Undergraduate Catalog 2015–16

Department of Nursing and Allied Health Professions

College of Health and Human Services

www.iup.edu/rn-alliedhealth

This document is a direct extract from the full 2015–16 *Undergraduate Catalog*. As a result, the original page numbering will appear.

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Indiana University of Pennsylvania

Department of Nursing and Allied Health Professions

Website: *www.iup.edu/rn-alliedhealth*
Theresa M. Gropelli, Chairperson; Boothby, Calderone, Chunta, Dusack, Gardner, Gerwick, Greenawalt, Hockensmith, Hoffman, Labant, Little, O'Harra, Ott, Palmer, Poorman, Shanty, Shellenbarger, West, Williams, Zuraikat; and professors emeritae Blair, Kresak, Kuzneski, Smatlak, Snyder, Thistlethwaite, Twal

The College of Health and Human Services offers a curriculum leading to the bachelor of science degree program in nursing. Students are admitted to the Nursing program as freshmen. Transfer students and those with a previous degree may also be admitted. Upon completion of the program, the graduate is prepared to write the examination for licensure as a registered nurse in Pennsylvania and all other states. The program is accredited by the Commission on Collegiate Nursing Education.

The nursing curriculum has as its primary goal the development of professional nurse generalists who are liberally educated, clinically competent, and aware of their social responsibilities as health professionals. The program is designed to provide a broad background in liberal education, coupled with the specialized knowledge and skills required for professional nursing practice. Additionally, the curriculum prepares the nurse to practice within the professional code of nursing ethics, to function effectively as a member of the health care team, and to utilize scientific principles in

planning, implementing, and evaluating health care. The nursing curriculum emphasizes concepts in primary, secondary, and tertiary prevention of health problems.

The first two semesters are devoted mainly to Liberal Studies and science courses considered essential to the nursing major. Throughout the last six semesters, clinical experiences in patient care are provided in acute and long-term care facilities as well as community settings.

The bachelor of science degree program in nursing is offered for licensed practical nurses who are graduates of accredited, approved practical nursing programs and who have met IUP's admission requirements. The track for licensed practical nurses provides an alternative curriculum accounting for prior work completed in a nursing program. Licensed practical nurse students will fulfill all requirements set by the university. The track is designed to prepare the practical nurse to function as a provider, designer, manager, and coordinator of care in a variety of health care settings.

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

Change of major applications and criteria are available in the Nursing Department office. Changes of major are granted based on meeting the criteria and seat availability.

Bachelor of Science—Nursing

Liberal Studies: As outlined in Liberal Studies section with the following specifications: 44
Mathematics: MATH 217 (1)
Natural Science: CHEM 101-102
Social Science: PSYC 101, SOC 151
Liberal Studies Electives: 3cr, PSYC 310, no courses with NURS prefix

Major: 52-55
Required Courses:

NURS 211	Fundamentals I Clinical	1cr
NURS 212	Fundamentals I Theory	2cr
NURS 213	Fundamentals II Clinical	1cr
NURS 214	Health Assessment	3cr
NURS 236	Fundamentals II Theory	2cr
NURS 312	Professional Nursing	2cr
NURS 316	Evidence-Based Practice in Nursing	3cr
NURS 330	Care of the Child and Family	2cr
NURS 331	Care of the Child and Family Clinical	2.5cr
NURS 332	Maternal-Neonatal Health	2cr
NURS 333	Maternal-Neonatal Health Clinical	2.5cr
NURS 336	Adult Health I	4cr
NURS 337	Adult Health I Clinical	5cr
NURS 412	Nursing Management	2cr
NURS 431	Public/Community Nursing Clinical	2.5cr
NURS 432	Psychiatric/Mental Health	2cr
NURS 433	Psychiatric/Mental Health Clinical	2.5cr
NURS 434	Public/Community Nursing	2cr
NURS 436	Adult Health II	4cr
NURS 437	Adult Health II Clinical	2.5cr
NURS 440	Nursing Management Clinical	2.5cr
NURS 450	A Cognitive Approach to Clinical Problem Solving (2)	3cr

Other Requirements: 17
Science Sequence:

BIOL 105	Cell Biology	3cr (3)
BIOL 150	Human Anatomy	4cr
BIOL 240	Human Physiology	4cr
BIOL 241	Introductory Medical Microbiology	4cr
FDNT 212	Nutrition	3cr

Free Electives: 5-8

(#) **Total Degree Requirements:** 120

(1) The Pennsylvania State Board of Nursing requires two units of high school mathematics (one of which is algebra) for admission to the nursing major.
(2) Students who achieve a higher score than a specified minimum on a department-required standardized test(s) are exempt from NURS 450. These students would need 8cr of free electives.
(3) Biology course requirement changes are pending. Please see your advisor for further information.
(#) See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.

Bachelor of Science—Nursing/Licensed Practical Nurse Track (1)

Liberal Studies: As outlined in Liberal Studies section with the following specifications: 43
Dimensions of Wellness: Fulfilled by the major
Mathematics: MATH 217
Natural Science: CHEM 101-102
Social Science: PSYC 101, SOC 151
Liberal Studies Electives: 5cr, PSYC 310, LIBR 251, no course with NURS prefix

Major: 52
Required Courses:

NURS 214	Health Assessment	3cr
NURS 312	Professional Nursing	2cr
NURS 316	Evidence-Based Practice in Nursing	3cr
NURS 334	Transitions in Professional Nursing	3cr
NURS 412	Nursing Management	2cr
NURS 431	Public/Community Nursing Clinical	2.5cr
NURS 432	Psychiatric/Mental Health	2cr
NURS 433	Psychiatric/Mental Health Clinical	2.5cr
NURS 434	Public/Community Nursing	2cr
NURS 436	Adult Health II	4cr
NURS 437	Adult Health II Clinical	2.5cr
NURS 440	Nursing Management Clinical	2.5cr
NURS 450	A Cognitive Approach to Clinical Problem Solving (2)	3cr
NURS 336	Adult Health I ***and***	4cr
NURS 337	Adult Health Clinical I	5cr
OR		
	Credits by Exam (3) ***and***	8cr
NURS 493	Internship	1cr
NURS 330	Care of the Child and Family	2cr
NURS 331	Care of the Child and Family Clinical	2.5cr
NURS 332	Maternal-Neonatal Health	2cr
NURS 333	Maternal-Neonatal Health Clinical	2.5cr
OR		
	Credits by Exam (3) ***and***	8cr
NURS 493	Internship	1cr

Other Requirements: 16

BIOL 105	Cell Biology	3cr (4)
BIOL 150	Human Anatomy	4cr
BIOL 240	Human Physiology	4cr
BIOL 241	Introductory Medical Microbiology	4cr
FDNT 212	Nutrition	3cr

Free Electives: 8-11

Total Degree Requirements: 120

(1) The Pennsylvania State Board of Nursing requires four units of English, three units of social studies, two units of math (one of which is algebra), and two units of science in high school for admission to the nursing major.

(2) Students who achieve a higher score than a specified minimum on a department-required standardized test(s) are exempt from NURS 450. These students would need 11 credits of free electives.
(3) Students have the option of earning up to 16cr via examination and NURS 493 (1-2cr) or completing NURS 336, 337, 330, 331, 332, and 333 (18cr). Exam results must be received before students register for any 300- or 400-level nursing courses other than NURS 334.
(4) Biology course requirement changes are pending. Please see your advisor for further information.

Allied Health Professions Programs

Joyce A. Shanty, Coordinator

Respiratory Care

The bachelor of science degree program 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 Hospital in Pittsburgh jointly offer this program. The program is accredited by the Commission on Accreditation for Respiratory Care. The program consists of two academic years of preclinical studies (61 credits) on the Indiana campus at IUP and two academic years (59 credits) of clinical study at the Western Pennsylvania Hospital School of Respiratory Care, Pittsburgh. Students are expected to 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 eligible 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 program in respiratory care is offered for certified respiratory therapists (CRTs) who are graduates of an accredited certificate or associate degree respiratory care program. CRT students may 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 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: 44-45
Mathematics: MATH 105 or higher level
Natural Science: CHEM 101-102
Social Science: PSYC 101, SOC 151, global and multicultural awareness course
Writing Intensive: not required
Liberal Studies Electives: 3cr, PHYS 151, no courses with RESP prefix

Major: 59
Required Courses:

RESP 101	The Profession of Respiratory Care	1cr
RESP 326	Respiratory Care Clinical Practice I	3cr
RESP 327	Pharmacology	3cr
RESP 328	Introduction to Respiratory Care	4cr
RESP 329	Respiratory Care Equipment	4cr
RESP 330	Cardiopulmonary Resuscitation	2cr
RESP 333	Respiratory Care Clinical Practice II	3cr
RESP 334	Respiratory Care Instrumentation and Application	4cr
RESP 335	Patient Care Skills	3cr
RESP 336	Cardiopulmonary Evaluation and Clinical Correlation	4cr
RESP 337	Introduction to Pulmonary Function Studies	1cr
RESP 425	Clinical Case Studies	3cr
RESP 426	Respiratory Care Clinical Practice III	4cr
RESP 428	Essentials of Electrocardiology	2cr
RESP 429	Design and Function of a Respiratory Care Program	2cr
RESP 430	Pulmonary Function Studies	3cr
RESP 431	Pediatric Respiratory Care	1cr
RESP 433	Respiratory Care Clinical Practice IV	4cr
RESP 434	Neonatal Respiratory Care	3cr
RESP 436	Respiratory Care Teaching	2cr
RESP 437	Methods in Critical Care	2cr
RESP 438	Cardiopulmonary Rehabilitation	1cr

Other Requirements: 12
Science Courses:

BIOL 150	Human Anatomy	4cr
BIOL 240	Human Physiology	4cr
BIOL 241	Introductory Medical Microbiology	4cr

Free Electives: 4-5

Total Degree Requirements: (1) 120

(1) RESP 300- and 400-level courses are completed at Western Pennsylvania Hospital School of Respiratory Care in Pittsburgh.

Bachelor of Science—Respiratory Care/Certified Respiratory Therapist Track

Liberal Studies: As outlined in Liberal Studies section with the following specifications: 44
Mathematics: 3cr
Natural Science: CHEM 101-102
Writing Intensive: not required
Liberal Studies Electives: 3cr, no courses with RESP prefix

Major: 60
RESP credits via articulation (1) 33cr
Required Courses: (2) 27cr

RESP 425	Clinical Case Studies	3cr
RESP 426	Respiratory Care Clinical Practice III	4cr
RESP 428	Essentials of Electrocardiology	2cr
RESP 429	Design and Function of a Respiratory Care Program	2cr
RESP 430	Pulmonary Function Studies	3cr
RESP 431	Pediatric Respiratory Care	1cr
RESP 433	Respiratory Care Clinical Practice IV	4cr
RESP 434	Neonatal Respiratory Care	3cr
RESP 436	Respiratory Care Teaching	2cr
RESP 437	Methods in Critical Care	2cr
RESP 438	Cardiopulmonary Rehabilitation	1cr

Free Electives: 16

Total Degree Requirements: 120

(1) Students in this track may be exempt from the 100- and 300-level courses in the Respiratory Care program and may receive 33cr via articulation.
(2) RESP 400-level courses are completed at Western Pennsylvania Hospital School of Respiratory Care in Pittsburgh.

Clinical Laboratory Science

Clinical Laboratory Science encompasses the study of analytical and diagnostic procedures used in clinical laboratories and in medical research. Clinical laboratory scientists (also known as medical technologists) perform a variety of laboratory tests upon which the physician depends for accurate diagnosis, prognosis, and proper treatment of the patient. The programs of study, presented jointly by IUP and accredited clinical laboratory science programs in hospitals, prepares the student to enter the profession. Upon completion of the four-year program, the bachelor of science degree in clinical laboratory science is granted. The program also prepares the student for graduate and professional schools.

IUP maintains affiliations with accredited schools of clinical laboratory science/medical technology. To be competitive for clinical placement, the student must have a minimum overall GPA and math/science GPA of 2.5. Since admission to any hospital program is on a competitive basis, IUP cannot guarantee admission.

The following programs maintain agreements of affiliation with IUP: Altoona Regional Health System, Altoona; Children's Hospital Medical Center, Akron, Ohio; Memorial Medical Center, Johnstown; Lancaster General College of Nursing and Health Sciences, Lancaster; the Reading Hospital and Medical Center, Reading; St. Christopher's Hospital for Children, North Philadelphia; St. Vincent Health Center, Erie; Williamsport Hospital and Medical Center, Williamsport; WCA Hospital, Jamestown, New York; and York Hospital, York.

Completion of academic studies at IUP and of one year of clinical experience qualifies the student to take a national certification examination. Successful results on this examination lead to certification as a professionally qualified medical technologist/clinical laboratory scientist.

Bachelor of Science—Clinical Laboratory Science

Liberal Studies: As outlined in Liberal Studies section with the following specifications: 44
Mathematics: MATH 217
Natural Science: CHEM 111-112
Writing Intensive: One required
Liberal Studies Electives: 3cr, PHYS 111, no course with MEDT prefix

Major: 32
Required Courses: (1)

MEDT 494	Clinical Microbiology	8cr
MEDT 495	Clinical Chemistry	10cr
MEDT 496	Clinical Hematology/Coagulation	6cr
MEDT 497	Clinical Immunohematology	4cr
MEDT 498	Clinical Immunology/Serology	2cr
MEDT 499	Clinical Seminar	2cr

Other Requirements: 40

BIOL 150	Human Anatomy	4cr
BIOL 202	Principles of Cell and Molecular Biology	4cr
BIOL 240	Human Physiology	4cr
BIOL 250	Principles of Microbiology	4cr
BIOL 364	Immunology	3cr
CHEM 231	Organic Chemistry I	4cr
CHEM 232	Organic Chemistry II	4cr
CHEM 325	Analytical Methods	4cr
CHEM 351	Biochemistry	4cr
PHYS 121	Physics I Lab	1cr
PHYS 112	Physics II Lecture	3cr
PHYS 122	Physics II Lab	1cr

Free Electives: 4

(#) **Total Degree Requirements:** 120

(#) See advisory paragraph "Timely Completion of Degree Requirements" in the section on Requirements for Graduation.
(1) These courses are offered by affiliating, hospital-based schools of clinical laboratory science (also known as medical technology). Areas of study are consistent with requirements of the National Accrediting Agency for Clinical Laboratory Sciences and are completed during the final 12 months of the degree program at an affiliating school.

Nuclear Medicine Technology

Nuclear medicine technology is a medical specialty in which allied health care professionals, under the direction of a nuclear medicine physician, use radioactive materials in the diagnosis and treatment of disease. They are responsible for patient education and preparation regarding the nuclear medicine procedures, administration of radiopharmaceuticals, performing complex computer imaging studies, and radiation safety procedures for both patients and staff. The nuclear medicine technologist's skills complement those of the nuclear medicine physician.

The College of Health and Human Services offers a curriculum leading to the bachelor of science degree in nuclear medicine technology. Students are admitted to the major as freshmen. Transfer students and those with a previous degree may also be admitted. The program of study consists of three years of preclinical study on the IUP Indiana campus and one year of clinical study at either the Nuclear Medicine Institute (NMI) at the University of Findlay, Findlay, Ohio, or the Nuclear Medicine Technology program at the Community College of Allegheny County (CCAC), Pittsburgh. The programs at NMI and CCAC are fully accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT). Graduates of the program are eligible to take the nuclear medicine technology national certificate examination offered by the Nuclear Medicine Technology Certification Board and the American Registry of Radiologic Technologists (ARRT). The granting of the degree is not contingent upon passing the examinations.

Students must meet specific academic requirements to be considered for admission to the NMI or to the CCAC Nuclear Medicine Technology program. Admission is competitive; IUP cannot guarantee admission into either of these facilities. Information regarding academic requirements and other special requirements for the clinical year is available in the department's office.

Bachelor of Science—Nuclear Medicine Technology

Liberal Studies: As outlined in Liberal Studies section with the following specifications: 50
Mathematics: MATH 105
Natural Science: CHEM 101-102
Social Science: PSYC 101, SOC 151
Liberal Studies Electives: 9cr, BTED/COSC/IFMG 101, MATH 217, PHYS 111, no courses with NMDT prefix

Major: 32
Required Courses: (1)

NMDT 427	Nuclear Scintigraphy	3cr
NMDT 428	Radiation Physics	3cr
NMDT 429	Nuclear Medicine Instrumentation	3cr
NMDT 430	Radiation Biology and Radiation Protection	2cr
NMDT 431	In Vivo/In Vitro Nonimaging	1cr
NMDT 432	Radiopharmaceuticals	3cr
NMDT 433	Introduction to Tomographic Imaging	1cr
NMDT 434	Clinical Nuclear Medicine	16cr

Other Requirements: (2) 20

BIOL 150	Human Anatomy	4cr
BIOL 240	Human Physiology	4cr
BIOL 241	Introductory Medical Microbiology	4cr
ENGL 310	Public Speaking	3cr
PHYS 121	Physics I Lab	1cr
PHYS 112	Physics II Lecture	3cr
PHYS 122	Physics II Lab	1cr

Free Electives: (3) 18

Total Degree Requirements: 120

(1) These courses are offered at the University of Findlay/Nuclear Medicine Institute, Findlay, Ohio, and/or Community College of Allegheny County Nuclear Medicine Technology program, Pittsburgh. These areas of study are consistent with requirements of the JRCNMT. All eight of these areas of study are completed during the final 12 months of the degree program.
(2) Students are also required to complete a medical terminology course/program. Options to fulfill this requirement must be approved by the coordinator of Allied Health Professions.
(3) Two writing-intensive courses are required. Both courses may be from either Liberal Studies or Free Electives.

Gerontology Certificate Program

Joyce A. Shanty, Coordinator

The Gerontology Certificate program provides an interdisciplinary approach to the systematic study of the aging and is designed to be combined with any undergraduate major at IUP. The 21-credit program entails three core courses, three elective courses, and an internship that provides experiential learning in an agency or program serving older adults. Many courses fulfill the Liberal Studies program requirements. Applications are available at 244 Johnson Hall. For information, call 724-357-7647.

Gerontology Certificate Program			**21**
Core Courses:			9
HPED 350	Health Aspects of Aging	3cr	
PSYC 312	Adult Development and Aging	3cr	
SOC 357	Sociology of Aging	3cr	
Controlled Electives:			9
Select 9cr from the following:		9cr	
ANTH 340, 444, CDFR 428, FCSE 315, GERN 281, 481, 482, HPED 413, MGMT 300, 311, PHIL 400, 405, PSYC 376, 378, RHAB 312, SAFE 380, SOC 336, 342, 345			
Other Requirements:			3
Internship (GERN 493 or internship in student's major)		3cr	