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CURRICULUM PROPOSAL COVER SHEET
University-Wide Undergraduate Curriculum Committee

I. CONTACT

Contact Person Rebecca Hartman Phone 73257 or 77647
Department Nursing and Allied Health Professions

II. PROPOSAL TYPE (Check All Appropriate Lines)

_____	COURSE	_____	Suggested 20 character title		
_____	New Course *	_____	Course Number and Full Title		
_____	Course Revision	_____	Course Number and Full Title		
_____	Liberal Studies Approval + for new or existing course	_____	Course Number and Full Title		
_____	Course Deletion	_____	Course Number and Full Title		
_____	Number and/or Title Change	_____	Old Number and/or Full Old Title		
		_____	New Number and/or Full New Title		
_____	Course or Catalog Description Change	_____	Course Number and Full Title		
X	PROGRAM:	_____ Major	_____ Minor	X	Track
X	New Program *	<u>Respiratory Care - CRT Track</u>			
		Program Name			
_____	Program Revision *	_____			
		Program Name			
_____	Program Deletion *	_____			
		Program Name			
_____	Title Change	_____			
		Old Program Name			

		New Program Name			

III. Approvals (signatures and date)

<u>Rebecca Hartman</u> 12-5-01 Department Curriculum Committee	<u>Sam Kozner</u> 12-6-01 Department Chair
<u>Mary E. Seidner</u> 8/24/02 College Curriculum Committee	<u>Barbara C. Zoni</u> 9-6-02 College Dean
_____ + Director of Liberal Studies (where applicable)	_____ *Provost (where applicable)

Part II. DESCRIPTION OF CURRICULUM CHANGE

1A. Current Catalog Description of Respiratory Care

Respiratory therapists assist physicians in the care of patients who have respiratory system problems or illnesses that relate to breathing. Their assistance includes administering gaseous drugs and executing therapeutic procedures. Included are the operation and maintenance of specialized equipment.

The program leads to the Bachelor of Science degree in Respiratory Care. Presented jointly by IUP and the Western Pennsylvania Hospital in Pittsburgh, the program offers intensive theoretical and applied knowledge to produce highly skilled graduates who are prepared to enter the profession as therapists or instructors.

Two academic years of university studies, followed by two academic years of hospital studies and clinical practice, constitute the program. Students must earn a GPA of 2.25 in Natural Sciences and Mathematics courses to be considered for admission into the clinical years in Respiratory Care. However, since admission to the hospital is competitive, IUP cannot guarantee admission into the hospital program.

Bachelor of Science--Respiratory Care

Liberal Studies: As outlined in Liberal studies section with the following specifications: **45-47**

Humanities: PHIL 222 recommended

Mathematics: MATH 105 or higher level

Natural Science: CHEM 101-102

Social Sciences: PSYC 101, SOC 151, non-Western course

Liberal Studies electives: One course, BTED/COSC/IFMG 101 recommended

Synthesis: not required

Writing Intensive: not required

Major:

62

Required courses: (1) (2)

RESP 101 The Profession of Respiratory Care	1sh
RESP 326 Respiratory Care Clinical Practice I	3sh
RESP 327 Pharmacology	3sh
RESP 328 Introduction to Respiratory Care	4sh
RESP 329 Respiratory Care Equipment	4sh
RESP 330 Cardiopulmonary Resuscitation	2sh
RESP 333 Respiratory Care Clinical Practice II	4sh
RESP 334 Respiratory Care Instrumentation and Application	4sh
RESP 335 Patient Care Skills	3sh
RESP 336 Cardiopulmonary Evaluation and Clinical Correlation	4sh
RESP 337 Introduction to Pulmonary Functions	1sh
RESP 425 Clinical Case Studies	3sh
RESP 426 Respiratory Care Clinical Practice III	5sh
RESP 428 Essentials of Electrocardiography	2sh
RESP 429 Design and Function of a Respiratory Care Program	2sh
RESP 430 Pulmonary Function Studies	3sh
RESP 431 Pediatric Respiratory Care	1sh

RESP 433 Respiratory Care Clinical Practice IV	5sh	
RESP 434 Neonatal Respiratory Care	3sh	
RESP 436 Respiratory Care Teaching	2sh	
RESP 437 Methods in Critical Care	2sh	
RESP 438 Cardiopulmonary Rehabilitation	1sh	
Other Requirements		17
Science courses:		
BIOL 105 Cell Biology	3sh	
BIOL 150 Human Anatomy	3sh	
BIOL 151 Human Physiology	4sh	
BIOL 241 General Microbiology	3sh	
PHYS 151 Medical Physics Lecture	3sh	
PHYS 161 Medical Physics Lab	1sh	
Free Electives:		<u>0</u>
(#) Total Degree Requirements		124-126

- (1) Qualified students are encouraged to elect RESP 342 Preceptorship in Respiratory Care in which case total credits would be 126-130.
- (2) RESP 300- and 400-level courses are completed at Western Pennsylvania Hospital in Pittsburgh.
- (#) See advisory paragraph "Timely Completion of Degree Requirements" in catalog section on Requirements for Graduation

1B. Revised Catalog Description of Respiratory Care

The Bachelor of Science degree in Respiratory Care prepares the graduate for a career as a registered respiratory care practitioner. Respiratory care practitioners evaluate, treat, and care for people with breathing problems. They assist physicians in the evaluation and treatment of heart and lung disorders. Respiratory care practitioners are experts in the therapeutic use of medical gases, oxygen administration, pulmonary resuscitation, and artificial airways. They are employed in hospitals, extended care facilities, clinics, rehabilitation centers, physicians' offices, private companies providing home care services, and municipal organizations.

IUP and the Western Pennsylvania Allegheny Health System in Pittsburgh, Pennsylvania jointly offers this program. The program is fully accredited by the Committee on Accreditation for Respiratory Care (CoARC). The program consists of two academic years of pre-clinical studies (62 credits) on the main campus at IUP and two academic years (62 credits) of clinical study at the Western Pennsylvania School of Respiratory Care, Pittsburgh, PA. Students must earn a GPA of at least 2.25 in the required Natural Sciences and Mathematics courses and an overall GPA of at least 2.0 to be considered for admission into the clinical years in Respiratory Care. However, since admission to the clinical years is competitive, IUP cannot guarantee admission. Upon graduation, graduates are qualified for certification (CRT) and registration (RRT) in respiratory care. The granting of the degree is not contingent upon passing the examinations. Graduates are prepared for graduate degrees that may lead to careers in administration, education, and medicine.

The Bachelor of Science degree in Respiratory Care is offered for Certified Respiratory Therapists (CRT) who are graduates of an accredited certificate or associate degree respiratory care program. CRT students will be awarded advanced standing (33 credits) based on prior academic work completed in a respiratory care program. Students fulfill degree requirements set by the university.

This track is designed to prepare the certified respiratory therapist (CRT) to function in an advanced practice role.

Detailed information is available in the department office regarding requirements, such as health screening, liability insurance, legal clearance, and professional uniforms.

Bachelor of Science—Respiratory Care

Liberal Studies: As outlined in Liberal studies section with the following specifications: **45-47**

Humanities: PHIL 222 recommended

Mathematics: MATH 105 or higher level

Natural Science: CHEM 101-102

Social Sciences: PSYC 101, SOC 151, non-Western course

Liberal Studies electives: One course, BTED/COSC/IFMG 101 recommended

Synthesis: not required

Writing Intensive: not required

Major:

62

Required courses: (1) (2)

RESP 101 The Profession of Respiratory Care 1sh

RESP 326 Respiratory Care Clinical Practice I 3sh

RESP 327 Pharmacology 3sh

RESP 328 Introduction to Respiratory Care 4sh

RESP 329 Respiratory Care Equipment 4sh

RESP 330 Cardiopulmonary Resuscitation 2sh

RESP 333 Respiratory Care Clinical Practice II 4sh

RESP 334 Respiratory Care Instrumentation and Application 4sh

RESP 335 Patient Care Skills 3sh

RESP 336 Cardiopulmonary Evaluation and Clinical Correlation 4sh

RESP 337 Introduction to Pulmonary Functions 1sh

RESP 425 Clinical Case Studies 3sh

RESP 426 Respiratory Care Clinical Practice III 5sh

RESP 428 Essentials of Electrocardiography 2sh

RESP 429 Design and Function of a Respiratory Care Program 2sh

RESP 430 Pulmonary Function Studies 3sh

RESP 431 Pediatric Respiratory Care 1sh

RESP 433 Respiratory Care Clinical Practice IV 5sh

RESP 434 Neonatal Respiratory Care 3sh

RESP 436 Respiratory Care Teaching 2sh

RESP 437 Methods in Critical Care 2sh

RESP 438 Cardiopulmonary Rehabilitation 1sh

Other Requirements

17

Science courses:

BIOL 105 Cell Biology 3sh

BIOL 150 Human Anatomy 3sh

BIOL 151 Human Physiology 4sh

BIOL 241 General Microbiology 3sh

PHYS 151 Medical Physics Lecture 3sh

PHYS 161 Medical Physics Lab 1sh

Free Electives:

0

(#) Total Degree Requirements

124-126

- (1) Qualified students are encouraged to elect RESP 342 Preceptorship in Respiratory Care in which case total credits would be 126-130.
- (2) RESP 300- and 400-level courses are completed at Western Pennsylvania Hospital in Pittsburgh.
- (#) See advisory paragraph "Timely Completion of Degree Requirements" in catalog section on Requirements for Graduation

Bachelor of Science--Respiratory Care CRT Track

Liberal Studies as outlined in Liberal Studies section

53-54

Major:

62

Required Courses (1)

RESP credits via articulation (2)

33sh

RESP 425 Clinical Case Studies

3sh

RESP 426 Respiratory Care Clinical Practice III

5sh

RESP 428 Essential of Electrocardiography

2sh

RESP 429 Design & Function of a Respiratory

Care Program

2sh

RESP 430 Pulmonary Function Studies

3sh

RESP 431 Pediatric Respiratory Care

1sh

RESP 433 Respiratory Care Clinical Practice IV

5sh

RESP 434 Neonatal Respiratory Care

3sh

RESP 436 Respiratory Care Teaching

2sh

RESP 437 Methods of Critical Care

2sh

RESP 438 Cardiopulmonary Rehabilitation

1sh

Free Electives:

9

(#) Total Degree Requirements

124-125

- (1) RESP 400 level courses are completed at Western Pennsylvania Hospital School of Respiratory Care in Pittsburgh, PA
- (2) Students in the CRT track are exempt from the 100 and 300 level courses in the respiratory care major and will receive 33 credits for the certification.
- (#) See advisory paragraph "Timely Completion of Degree Requirements" in catalog section on Requirements for Graduation

2. A detailed description of the track including a rationale/justification, credit requirements, and sequencing and restrictions.

Rationale/Justification

Background-Historically, respiratory care practitioners have received the basic entry-level respiratory care education from three types of programs: an 18-month certificate program, a two-year associate degree program, or a baccalaureate degree program. The bachelor degree in respiratory care is the terminal degree in the profession. The Committee on Accreditation for Respiratory Care (CoARC) must accredit all programs. The 18-month and associate programs

prepare entry-level practitioners who usually deliver respiratory care in hospital settings. The graduates of baccalaureate programs are not only prepared for entry-level positions, but also are prepared for advanced practice. The program at IUP offers students these advanced experiences during the final year of clinical study. Successful completion of any of the programs qualifies the graduate to sit for the certification examination in respiratory care practice. The National Board of Respiratory Care (NBRC) provides two levels of credentialing for the Respiratory Care practitioner: the entry-level credential, Certified Respiratory Therapist (CRT), and the advanced practitioner credential Registered Respiratory Therapist (RRT). Graduates from IUP's program are eligible to sit for both examinations upon graduation.

For economic and personal reasons many students have taken their entry-level education in the 18-month or the associate programs. The BS degree in respiratory care is considered by those in the profession to be necessary for advancement in the profession. Advancement in the profession might include managing a respiratory care department, teaching at a community college, participating in a research project, or advanced practice. More than 40 of IUP respiratory care graduates hold leadership positions at prominent Western Pennsylvania health care institutions. Also, they serve in national leadership positions. For example, the Associate Director of the American Association for Respiratory Care (AARC), the CEO of the National Sleep Technologies, and a member of the AARC Board of Directors are all graduates of IUP's program. According to the *Allied Health and Rehabilitation Professions Education Directory* (2000) there are only 285 respiratory therapy programs in the US and Puerto Rico of which only 14% (42) offers a BS degree. Not only is there a critical shortage of respiratory practitioners in the United States, there is an even more critical shortage of BS prepared practitioners. In the next eight years it is estimated there will be a demand for about 100,000 respiratory care professionals, but schools will be producing less than 40,000 (William Turner at the AARC Summer Forum, Vail, CO).

According to the Committee on Accreditation for Respiratory Care (CoARC), as of January 1, 2002, the minimum educational requirement for entry-level practice in respiratory care will be the associate degree. This change in the minimum education level for entry into practice is supported by the National Board of Respiratory Care who provides credentialing for individuals who work in respiratory care to assure quality of practice in the field. The move toward differentiating between entry level and advanced practice came about because of the ever increasing complexity of the jobs of respiratory care practitioners and the need for education to keep pace with the progress of the profession. Advanced preparation in practice is found at the baccalaureate level. The BS degree in respiratory care provides graduates the opportunity to sit for the RRT examination, to provide advanced respiratory care, to seek further career advancement, to seek leadership positions in the community, and to teach in a respiratory care program. A track for CRTs in the respiratory care program will provide an educationally sound mechanism for professional growth for respiratory care practitioners.

Currently CRTs who desire to earn the BS in respiratory care at IUP fulfill degree requirements set forth by the university and the department following the standard respiratory care curriculum sequence. This sequence was developed for students with no background in respiratory care. The academic requirements do not take into account those students with prior respiratory therapy education and relevant clinical experience. Subsequently, the CRT student may be required to enroll in courses that are repetitive to their previous educational experiences. The critical shortage of BS prepared respiratory therapists, and the national and local lack of specified tracks for the CRT makes it logical to develop a special track at IUP. Therefore, this proposal provides for a distinct track for CRTs who are seeking to obtain the advanced practice BS degree.

Curriculum Change

Currently certified respiratory therapists (CRT) who seek a BS degree from IUP enroll in the Bachelor of Science in Respiratory Care program. They fulfill degree requirements set forth by the university and the Department of Nursing and Allied Health Professions. These students follow a standard curriculum sequence that neither considers prior respiratory care education nor relevant clinical experience. With few exceptions, CRT's entering the program must adapt to a curriculum that is designed for students who have no prior experience in respiratory care. The proposed track for CRTs focuses on the elimination of course redundancy and the inclusion of learning experiences that build on their prior learning in their AD or certificate programs.

The proposed track will not involve a change in degree title, degree designation, or certification. No new courses are proposed. CRT students will take the respiratory care courses currently offered during the final clinical year of study. These courses represent the learning experiences necessary for advanced respiratory care practice. A CRT will receive 33 credits for prior respiratory care learning. These credits represent the 100 and 300 level courses currently required for beginning students in the respiratory care major. Additionally students may have liberal studies transfer credits. Prior coursework that fulfills liberal studies, science and math requirements will be evaluated on a case-by-case basis through transfer credit evaluation.

Typically students entering into a baccalaureate program from either an associate degree or certificate program will bring with them some course work that is equivalent to IUP's Liberal Studies. These courses may include the following: ENGL 101 College Writing, ENGL 202 Research Writing and ENGL 121 Introduction to Literature, PSYC 101 General Psychology, BIOL 150 Human Anatomy, BIOL 151 Human Physiology, and BIOL 241 General Microbiology, CHEM 101 College Chemistry I and CHEM 102 College Chemistry II and a cadre of other elective credits. In order to provide students with flexibility and options to meet their individualized learning needs, department specific mandated courses are not part of this track.

Admission Guidelines and Awarding of Transfer Credits

All students applying for admission into the CRT track at IUP must have successfully passed the Certified Respiratory Therapist examination (CRT). Students requesting part-time study will be admitted through IUP's School of Continuing Education. Those who plan for full-time study will be admitted through IUP's Admissions Office. Prior respiratory care education, date of completion of program, recent work experience, continuing education or recredentialing will determine eligibility for admission as described below.

Students who have graduated within three years prior to matriculation from a certificate or associate degree respiratory program and hold a CRT will be eligible for admission into the respiratory care program. *

Students who have graduated within ten years prior to matriculation from a certificate or associate degree respiratory program and have practiced a minimum of 1000 hours as a CRT during the last 3 years will be eligible for admission into the respiratory care program. *

Students who have graduated within ten years prior to matriculation from a certificate or associate degree respiratory program and have not practiced a minimum of 1000 hours as a CRT during the last 3 years, but have successfully passed the NBRC recredentialing examination(s) will be eligible for admission into the respiratory care program. *

Students who have graduated more than ten years prior to matriculation from a certificate or associate degree respiratory program and hold a CRT must validate respiratory care

knowledge by successfully passing the recredentialing examination for the highest level held from the NBRC. Evidence of employment in the field of respiratory care within the last five years is also necessary. *

*Note: Certificate or associate programs must have accreditation from the Committee on Accreditation for Respiratory Care (CoARC) at the time of student graduation for fulfillment of admission requirements by this policy.

Students may request transfer credit for non-respiratory care course work completed at other institutions. Those fulfilling degree requirements set forth by the university and deemed equivalent during the evaluation process will be accepted as transfer credits. Students will be awarded 33 credits for prior respiratory care coursework.

Part III. Implementation - It is proposed that the CRT track will become effective in the Fall Semester 2002

1. Students already in the program and attending classes at Western Pennsylvania Hospital School of Respiratory Care will be joined by the CRT's in the final year of study. Including the CRT's in these classes should enrich the experiences of the basic students.
2. Faculty teaching loads will not be affected. The adjunct faculty at Western Pennsylvania Hospital School of Respiratory Care teach all classes in the major.
3. The resources are adequate for the additional students.
4. The track should increase the numbers of students in the senior year of study. Estimated increase in students is 5-7 students per senior year.

Part IV. Course Proposals

There are no new course proposals for this track.

Part V. No letters of support are necessary.

References

American Medical Association. (2000). Allied health and rehabilitation professions education directory. Chicago: Author.

Gooding, J. L. (2001). What you should know about upcoming. NBRC Horizons, 1, 1-8

Pew Health Professions Commission. (1998). Recreating health professional practice for a new century. [Executive summary]. San Francisco, CA: Author. Retrieved May 23, 2000 from the World Wide Web: <http://www.futurehealth.ucsf.edu/pubs/html>.