) | 3 | 0 | 3 | 54 | | | | | |
| Philosophy of Man | 3 | 0 | 3 | 54 | | | | | |
| Logic | 3 | 0 | 3 | 54 | | | | | |
| Physical Education 4 (Games and Recreation) | 2 | 0 | 2 | 36 | | | | | |
| Total : | 22 | 2 | 24 | 504 | TVET Total : | | | | |

Emergency Medical Services NC-II will be issued by TESDA upon passing the certification process.



MODEL EMBEDMENT OF EMERGENCY MEDICAL SERVICES IN BACHELOR OF SCIENCE IN RESPIRATORY THERAPY

THIRD YEAR

1st Semester

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | Prereq |
|---|-----------|----------|-----------|------------|--------|
| Cardiopulmonary Anatomy and Pathophysiology | 3 | 0 | 3 | 54 | |
| Neuromuscular Anatomy and Pathophysiology | 3 | 0 | 3 | 54 | |
| Fundamentals of RT | 3 | 1 | 4 | 72 | |
| Patient Assessment | 2 | 0 | 2 | 36 | |
| Principles of Pulmonary Rehabilitation | 3 | 0 | 3 | 54 | |
| Airway Management and Cardiopulmonary Resuscitation | 1 | 1 | 2 | 36 | |
| Pharmacology | 2 | 0 | 2 | 36 | |
| Total : | 17 | 2 | 19 | 342 | |

2nd Semester

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | Prereq |
|--|-----------|----------|-----------|------------|--------|
| Principle of Neonatal / Pediatric Respiratory Care | 2 | 0 | 2 | 36 | |
| Principles of Pulmonary Physiology in the ICU | 3 | 0 | 3 | 54 | |
| Mechanical Ventilation | 3 | 1 | 4 | 72 | |
| Ventilation & Gas Exchange Monitoring | 2 | 1 | 3 | 54 | |
| Microbiology | 3 | 1 | 4 | 72 | |
| Test of Pulmonary Function and structure | 2 | 1 | 3 | 54 | |
| Total : | 15 | 4 | 19 | 342 | |

FOURTH YEAR

1st Semester

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | Prereq |
|-----------------------------------|----------|----------|-----------|------------|--------|
| ICU Crisis Management | 1 | 0 | 1 | 18 | |
| Management and Health Care Ethics | 2 | 0 | 2 | 36 | |
| Respiratory Care Seminar 1 | 2 | 0 | 2 | 36 | |
| Clinical Education 1 | - | - | 15 | 270 | |
| Total : | 5 | 0 | 20 | 360 | |

2nd Semester

| SUBJECT | LEC | LAB | UNITS | Hrs / Sem | Prereq |
|---------------------------------|----------|----------|-----------|------------|--------|
| Advanced Mechanical Ventilation | 1 | 0 | 1 | 18 | |
| Hemodynamic Monitoring | 1 | 0 | 1 | 18 | |
| Respiratory Care Seminar 2 | 2 | 0 | 2 | 36 | |
| Clinical Education 2 | - | - | 15 | 270 | |
| Teaching in Healthcare Setting | 3 | 0 | 3 | 54 | |
| Total: | 7 | 0 | 22 | 396 | |

