

**SUBJECT: SAMPLE OUTCOMES-BASED CURRICULUM FOR THE BACHELOR OF SCIENCE
IN RESPIRATORY THERAPY (BSRT) EDUCATION**

PROGRAM SPECIFICATIONS

Program Description

Degree Name: Bachelor of Science in Respiratory Therapy

Program Code: 50-500804

Nature of the Field of Study

The Bachelor of Science in Respiratory Therapy is a four-year program consist of general health education and professional courses. The first and second semesters of the fourth year level is a fifteen hundred (1,500) hours of clinical internship program in a CHED - DOH accredited training respiratory laboratory with rotational duties in different sections of one or more hospitals. Rotation in different clinical areas include: Pulmonary Diagnostics, General Respiratory Care, Adult Intensive Care Unit, Neonatal and Pediatric Critical Care Unit, Sleep Laboratory, and Pulmonary Rehabilitation.

Program Goals

The BSRT program aims to produce respiratory therapists who are capable of:

- A. Evaluating and assessing patients;
- B. Planning and implementing respiratory therapy interventions based on guidelines and standards;
- C. Participating in the promotion of the profession;
- D. Valuing the importance of professional development;
- E. Appreciating the value of inter-professional communication and coordination with members of the health care team

Specific Professions/Careers/Occupations for graduates

Graduates of BSRT are expected to be able to perform any of the following roles:

- A. Clinician
- B. Educator
- C. Administrator
- D. Product specialist
- E. Researcher
- F. Homecare respiratory therapist
- G. Advocate

Allied Fields

All Health-related Programs

Program Outcomes

The minimum standards for the BS Respiratory Therapy program are expressed in the following minimum set of learning outcomes:

Common to all programs in all types of schools

The graduates have the ability to:

- a) engage in lifelong learning and understanding of the need to keep abreast of the developments in the specific field of practice. (PQF level 6 descriptor)
- b) effectively communicate orally and in writing using both English and Filipino
- c) work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)
- d) practice professional, social, and ethical responsibility
- e) appreciate of "*Filipino historical and cultural heritage*" (based on RA 7722)

Common to Health Professions

The graduates have the ability to:

- a) demonstrate clinical competence in specific profession
- b) become an Educator
- c) become a leader/manager
- d) become a researcher
- e) become social advocate/ mobilize

Specific to BSRT

The graduates have the ability to:

- a. Engage in lifelong learning (*PQF level 6 descriptor*)
- b. Effectively communicate orally and in writing using both English and Filipino
- c. Work effectively and independently in multi-disciplinary and multi-cultural teams. (*PQF level 6 descriptor*)
- d. Practice professional, social, and ethical responsibilities
- e. Appreciate "*Filipino historical and cultural heritage*" (*based on RA 7722*)
- f. Practice basic supervisory skills in the management of the respiratory department
- g. Demonstrate responsible citizenship as an advocate of health wellness

h. Demonstrate consistent competence in planning and conducting diagnostic, therapeutic, and supportive respiratory interventions.

Common to a horizontal type as defined in CMO 46 s 2012

- a. For professional institutions: a service orientation in one’s profession
- b. For colleges: an ability to participate in various types of employment, development activities, and public discourses particularly in response to the needs of the communities one serves
- c. For universities: an ability to participate in the generation of new knowledge or in research and development projects

Graduates of State Universities and Colleges must, in addition, have the competencies to support “national, regional and local development plans.” (RA 7722)

A PHEI, at its option, may adopt mission-related program outcomes that are not included in the minimum set.

To distinguish among HEIs according to horizontal typology types, HEIs are encouraged to develop BS in Respiratory Therapy curricula that provide enhancements in the following program outcomes:

PROGRAM OUTCOMES	Horizontal Typology Types		
	Professional Institution	College	University
A. Engage in lifelong learning (PQF level 6 descriptor)	+	+	+++
B. Effectively communicate orally and in writing using both English and Filipino	+++	+++	+++
C. Work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)	+++	+	+++
D. Practice professional, social, and ethical responsibilities	+++	+++	+++
E. Appreciate “Filipino historical and cultural heritage” (based on RA 7722)	+	+++	+
F. Practice basic supervisory skills in the management of the respiratory department	+++	+++	+
G. Demonstrate responsible citizenship as an advocate of health wellness	+++	+++	+++
H. Demonstrate consistent competence in planning and conducting diagnostic, therapeutic, and supportive respiratory interventions.	+++	+++	+++

+ Minimum Requirement

+++ Enhancement

Sample Performance Indicators

PO Code	PO Statement	Performance Indicator	Codes of Key Courses for the PI	Assessment Methods			Evaluation Methods (Performance Target)	Standards	Evaluator's Comments
				A1	A2	A3			
A	Engage in lifelong learning (PQF level 6 descriptor)						75% Passing rate	70% of the class should get 75%	
B	Effectively communicate orally and in writing using both English and Filipino								
C	Work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)	1. Understand the roles and scope of practice of respiratory therapy and the healthcare team members		Essay					
		2. Demonstrate appropriate behavior as a productive member of the healthcare team			Clinical simulation rubrics				
		3. Respect the beliefs and values of others				Essay Case Study			
D	Practice professional, social, and ethical responsibilities								
E	Appreciate " <i>Filipino historical and cultural heritage</i> " (based on RA 7722)								
F	Practice basic supervisory skills in the management of the respiratory department	1. Analyze manpower availability in							

		response to patient census							
		2. Prepare a single-shift treatment workload distribution.		Case study					
G	Demonstrate responsible citizenship as an advocate of health wellness	1. Design a program promoting general well-being of patients and their respective families.			Final Exam				
H	Demonstrate consistent competence in planning and conducting diagnostic, therapeutic, and supportive respiratory interventions.	1. Identify and assess the type of respiratory patient.		Case Study					
		2. Develop a plan of management and initiate procedures.		Clinical simulation					
		3. Monitor patient response and modify respiratory care plan.							

Minimum Performance Indicators

This section contains a list of minimum performance standards by which to measure the degree of attainment of each of the identified program outcomes. These performance standards will be used to evaluate student achievement throughout different points in the curriculum and will be used to develop course outcomes and learning outcomes

A. Engage in lifelong learning (PQF level 6 descriptor)

Performance Indicators

1. Develop skills that will allow for effective self-assessment of levels of competence for performance of tasks in various practice settings
2. Engage actively in self-directed learning strategies / opportunities
3. Engage actively in formal and informal continuing professional development activities

B. Effectively communicate orally and in writing using both English and Filipino

Performance Indicators

1. Express thoughts and ideas effectively in verbal and written forms using Filipino and English or any relevant language/dialect.
2. Demonstrate accuracy and brevity in documentation in the practice of respiratory therapy
3. Demonstrate competent sending, listening, and feedback skills in oral communication
4. Demonstrate proficient reading and comprehension

C. Work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)

Performance Indicators

1. Understand the roles and scope of practice of respiratory therapy and the healthcare team members
2. Demonstrate appropriate behavior as a productive member of the healthcare team
3. Respect the beliefs and values of others

D. Practice professional, social, and ethical responsibilities

Performance Indicators

1. Demonstrate behavior that reflects integrity, supports objectivity and fosters trust in the profession and its professionals.
2. Provide care without discrimination on any basis, with respect for the rights and dignity of individuals
3. Respect and protect the legal and personal rights of patients, including the right to informed consent and refusal of treatment
4. Comply with laws and standards that govern and relate to respiratory therapy practice
5. Perform procedures or functions within the scope of respiratory therapy practice

E. Appreciate “Filipino historical and cultural heritage” (based on RA 7722)

Performance Indicators

1. Ability to view the contemporary world from both Philippine and global perspective
2. Self-assuredness in knowing and being a Filipino
3. Ability to contribute personally and meaningfully to the country’s development

F. Practice basic supervisory skills in the management of the respiratory department

Performance Indicators

1. Assess staff performance based on performance targets
2. Develop staffing pattern based on hospital operations
3. Develop clinical and procedural practice guidelines based clientele needs

G. Demonstrate responsible citizenship as an advocate of health wellness

Performance Indicators

1. Assess general state of health and quality of life in different client populations
2. Develop or enhance a plan for wellness and health promotion for different client populations
3. Implement a plan for wellness and health promotion for different client populations
4. Evaluate the effectiveness of the wellness and health promotion program for different client populations

H. Demonstrate consistent competence in planning and conducting diagnostic, therapeutic, and supportive respiratory interventions

Performance Indicators

1. Identify and assess the type of respiratory patient, develop a plan of management.
2. Initiate measures/procedures and monitor patient response,
3. Modify respiratory care plan based on patient’s response, physical examination, and laboratory data, utilizing standardized respiratory protocols.
4. Apply infection prevention and control procedures.
5. Assist patients in promoting nutritional, emotional and physical well-being.

CURRICULUM

Curriculum Description

Higher education institutions offering Respiratory Therapy program may exercise flexibility in their curricular offering. However, the following respiratory therapy courses as prescribed in the sample program shall be implemented.

Sample Curriculum

Components

A. Outline of General Education Courses

Language and Humanities	18 Units
English	6
Filipino	6
Humanities (Philosophy; Logic)	6
Mathematics, Natural Science & Information Technology	25 Units
Mathematics	6
Basic Statistics	3
Natural Science with STS	3
Chemistry (General Inorganic)	3
Physics	4
Biochemistry	3
Basic Computer Concepts	3
Social Sciences	6 Units
Psychology	3
Sociology / Anthropology	3
General Health Science Education Curriculum	14 Units
Human Anatomy & Physiology	4
Health Care	5
Medical Terminology	2
Health Economics	3
Mandated Subjects	9 Units
Rizal's Life Works & Writings	3
Phil. Government & Constitution	3
Phil. History	3
Physical Education	8 Units
NSTP	6 Units
Total G.E. Units	86 Units

B. Outline of Professional Education Courses

Professional Education Courses	45 Units
Cardiopulmonary Anatomy & Pathophysiology	3
Neuromuscular Anatomy & Pathophysiology	3
Fundamentals of Respiratory Therapy	5
Patient Assessment	2
Principles of Pulmonary Rehabilitation	3
Airway Management & Cardiopulmonary Resuscitation	2
Pharmacology	2
Principles of Neonatal/Pediatric Respiratory Care	2
Principles of Pulmonary Physiology in the ICU	3
Mechanical Ventilation	4
Ventilation & Gas Exchange Monitoring	3
Microbiology	4
Test of Pulmonary Function & Structure	3
ICU Crisis Management	1
Management & Health Care Ethics	2
Advanced Mechanical Ventilation	1
Hemodynamic Monitoring	1
Teaching in HealthCare Setting	1
Seminar (Respiratory Care Seminar 1&2)	4 Units
Clinical Internship (Clinical Education 1 & 2)	30 Units

Summary of Units

General Health Science Education Curriculum	86
Professional Courses	47
Seminar (Respiratory Care Seminar 1&2)	4
Clinical Internship (Clinical Education 1 & 2)	30
Total Units	167

Program of Study

FIRST YEAR

First Semester

Subject	Lec	Lab	Units
English 1 (Communication Arts 1)	3	0	3
Filipino 1 (Sining ng Pakikipagtalastasan)	3	0	3
Mathematics 1 (College Algebra)	3	0	3
Natural Science 1 (Zoology) w/ STS	2	1	3
Philippine History	3	0	3
Physical Education 1 (Physical Fitness) (Calisthenics & Gymnastics)	2	0	2
NSTP 1	3	0	3
TOTAL	19	1	20

Second Semester

Subject	Lec	Lab	Units
English 2 (Communication Arts 2)	3	0	3
Filipino 2 (Pagbasa at Pagsulat)	3	0	3
Sociology/Anthropology	3	0	3
Mathematics 2 (Plane Trigonometry)	3	0	3
Chemistry (General & Inorganic)	2	1	3
Physical Education 2 (Folk Dancing)	2	0	2
NSTP 2	3	0	3
TOTAL	19	1	20

SECOND YEAR

First Semester

Subject	Lec	Lab	Units
Mathematics 3 (Basic Statistics)	3	0	3
Rizal	3	0	3
Human Anatomy & Physiology	3	1	4
Health Care	3	2	5
Physical Education 3 (Swimming)	2	0	2
Medical Terminology	2	0	2
General Psychology	3	0	3
Total	19	3	22

Second Semester

Subject	Lec	Lab	Units
Basic Computer Concepts	2	1	3
Physics (College Physics)	3	1	4
Health Economics with Taxation & Land Reform	3	0	3
Biochemistry	3	0	3
Political Science (Phil. Government & New Constitution)	3	0	3
Philosophy of Man	3	0	3
Logic	3	0	3
Physical Education 4 (Games & Recreation)	2	0	2
Total	22	2	24

THIRD YEAR

First Semester

Subject	Lec	Lab	Units
Cardiopulmonary Anatomy & Pathophysiology	3	0	3
Neuromuscular Anatomy & Pathophysiology	3	0	3
Fundamentals of RT	3	2	5
Patient Assessment	2	0	2
Principles of Pulmonary Rehabilitation	3	0	3
Airway Management & Cardiopulmonary Resuscitation	1	1	2
Pharmacology	2	0	2
Total	17	3	20

Second Semester

Subject	Lec	Lab	Units
Principles of Neonatal/Pediatric Respiratory Care	2	1	3
Principles of Pulmonary Physiology in the ICU	3	0	3
Mechanical Ventilation	3	1	4
Ventilation & Gas Exchange Monitoring	2	1	3
Microbiology	3	1	4
Test of Pulmonary Function & Structure	2	1	3
Total	15	4	19

FOURTH YEAR

First Semester

Subject	Lec	Lab	Unit/s
ICU Crisis Management	1	0	1
Management & Health Care Ethics	2	0	2
Respiratory Care Seminar 1	2	0	2
Clinical Education 1	-	-	15
Total			20

Second Semester

Subject	Lec	Lab	Unit/s
Advanced Mechanical Ventilation	1	0	1
Hemodynamic Monitoring	1	0	1
Respiratory Care Seminar 2	2	0	2
Clinical Education 2	-	-	15
Teaching in HealthCare Setting	3	0	3
Total			22

Sample Curriculum Map

This section provides an example of how to thread the identified program outcomes through the different courses in the curriculum. This should guide the development of the expected outcomes at different points within the program to ensure that the HEI is on-track in achieving the expected program outcomes.

Similarly, the HEI should be able to thread the institutional outcomes across relevant courses in the curriculum. The HEIs should not be limited to the competency levels indicated in this sample curriculum map, but are highly encouraged to determine the competency levels appropriate to their institutional outcomes and capacities.

Key Legends

I – Introduced; Basic concepts/principles

P – Practiced: Concepts and skills presented with application

D – Demonstrated: Principles/concepts are applied with skill across different clinical setting with minimal supervision

Identified Program Outcomes

- a. Engage in lifelong learning (PQF level 6 descriptor)
- b. Effectively communicate orally and in writing using both English and Filipino
- c. Work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)
- d. Practice professional, social, and ethical responsibilities
- e. Appreciate “Filipino historical and cultural heritage” (based on RA 7722)
- f. Practice basic supervisory skills in the management of the respiratory department
- g. Demonstrate responsible citizenship as an advocate of health wellness
- h. Demonstrate consistent competence in planning and conducting diagnostic, therapeutic, and supportive respiratory interventions.

BSRT Program Curricular Map

Curriculum Map

Program Outcomes (First Year)	English 1 & 2	Filipino 1 & 2	Math 1 & 2	Sociology / Anthropology	Natural Science (Zoology) w/ STS	Philippine History	Chemistry	Physical Education 1 & 2	NSTP 1 & 2
a) Engage in lifelong learning (PQF level 6 descriptor)	I	I	I	I	I	I	I	I	I
b) Effectively communicate orally and in writing using both English and Filipino	I/P	I	I	I	I	I	I	I	I
c) Work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)	I	I		I				I	I
d) Practice professional, social, and ethical responsibilities	I	I		I				I	I
e) Appreciate <i>“Filipino historical and cultural heritage”</i> (based on RA 7722)		I		I	I	I			I
f) Practice basic supervisory skills in the management of the respiratory department	I	I	I						
g) Demonstrate responsible citizenship as an advocate of health wellness	I	I			I			I	I
h) Demonstrate consistent competence in planning and conducting diagnostic, therapeutic, and supportive respiratory interventions.									

Legend: I- Introduced concepts/principles; P-Practiced- with supervision; Demonstrated – across different clinical setting with minimal supervision

Program Outcomes (Second Year)	Basic Statistics	Basic Computer Concepts	Physics	Human Anatomy & Physiology	Health Eco with Taxation & Land Reform	Health Care	Biochemistry	Physical Education 3 & 4	Political Science	Medical Terminology	Philosophy of Man	Gen Psychology
a) Engage in lifelong learning (PQF level 6 descriptor)	I	I	I	I	I	I	I	I	I	I	I	I
b) Effectively communicate orally and in writing using both English and Filipino	I	I	I	I/P	I	I/P	I	I	I	I	I	I
c) Work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)						I/P		I		I	I	I
d) Practice professional, social, and ethical responsibilities	I	I				I/P		I	I		I	I
e) Appreciate “Filipino historical and cultural heritage” (based on RA 7722)											I	I
f) Practice basic supervisory skills in the management of the respiratory department						I						
g) Demonstrate responsible citizenship as an advocate of health wellness						I/P		I/P				
h) Demonstrate consistent competence in planning and conducting diagnostic, therapeutic, and supportive respiratory interventions.						I/P						

Legend: I- Introduced concepts/principles; P-Practiced- with supervision; Demonstrated – across different clinical setting with minimal supervision

Program Outcomes (Third Year)	Cardio-Pulmonary & Pathophysiology	Principles of Neonatal/Pediatric Respiratory Care	Neuromuscular Anatomy & Pathophysiology	Principles of Pulmonary Physiology in the ICU	Fundamentals of RT	Mechanical Ventilation	Patient Assessment	Ventilation & Gas Exchange Monitoring	Principles of Pulmonary Rehabilitation	Microbiology	Airway Management & Cardiopulmonary Resuscitation	Test of Pulmonary Function & Structure	Pharmacology
a) Engage in lifelong learning (PQF level 6 descriptor)	I	I	I	I	I	I	I	I	I	I	I	I	I
b) Effectively communicate orally and in writing using both English and Filipino	I	I/P	I	I/P	I/P	I/P	I/P	I/P	I/P	I	I/P	I/P	I
c) Work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)		I/P		I/P	I/P	I/P	I/P	I/P	I/P		I/P	I/P	
d) Practice professional, social, and ethical responsibilities	I	I/P	I	I/P	I/P	I/P	I/P	I/P	I/P	I	I/P	I/P	I
e) Appreciate " <i>Filipino historical and cultural heritage</i> " (based on RA 7722)							I/P		I/P			I/P	
f) Practice basic supervisory skills in the management of				I			I		I/P		I	I	

the respiratory department													
g) Demonstrate responsible citizenship as an advocate of health wellness		I		I	I	I	I	I	I	I	I	I	I
h) Demonstrate consistent competence in planning and conducting diagnostic, therapeutic, and supportive respiratory interventions.	I	I	I	I	I/P	I/P	I/P	I/P	I/P	I	I/P	I/P	I

Legend: I- Introduced concepts/principles; P-Practiced- with supervision; Demonstrated – across different clinical setting with minimal supervision

Program Outcomes (Fourth Year)	ICU Crisis Management	Advanced Mechanical Ventilation	Management & Health Care Ethics	Hemodynamic Monitoring	Respiratory Care Seminar 1 & 2	Clinical Education 1 & 2	Teaching in HealthCare Setting
a) Engage in lifelong learning (PQF level 6 descriptor)	P	P	P	P	P	P	P
b) Effectively communicate orally and in writing using both English and Filipino	D	D	D	D	D	D	D
c) Work effectively and independently in multi-disciplinary and multi-cultural teams. (PQF level 6 descriptor)	D	D	D	D	D	D	D
d) Practice professional, social, and ethical responsibilities	D	D	D	D	D	D	D
e) Appreciate <i>“Filipino historical and cultural heritage”</i> (based on RA 7722)							
f) Practice basic supervisory skills in the management of the respiratory department			P		P	D	P
g) Demonstrate responsible citizenship as an advocate of health wellness			P			D	D
h) Demonstrate consistent competence in planning and conducting diagnostic, therapeutic, and supportive respiratory interventions.	D	D	D	D	D	D	D

Legend: I- Introduced concepts/principles; P-Practiced- with supervision; Demonstrated – across different clinical setting with minimal supervision

Sample Syllabi and Curriculum Delivery for Selected Core Course

Course Name: Pulmonary Rehabilitation

A. Course Description

The subject deals with rehabilitation techniques and procedures related and I to the practice of Respiratory Care: (a) chest expansion measurements and assessment (b) chest percussion and vibration (c) postural drainage (d) chest mobility exercises (e) diaphragm retraining and breathing exercises and (f) create a respiratory home care plan and follow-up. The roles of a Respiratory Care Practitioners in the elderly and procedures for homecare and nursing homes are also discussed.

B. Intended Learning Outcomes

At the end of the course, the student will be able to:

1. Explain the importance of cardio-pulmonary rehabilitation program patients with chronic cardio-respiratory disorders.
2. Perform proper chest-physiotherapy on a simulated patient.
3. Enumerate and discuss the indications, hazards, and precautionary measures to be observed during chest-physiotherapy.

Week	Topic	Teaching-Learning Activities	Assessment Tasks/Tools
1	A. Goals of Cardiopulmonary Rehabilitation B. Historical Perspective	Short Video presentation	Reaction paper using Rubrics
2	C. Scientific Bases 1. Physical Reconditioning 2. Psychosocial Reconditioning 3. Physiology of Airway Clearance	Lecture	Written exam
3	Pulmonary Rehabilitation Program A. Program Goals and Objectives B. Benefits and Potential Hazards	Lecture	Written exam; Essay
4	C. Patient Evaluation and Selection D. Program Design	Lecture Case Study	Written exam; Essay
5	E. Program Implementation F. Program Results	Case Study	Written exam; Essay
6	PRELIM		Written exam; Essay
7	Chest Physiotherapy A. Initial Evaluation of the Patient B. Chest Percussion and Vibration C. Postural Drainage	Demonstration Return demo	Lab exercise Rubrics
8	D. Chest Mobility Exercises	Demonstration Return demo	Lab exercise Rubrics

9	E. Diaphragm Retraining and Breathing Exercises	Short Video presentation Return demo	Lab exercise Rubrics
10	Lung Expansion Therapy A. Incentive Spirometry	Demonstration Return demo	Lab exercise Rubrics
11	B. Intermittent Positive Pressure Breathing	Short Video presentation Return demo	Lab exercise Rubrics
12	MIDTERMS		Written exam / Practical exam
13	C. Continuous Positive Airway Pressure D. Flutter and Other Devices	Lecture Demonstration Return demo	Written exam / Lab exercise Rubrics
14	The Respiratory Homecare Program A. Family Orientation B. Patient Orientation	Short Video presentation Lecture	Essay Exam
15	Case Study	Group presentation	Reaction Paper
16	C. Homecare Program Implementation and Monitoring	Group presentation	Reaction Paper
17	Case Study	Group presentation	Reaction Paper
18	FINALS		Written Exam Essay

Suggested Readings and References:

Course Requirements

Course Credit	3 units Lecture
Contact Hours	3 lecture hours per week
Prerequisite	Physics, Human Anatomy and Physiology
Placement	Third year First semester

Grading System:

Classroom Policies:

Consultation Hours: