INDIANA UNIVERSITY
SCHOOL OF ALLIED HEALTH SCIENCES

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(317) 274-4702
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Indiana University

Founded in 1820, Indiana University is one of the 15 largest universities in the nation. With a faculty of nearly 4,000, the university is internationally known for the excellence and diversity of its programs, which meet the needs of more than 90,000 students. The university attracts students from all 50 states and around the world.

Indiana University consists of eight campuses: Indiana University–Purdue University Indianapolis, Indiana University Kokomo, Indiana University–Purdue University Fort Wayne, Indiana University Northwest (Gary), Indiana University South Bend, Indiana University Bloomington, University Southeast (New Albany), and Indiana University East (Richmond). IU also offers courses through facilities at Columbus, Elkhart, and many other sites. More than 80 percent of Indiana’s population lives within a 50-mile radius of an IU campus.

The regional campuses offer students and other individuals the educational and informational resources of a large university, with the additional advantages of being able to pursue academic studies in their home communities or nearby, to attend college classes while working full time, to upgrade professional and technical skills, and to pursue intellectual and cultural interests.

The School of Allied Health Sciences offers educational programs on the following five of the university’s eight campuses:

Indiana University–Purdue University Indianapolis
Indiana University Kokomo
Indiana University–Purdue University Fort Wayne
Indiana University Northwest (Gary)
Indiana University South Bend
Indiana University Southeast (New Albany)

Indiana University–Purdue University Indianapolis

Indiana University–Purdue University Indianapolis is an innovative urban campus offering 182 degree programs in more than 200 study fields to more than 27,000 students. Indiana University and Purdue University programs and facilities merged at Indianapolis in 1969. The campus continues to experience growth in both the range of its academic offerings and its physical facilities. IUPUI also offers courses at the Columbus Center at Columbus, Indiana.

IUPUI is the home of the IU School of Medicine, the second largest medical school in the United States. There are more than 800,000 patient visits annually to the Medical Center’s five teaching hospitals and more than 150 clinics.

The IUPUI library system consists of seven libraries serving the special interests of individual schools. In addition, the entire Indiana University system library is readily available through the interlibrary loan system.

As an urban university, IUPUI has taken advantage of flexible scheduling of classes. Classes are offered days, evenings, and weekends both on the campus and in shopping centers around the city. More than 1,500 faculty plus hundreds of professionals from the metropolitan area bring a rich blend of scholarly demands and practicality to the courses they teach.

Indiana, in addition to being the capital city and cultural center of the state of Indiana, is one of the major economic, cultural, and sports centers of the Midwest. With a population of more than 800,000, the city offers numerous museums, cultural and entertainment events, and national and international athletic competitions.

Information and Applications

For an application to Indiana University–Purdue University Indianapolis and other information about the campus, contact:
Office of Admissions
Indiana University–Purdue University Indianapolis
Cavanaugh Hall 129
425 University Boulevard
Indianapolis, IN 46202-5140
(317) 274-4591
Web site: enroll.iupui.edu

For an application to an allied health program and additional information about allied health programs offered at Indiana University–Purdue University Indianapolis, contact the program(s) of interest or:
E-mail: askahlt@iupui.edu
Web site: sabs.iupui.edu

For financial aid available at Indiana University–Purdue University Indianapolis, contact:
Office of Financial Aid
Indiana University–Purdue University Indianapolis
Cavanaugh Hall 103
425 University Boulevard
Indianapolis, IN 46202-5140
(317) 274-4162
Web site: www.iupui.edu/finaid

Students interested in taking prerequisites at Indiana University–Purdue University Columbus should contact:
Vickie Welsh-Huston
Academic Counselor
Indiana University–Purdue University Columbus
4601 Central Avenue
Columbus, IN 47203-1769
(812) 372-8266

Indiana University Kokomo

Since its establishment in 1945, Indiana University Kokomo has developed as a regional university for commuter students that serves an 11-county area in north central Indiana. IUK offers programs leading to associate, baccalaureate, and master's degrees and a wide variety of continuing education activities.

IUK’s heterogeneous student group numbers approximately 3,000 full-time and part-time students. Two-thirds of the classes at IUK have fewer than 30 students, which ensures significant individual attention. The Kokomo campus also offers a broad range of student support services, including career development and placement assistance, interest testing, tutoring, and child care. In addition, concerts, lectures, and athletic events enhance student life at IUK. Course schedules and student services are designed to meet the needs of both traditional and nontraditional students.

The campus is located on a 54-acre site in the southern part of the city of Kokomo. IUK facilities include classroom buildings, faculty research areas, the Havens Auditorium, and an observatory. The Kellogg Student Center contains student services offices, lounge and cafeteria facilities, a child care center, and a bookstore. The Purdue University Technology Wing includes classrooms, laboratories, faculty and administrative offices of the Purdue School of Technology. A modern 55,000-square-foot library includes an exhibition gallery and the Kresge Auditorium, as well as eight study rooms, space for 50 study carrels, a community conference room, and two classrooms for library-related instruction. A new state-of-the-art 42,000-square-foot science building which will house biology, chemistry, mathematics, physics, information systems, and allied health programs will open in fall 2001.

Information and Applications

For an application to Indiana University Kokomo and other information about the campus, contact:
Office of Admissions
Indiana University Kokomo
2300 S. Washington Street
P.O. Box 9003
Kokomo, IN 46904-9003
(765) 455-9389

For an application to an allied health program and additional information about allied health programs offered at Indiana University Kokomo, contact:
Dr. Robert Roales
Chairperson, Division of Allied Health Sciences
Indiana University Kokomo
P.O. Box 9003
2300 S. Washington Street
Kokomo, IN 46904-9003
(765) 455-9371
Fax: (765) 455-9528

For financial aid available at Indiana University Kokomo, contact:
Office of Financial Aid
Indiana University Kokomo
2300 S. Washington Street
P.O. Box 9003
Kokomo, IN 46904-9003
(765) 455-9359

Indiana University–Purdue University Fort Wayne

Because Indiana University–Purdue University Fort Wayne combines two universities in one, it provides an unusually comprehensive range of undergraduate programs. IPPW’s urban location allows university programs to offer many opportunities for practical experience and projects that tap community resources.
Since classes are relatively small, faculty have time for their students, in and out of class. Faculty members at IPFW are known for their dedication to teaching as well as for their professional expertise.

At IPFW, recent high school graduates mingle with older students who want to enrich their lives or take new career paths. This diverse group of students participate together in campus activities that include lecture and film series, concerts and plays, intramural and intercollegiate sports, fraternal organizations, and special interest groups.

IPFW prizes its rich mix of personalities and cultures and organizes special services for minority, international, and physically handicapped students. Other services include financial aid; individualized academic advising; well-equipped modern classrooms, laboratories, and libraries; career and placement counseling; and child care.

**Information and Applications**

For an application to Indiana University–Purdue University Fort Wayne and other information about the campus, contact:

Office of Admissions
Indiana University–Purdue University Fort Wayne
Ketter Hall 103
2101 Coliseum Boulevard East
Fort Wayne, IN 46805-1499
(219) 481-6812

For an application to an allied health program and additional information about allied health programs offered at Indiana University–Purdue University Fort Wayne, contact:

Dean's Office
School of Health Sciences
Indiana University–Purdue University Fort Wayne
Neff Hall 142
2101 Coliseum Boulevard East
Fort Wayne, IN 46805-1499
(219) 481-6967

For financial aid available at Indiana University–Purdue University Fort Wayne, contact:

Office of Financial Aid
Indiana University–Purdue University Fort Wayne
Ketter Hall 109
2101 Coliseum Boulevard East
Fort Wayne, IN 46805-1499
(219) 481-6820

**Indiana University Northwest**

Indiana University Northwest in Gary serves the highly diverse area of northwest Indiana, which includes urban, rural, industrial, and metropolitan characteristics. To meet the educational needs of this complex region, IUN offers a range of degree programs at the associate, baccalaureate, and master's levels as well as certificate and postbaccalaureate programs. IUN's broadly conceived educational and cultural events enrich the quality of life in northwest Indiana.

The rich economic, cultural, and racial diversity of northwestern Indiana is found on the campus. The student body is composed of both traditional students and students who have been away from school for a number of years, many of whom are working on a degree while continuing to earn a living. This mixture enhances the educational experience for all students at IUN. The campus offers a full range of student support services and flexible scheduling to meet the needs of its diverse student body. In addition, many cultural, social, and special interest activities on campus contribute to student life at IU Northwest.

**Information and Applications**

For an application to Indiana University Northwest at Gary and other information about the campus, contact:

Office of Admissions
Indiana University Northwest
Hawthorn Hall 100A
3400 Broadway
Gary, IN 46408-1197
(219) 980-6821

For an application to an allied health program and additional information about allied health programs offered at Indiana University Northwest, contact:

Division of Allied Health Sciences
Indiana University Northwest
Hawthorn Hall 206
3400 Broadway
Gary, IN 46408-1197
(219) 980-6863

Fax: (219) 980-6649

For financial aid available at Indiana University Northwest, contact:

Office of Financial Aid
Indiana University Northwest
Hawthorn Hall 101D
3400 Broadway
Gary, IN 46408-1197
(219) 980-6777

**Indiana University South Bend**

Centrally located in the Michiana area, Indiana University South Bend offers 91 degree programs for its almost 7,100 students. IUSB responds to today's college students by designing its academic programs, schedules, and support services to meet the needs of a diverse student body that includes many adult and part-time students as well as traditional students.

The campus lists teaching as its highest priority, and a student/faculty ratio of 20 to 1 ensures that students receive individual attention. More than 90 percent of the campus's full-time faculty have earned the highest degrees in their disciplines. IUSB offers a full range of student support services, from career and placement services to child care and a preschool. The many campus activities include lectures, films, plays, special interest groups, and athletics. IUSB's music and theater programs are important contributors to the cultural life of the Michiana region.

Facilities at IUSB house a full university program: laboratories, lecture halls, study areas, theaters, a cafeteria, lounges, and recreational centers.

Computer facilities are available to all students. The academic heart of the campus is the Franklin D. Schurz Library, which contains more than 370,000 volumes and several special collections.

**Information and Applications**

For an application to Indiana University South Bend and other information about the campus, contact:

Office of Admissions
Indiana University South Bend
Administrative Building 169
1700 Mishawaka Avenue
P.O. Box 7111
South Bend, IN 46634-7111
(219) 237-4839

For an application to an allied health program and additional information about allied health programs offered at Indiana University South Bend, contact:

Jim H. Howard, Director, Radiography Program
Indiana University South Bend
Northside Hall 405
1700 Mishawaka Avenue
P.O. Box 7111
South Bend, IN 46634-7111
(219) 237-6569

For financial aid available at Indiana University South Bend, contact:

Office of Financial Aid
Indiana University South Bend
Administrative Building 157
1700 Mishawaka Avenue
P.O. Box 7111
South Bend, IN 46634-7111
(219) 237-4358

**Indiana University Bloomington**

Indiana University Bloomington is the university’s primary residential campus, with nearly 35,000 students pursuing academic degrees. An outstanding faculty that numbers more than 1,500 has developed a reputation for research discoveries that have broadened knowledge in many areas.

Located in the rolling hills of southern Indiana, IU Bloomington is known for the wooded beauty of its campus. The city of Bloomington, with a population of 60,000, has been selected by Rand McNally as one of the eight most desirable places to live in the nation based on economy, personal safety, climate, housing, services, and leisure activities.

Students from all 50 states and 108 foreign countries study on the Bloomington campus. More than 5,000 course offerings provide a wealth of academic opportunity, and a wide array of lectures and seminars complement classroom, laboratory, and studio activity. The University Theatre, the Art Museum, and the Musical Arts Center serve as major resources for university programs in the performing and fine arts.

The resources of the University Libraries, with 7 million bound volumes and 17 million other holdings, are available to students on all campuses of the university and to all citizens of Indiana.
Information and Applications
While professional programs in allied health are not offered on the Bloomington campus, prerequisite courses are available. Students who want to take prerequisites toward an allied health degree on the Bloomington campus should contact:
John Simpson
Director, Health Professions and Pre-law Information Center
Indiana University Bloomington
Maxwell Hall 021
Bloomington, IN 47405-4601
(812) 855-9766

Indiana University Southeast
Indiana University Southeast is a modern commuter campus at New Albany in the metropolitan Louisville area. Its location permits students to benefit from many cultural, recreational, and employment opportunities.
IU Southeast offers 46 degree programs, including associate, bachelor's, and master's degrees, for its student body of 5,500. Approximately half of the IU Southeast students attend full time, while others take advantage of the convenience and flexibility of IUS programs to take courses related to their jobs, to combine work or family responsibilities with part-time study for a degree, or to take special courses of personal interest.
More than 85 percent of the full-time faculty at IU Southeast hold the highest degrees attainable in their fields. The average class size is 23 students.
Students can participate in more than 40 organizations, including fraternities and sororities and intercollegiate and intramural sports programs. With concerts, lectures, films, and theatrical productions, IUS offers students a rich cultural life.
An extensive range of student support services includes the Career Services and Placement Office and the Student Development Center.

Information and Applications
While most professional programs in allied health are not offered on the Southeast campus, prerequisite courses are available in cytotechnology, health information administration, health sciences education, occupational therapy, paramedic science, radiation therapy, radiologic sciences, and respiratory therapy. Students are able to obtain certificates in Medical Transcription and in Coding Specialist. Baccalaureate degrees are also available that will prepare a student for entry into the physical therapy master's degree program. Students who want to take prerequisites toward an allied health degree on the Southeast (New Albany) campus should contact:
Dr. Teresa Forsyth
Division of Natural Sciences, IS 202
Indiana University Southeast
4201 Grant Line Road
New Albany, IN 47150-6405
(812) 941-2657

Indiana University East
Indiana University East provides educational opportunities for east central Indiana, stressing accessible education, so area residents can achieve their personal and professional goals while living at home. The campus offers flexible schedules with day, evening, and weekend classes to allow students to take courses while maintaining family and job responsibilities. Ninety percent of the students at IU East work full or part time, and 72 percent attend the university part time.
The faculty at IU East is recognized for distinguished teaching, and an average class size of 19 makes frequent student-faculty interaction possible. Sixty-five percent of the full-time faculty members hold the highest degrees in their fields.
IU East stresses the importance of liberal education, career education, and lifelong learning in its varied offerings, which include 26 degree programs. The campus offers a full range of student support services for its more than 2,400 students. Career and academic counseling as well as academic support services are available through the IU East Academic Advising Center.

Information and Applications
While professional programs in allied health are not offered on the IU East campus, prerequisite courses are available. Students who want to take prerequisites toward an allied health degree on the East (Richmond) campus should contact:
Dr. Joan Lafuze
Professor
Department of Biology
Indiana University East
Whitewater Hall 268
2325 Chester Boulevard
Richmond, IN 47374-1289
(317) 631-0941 or (317) 278-0616

School of Allied Health Sciences
Dean’s Remarks
Thank you for your interest in the Indiana University School of Allied Health Sciences. Allied health degrees were first offered through Indiana University in 1940 with the implementation of the Bachelor of Science degree in Medical Technology. Over the years we have grown to 28 certificate and degree programs offered on five of the eight campuses of Indiana University. The school’s curriculum. We are proud of these relationships and continue to seek other collaborative opportunities.

School of Allied Health Sciences
Purpose
The Indiana University School of Allied Health Sciences is charged with providing allied health education within Indiana University. The school prepares allied health professionals to provide management skills for health services or diagnostic, therapeutic, and rehabilitative patient care. As part of a major university, the school accepts and fulfills four major responsibilities by providing (1) opportunities for federal granting agencies, and invited speakers. Their research is published in the best journals in their disciplines, and they routinely serve as consultants to community agencies, state and national health care facilities, and corporations. But their principal goal is to educate the next generation of practitioners to effectively function in the health care environment of the future.
The services offered by the school facilitate our student-centered approach to learning. Student advising starts immediately when an individual indicates a desire to study in one of our educational programs. Our Office of Academic and Student Affairs sponsors important student organizations in combination with its statewide advising network. The Office of Research and Graduate Studies is the entry point for learning more about our outstanding opportunities in graduate education.
To promote excellence in education, research, and service, the School of Allied Health Sciences maintains strong relationships with a variety of critical constituent groups. Our alumni activities keep our graduates involved. We improve facilities and offer scholarships through generous donations by alumni and friends of the school. The school’s collaboration with other academic units promotes creative opportunities, and our affiliation with over 500 health care facilities gives students unique educational experiences. Moreover, the involvement of associated faculty is essential to fully implement the school’s curriculum. We are proud of these relationships and continue to seek other collaborative opportunities.

Health care delivery in this country is undergoing dramatic change, but it remains one of the most personally fulfilling professions, and we know that most of our students pursue it with a sense of mission. The School of Allied Health Sciences strives to provide a comprehensive educational experience that helps students realize their goals and ambitions.

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to acquire a sound basic education in allied health sciences and to foster the development of lifelong habits of scholarship and service; (2) advancement of knowledge through research; (3) continuing education programs aimed at maintaining and improving the competence of those allied health professionals engaged in patient care or supportive health services; and (4) multiple services to the people of the state of Indiana in all areas of allied health sciences, patient care, and administrative supportive health services.

Philosophy
The School of Allied Health Sciences of Indiana University is committed to quality preparation of allied health personnel who have a concern for the well-being and welfare of the people they serve. The school integrates teaching, research, and service through the efforts of its faculty and students. This integration results in quality programs that have a significant, positive impact on health care.

Each program offered in the school provides the allied health student with an opportunity to develop expertise, scientific knowledge, and professional attitudes that will enable the student to contribute to the health of society and obtain career satisfaction. The programs adhere to specific professional guidelines or standards and are designed in collaboration with the appropriate accrediting bodies. All curricula are based upon a foundation in the liberal arts and sciences, which is essential for an informed and productive life.

The faculty believes that the education of allied health personnel follows a coordinated and logical interdisciplinary process based on a core body of knowledge germane to allied health practice. By sharing experiences related to a variety of activities, the student is introduced to others who have common, yet unique, educational interests. Appreciation of the contribution of each health discipline and interaction with peers and scholars in different health professions encourage the coordination of health planning, health services, disease prevention, and health promotion.

Education is perceived by the faculty as an evolving and continuing process toward an increased ability to think, reason, and judge that leads to a satisfying and self-disciplined life. Effective education allows for individual difference and is provided in a participative atmosphere. It is believed that freedom of choice and meaningful assimilation of facts nurture the development of the students, enhance their understanding of patients’ and clients’ problems, and promote a dedication to lifelong self-evaluation and self-education.

Faculty of the School of Allied Health Sciences are fully qualified in their fields of expertise and hold appropriate degrees and certification or licensure. In implementing the objectives of the school, they strive to keep their professional and teaching competencies current. The faculty are committed to preparing uniquely qualified personnel who must meet the challenges of the complex and ever-changing health care needs of society.

The graduates of the school should be prepared to apply the knowledge they have attained in their selected discipline. Graduates have a responsibility to maintain competency through formal and informal continuing education and to contribute to new knowledge in their discipline. Graduates have legal, moral, and ethical responsibilities to their employers, clients, patients, and the public and are expected to participate in community and professional activities.

This statement of philosophy forms the core of values from which the school’s vision, mission, objectives, policies, and procedures are derived.

Vision
The vision of the School of Allied Health Sciences is to be a nationally and internationally recognized leader in allied health education, research, and service, while providing a comprehensive array of high-quality health care professionals in Indiana.

Mission
The School of Allied Health Sciences has a long tradition of academic excellence. The school’s major purpose is to provide quality degree programs in the allied health sciences to meet the needs of the people of the state of Indiana. In fulfilling its fundamental purpose, the school seeks to develop and maintain a scholarly and competent faculty capable of achieving the following goals:

- To build upon sound principles of general education by preparing students to communicate effectively, exhibit quantitative skills, think critically, integrate and apply knowledge, exhibit intellectual depth and breadth, be intellectually adaptive, appreciate societal and cultural diversity, and apply ethical standards and values to professional practice.
- To provide undergraduate and graduate degree programs that offer education related to the provision and management of health services by the various allied health professions.
- To contribute to the advancement of knowledge through research.
- To provide continuing education for allied health practitioners wishing to further their career development.
- To foster the development of lifelong habits for scholarship and service among faculty and students.

In addition to the mission of the school, each program has its own mission statement which can be found on the school Web site or in the brochures produced by individual programs. Please see the Web site or contact individual programs for further information.

History of Current Degree Programs
The School of Allied Health Sciences is the prebaccalaureate and postbaccalaureate academic, administrative, and fiscal unit of the School of Medicine. Allied Health Sciences was first established as a division in 1989 by action of the Trustees of Indiana University. In 1986, the Trustees conferred upon the faculty of the School of Medicine the responsibility and authority to qualify for the Bachelor of Science degree those students successfully completing the prescribed curriculum in four allied health programs that had been offered long before the establishment of the division. Since that time, additional baccalaureate programs and new programs at the associate and master’s levels have been approved and initiated.

At the April 1991 meeting of the Trustees of Indiana University, the Division of Allied Health Sciences was approved as a university-wide school. The School of Allied Health Sciences encompasses allied health programming on five of the eight campuses of Indiana University.

The School of Allied Health Sciences is composed of 25 distinct allied health academic degree programs. The school is one of the oldest allied health academic units in the country and has provided leadership in allied health services, as well as research and education, to the citizens of Indiana, the region, and the nation for 37 years. In 1967, the school was one of 13 allied health units from across the country to participate in the planning and formation of the national professional society—the Association of Schools of Allied Health Programs.

Accreditation
The School of Allied Health Sciences shares with the other schools of the university the accreditation accorded Indiana University as a member of the North Central Association of Colleges and Schools.

In addition, the professional programs are individually accredited by appropriate governing agencies within the discipline. See program-specific sections.

Preadmission Status
Enrollment at Indiana University does not guarantee admission to the professional programs offered through the School of Allied Health Sciences. To be eligible for admission to the programs offered by the school, students must adhere to the academic regulations of the academic unit in which they are enrolled and meet school and program preadmission requirements as stipulated in the general-education and program sections of this bulletin. Admission to many programs is competitive; therefore, completion of the prerequisites does not guarantee admission to the program. On some campuses a student may be admitted to the School of Allied Health Sciences as a preprofessional student; however, this status is for academic advising purposes only and in no way influences admittance into a professional program.

Change of Educational Objective for Preprofessional Students
Changing one’s educational objective to an allied health program does not guarantee admission to the school or the program. Students thinking of changing their educational objective should consult with the allied health counselor on their respective campuses prior to initiating the change. Pre—allied health students in University College, the School of Allied Health Sciences, or other Indiana University schools or divisions must follow that academic unit’s procedures for changing the educational objective. All students must meet school and program
admission requirements in order to be admitted to a professional program offered through the School of Allied Health Sciences.

Admission Policies

The admission policies of individual programs within the School of Allied Health Sciences on all campuses comply with the following standards:

Prerequisite Course Work  Applicants must complete prerequisite courses at an accredited high school (or by GED equivalent), college, or university. Individual programs determine the specific courses and the minimum grade that must be achieved in any course (see specific program information); therefore, program-specific requirements may differ. The completion of a prerequisite course with a Pass/Fail grade must be approved by each program. Students are eligible to apply for admission to an associate or baccalaureate program when their academic progress shows reasonable probability that entry-level requirements can be completed prior to the beginning date of the professional program. Applicants should read the “Admission Policies” and “Program Descriptions” sections of this bulletin for specific entry-level requirements.

Grade Requirements  Without exception, applicants must have a cumulative grade point average of at least 2.00 on a 4.00 scale for all course work completed at Indiana University and/or any other college or university. Some programs have established a minimum grade point average higher than 2.00 on a 4.00 scale. Some programs also use a component of the overall grade point average (for example, math/science grade point average). See specific program information. Only completed course work and the resultant grade point average are evaluated. In evaluating the high school record of applicants to an associate degree program, only academic course work will be used in calculating the admission grade point average. Students may not be admitted to, hold a position in, or begin a program if they would be on probation as defined by the School of Allied Health Sciences. Students are placed on probation within the School of Allied Health Sciences when the cumulative and/or most recently completed semester grade point average falls below 2.00 on a 4.00 scale. The applicant must also maintain the minimum grade point average as established by the program. The applicant’s grade point average will be the major consideration (51 percent or greater) for admission. (See specific program information.)

Repeated Courses  Applicants whose cumulative grade point average is at least 2.00 on a 4.00 scale and who have repeated courses may petition to have their admission grade point average recalculated. The recalculation will use the most recent grade of the repeated course. This repeat option includes the use of the Indiana University EX option and is applied with the following restrictions: it can be used for a total of no more than 15 credits; the grade will be deleted not more than twice for a given course; each attempt will count toward the 15 credit hour limit; and W’s cannot be used to replace a grade and will not count toward the 15 credit hours. If more than 15 credit hours are repeated, the applicant will determine which of the repeated courses are to be deleted. The petition must be attached to the application. The effective date is the beginning of the 1996 fall semester. Any course being used to replace an earlier taking of the course must be taken in the fall of 1996 or later.

Academic Bankruptcy  Applicants whose grade point average is at least 2.00 on a 4.00 scale may petition the program for up to one year (fall, spring, and summer) of academic bankruptcy based on compelling nonacademic reasons. The bankrupted semesters must be consecutive. Academic bankruptcy is for admission purposes only and in no way affects the university’s official grade point average. Course work completed in a semester that has been bankrupted for admission purposes cannot be used for the fulfillment of program prerequisites or counted as credit hours toward the degree. The petition must be attached to the application.

Fresh Start  The Indiana University School of Allied Health Sciences, for the purposes of selecting candidates for its various undergraduate programs, will allow an applicant to appeal to the program’s admissions committee for “academic forgiveness.” Students must request academic forgiveness at the time of program application.

Academic forgiveness will eliminate, during the forgiveness period, all courses and grades earned by the applicant for the purpose of calculating the admission grade point average. Only grades from courses completed after the forgiveness period will be considered in admission calculations. No course taken during this forgiveness period may be used for the fulfillment of any prerequisite or graduation requirement.

The forgiveness period begins with the applicant’s first academic enrollment period (at any college/university) and ends on a date designated by the applicant but no less than four calendar years for baccalaureate degree programs (two calendar years for associate degree programs) prior to the program’s starting date. To invoke this policy, the student must meet the following conditions:
1. have a 2.00 grade point average (on a 4.00 scale), including all course work taken during the requested forgiveness period,
2. complete a minimum of 24 credit hours for bachelor’s degree programs (12 credit hours for associate degree programs) of graded course work after the forgiveness period, and
3. meet all other program-specific admission requirements.

The granting of academic forgiveness by a program does not alter the student’s official academic record. Students must meet all minimum degree requirements and may invoke this policy only one time. The petition for academic forgiveness must be attached to the application.

Credit by Examination  Applicants to any of the Indiana University School of Allied Health Sciences programs who have received “credit by examination” in a course that meets a program prerequisite will be viewed as meeting this specified requirement. Application of this policy for math/science prerequisites will be determined at the program level.

Any “credit by examination” hours received by the student must be transferred onto the student’s university transcript before it can be considered as meeting a program’s admissions prerequisite. At IUPUI, “credit by examination” can be earned from the following sources: Advance Placement (AP), the College Level Examination Program (CLEP), the Defense Activity for Non-Traditional Education Support (DANTES), and Indiana University departmental examinations. Students on other campuses should contact the School of Allied Health Sciences Administrative Office on their campus.

Testing  Applicants may be required to complete testing as designated by the program. Testing results may be used as a component of the admissions decision unless their use would violate state or federal law.

Interview  Applicants may be required to complete a personal interview. The interview may be a component of the admission decision.

Technical Standards for Admission and Retention  Since a degree in one of the allied health sciences disciplines attests to the mastery of knowledge and skills, graduates must possess the essential knowledge and skills to function in a broad variety of clinical situations and render a wide spectrum of patient care in a safe and effective manner.

The School of Allied Health Sciences faculty has therefore specified nonacademic criteria. Technical Standards for Admission and Retention, which all applicants/students are expected to meet in order to participate in the allied health programs. These criteria include the following five categories: (1) observation; (2) communication; (3) motor function; (4) intellectual-conceptual, integrative, and quantitative abilities; and (5) behavioral and social attributes. All accepted students will be required to sign a statement certifying that they can meet the technical standards that apply to the program to which they have been admitted. A copy of the technical standards will be sent to each applicant with an offer of admission. Additionally, a copy may be obtained from the program of interest or the Office of Academic and Student Affairs in the School of Allied Health Sciences.

Preference to In-State Residents  Preference is given to applicants who are Indiana residents. Preference is also given to applicants who complete the majority of applicable course work at a public college or university in Indiana. This policy is applicable only to undergraduate programs, and is applied at the time of program application.

Equal Opportunity/Affirmative Action Policy  Indiana University pledges to continue its commitment to the achievement of equal opportunity within the university and throughout American society. In this regard, Indiana University will recruit, hire, promote, educate, and provide services to persons based upon their individual qualifications. Indiana University prohibits discrimination based on arbitrary consideration of such characteristics as age, color, disability, ethnicity, gender, marital status, national origin, race, religion, sexual orientation, or
veteran status. Indiana University shall take affirmative action, positive and extraordinary, to overcome the discriminatory effects of traditional policies and procedures with regard to the disabled, minorities, women, and Vietnam-era veterans. An office on each campus monitors the university’s policies and assists individuals who have questions or problems related to discrimination.

Policy Changes Policies concerning the minimum grade point average for admission consideration are subject to change. Changes for beginning freshmen become effective the semester following the announcement of the decision to the university counselors and other constituencies. Changes in prerequisite courses or the minimum grade required in a prerequisite course will be applied as follows for continuing students:

1. Applicants who have taken the course prior to the change and who meet the old requirement will have satisfactorily completed the requirement.
2. Applicants who have taken the course prior to the change and who do not meet the old requirement must complete the course under the new requirements.
3. Applicants enrolled in the course at the time of the change will be permitted to meet the old requirements.
4. Applicants who have not taken the course prior to the change will have to meet the new requirements.

Admission Procedures
1. In addition to the general admission requirements stated above, the program-specific sections in this bulletin must be read for admission requirements and deadlines.
2. Individuals seeking admission to a professional program must submit a complete school/division application prior to the program’s application deadline. See the campus information section of this bulletin for names, addresses, and telephone numbers of persons to contact for applications. When applying to more than one program or campus, separate applications must be completed. Admission to the professional program is competitive; application for admission to the school does not constitute automatic admission to a program.
3. Applicants who are not Indiana University students must also file an Indiana University application and pay the application fee prior to the program application deadline. Applications for admission to Indiana University can be obtained from the Office of Admissions on the campus of interest. Some campuses may have application deadlines.
4. All complete applications are reviewed by the program’s admission committee. The selection of a class is based on school and program admission criteria. All applicants receive written notification of their admission status.
5. Applicants may appeal any admission decision except the requirement of a cumulative grade point average of 2.00 on a 4.00 scale. Copies of the policies and procedures governing the appeals process are available on request from any of the allied health administrative offices.
6. Individuals interested in being admitted to one of the school’s programs should contact the program of interest annually for an update of admission criteria.
7. The school/division application is revised each summer. Applicants must obtain an application for the year in which they wish to apply.
8. Applicants should check the current school application for submission deadlines.
9. Students who have been convicted of a felony may be unable to obtain appropriate credentials to practice in some disciplines. Contact the program director for further information.
10. Individuals whose names appear on the Sex Offenders List will not be allowed to pursue admission to any program in the School of Allied Health Science.

Transfer Credit Acceptance of credit from a regionally accredited college or university for transfer to Indiana University will be determined by the campus office of admissions. While the grades from course work completed at Indiana University and all other colleges and universities are used to calculate the admission grade point average, only grades of C (2.00) or above will be considered for transfer. The university does not accept the transference of special credit by examination awarded by another college or university. The transfer of credit earned through a regionally accredited junior college or a community college is normally limited to the equivalent of two years of academic work toward a baccalaureate degree and one year of academic work toward an associate degree.

Correspondence Courses All credit to be applied to an allied health degree earned through IU’s Independent Study Program, correspondence study, or other nontraditional methods must be validated and approved by the faculty of the program to which the student is applying. The School of Allied Health Sciences retains the right to determine the acceptability of transfer credit to meet degree requirements.

UNDERGRADUATE Degree Requirements
The faculty of the School of Allied Health Sciences, Indiana University School of Medicine, will recommend for degrees only those students who have been admitted to Indiana University and are students in good standing in the School of Allied Health Sciences. Candidates for degrees are eligible for graduation upon completion of all program requirements in effect when the student first enrolls in professional course work, provided requirements are met within five years. (Exception: State rules require students in paramedic science to complete the professional program in two years.)

The program faculty reserve the right to require students whose program course of study is interrupted for any reason to meet requirements as specified by the director of the program and the dean of the School of Allied Health Sciences or the dean’s campus designee. Changes in the student’s original program may be necessary when, for example, a curriculum has been revised, offerings are no longer available, significant changes in curriculum content have occurred, or repetition of material is deemed essential to assure continuity of clinical competency.

Academic counseling and guidance are available for students. Students are responsible for seeking such counseling and guidance and for planning courses of study to meet degree requirements.

General Undergraduate Requirements

Minimum Degree Requirements
1. Based upon earned Indiana University credits, a minimum cumulative grade point average of 2.00 must be maintained.
2. A minimum of 30 credit hours of program or program-related course work must be completed in residence on the Indiana University campus at which the degree is awarded.
3. Additional general requirements must be completed for the bachelor’s degree or associate degree as listed below:

   Bachelor's Degree
   a. Minimum of 122 credit hours.
   b. School baccalaureate degree general-education requirements.
   c. Minimum of 30 credit hours in courses at the 300-400 (junior-senior) level.
   
   Associate Degree
   a. Minimum of 60 credit hours.
   b. School associate degree general-education requirements.

Students must complete the prescribed course of study, meeting program academic, professional, and technical standards requirements, which may exceed the requirements stated above. Program professional standards consist of ethics and proper health care practices to which students must adhere. Program faculty will distribute these standards when appropriate.

During the fall semester prior to the graduation year, the student is responsible for submitting an intent-to-graduate form, which indicates that the student plans to complete all requirements for the appropriate degree.

Work for a degree must be completed within five years from the time the student first enrolls in the professional program. (Exception: State rules require students in paramedic science to complete the professional program in two years.) Under unusual circumstances, the program director may recommend granting a waiver of this requirement.

Degrees are granted in May, June, August, and December; however, Commencement exercises are held only in May.
General-Education Requirements

Each candidate for an undergraduate allied health degree must complete course work in the following categories:

Basic General-Education Areas

A.S. Degree

Written Communication, one course
Verbal Communication, one course

At least one course from any two of the following categories:
College-level Mathematics
Social-Behavioral Sciences
Basic Life-Physical Sciences

Humanities (classical studies, literature, English, folklore, foreign language, history, journalism, philosophy, religion, speech communication, minority studies, visual and performing arts)

B.S. Degree

Written Communication, three courses
(two prerequisites: one in professional curriculum. See program section for specific content emphasis.)
Verbal Communication, one course
Humanities, one course (classical studies, literature, English, folklore, foreign language, history, journalism, philosophy, religion, speech communication, minority studies, visual and performing arts)
College-level Mathematics, one course
Social-Behavioral Sciences, two courses
Basic Life-Physical Sciences, two courses

In addition to the above general-education requirements, students are strongly encouraged to learn to do word processing, use e-mail, and navigate the internet prior to the beginning of the professional program. See program-specific sections for program requirements.

Program Prerequisites

Each program has additional specific course requirements. Refer to the program of interest in this bulletin for specific information.

Professional Program Requirements

An outline of the professional program is contained in the program-specific information in this bulletin.

Academic Regulations

All students admitted to the School of Allied Health Sciences are governed by the following academic regulations.

Grades

All students admitted to the School of Allied Health Sciences are governed by the grade definitions and minimum grade requirements as established by their professional program. Instructors are responsible for establishing and publishing the grading scale applicable to their courses.

Points are assigned to determine the cumulative grade point average as follows:

- A+ or A = 4.00
- A– / A = 3.70
- B+ = 3.30
- B = 3.00
- B– = 2.70
- C+ = 2.30

No points are assigned for I (Incomplete); S (Satisfactory); P(Passing); R (Deferred); W (Withdrawn); or FX, DX, CX, or BX (Course Repeated) grades.

Grade Point Average

Courses transferred from other institutions are not used to calculate the cumulative grade point average for graduation. Regardless of the number of times they are taken, all courses that are repeated are evaluated by averaging the grades received. Courses for which the grades of I, S, P, R, W, or FX are assigned are not used to calculate the cumulative grade point average since there are no points assigned to these grades.

R Grade, Deferred

The R grade (deferred grade) is applicable only to courses approved for that purpose. The grade R used on the final report indicates that the nature of the course is such that the work of the student can be evaluated only after more than one term. Upon completion of the course, the instructor will submit paperwork to replace the R grade on the transcript with the earned grade.

Pass/Fail

Pass/Fail grading is a student option in elective courses. Any student in good standing may enroll in elective courses for which the grade assigned is P (Pass) or F (Failure). Such courses, if passed, are credited toward the degree but do not affect the grade point average. A failing grade adversely affects the grade point average. Students may not use the Pass/Fail option for a stated prerequisite or a professional course. No more than one Pass/Fail course may be taken in any one semester. Students are limited to a maximum of 24 Pass/Fail credit hours for the baccalaureate degree and a maximum of 12 Pass/Fail credit hours for the associate degree.

Satisfactory/Fail

A grade of S (Satisfactory Performance) or F (Failure) is used for approved courses. In such courses, the only grades permitted are S and F, and students are notified during the first class session of the S/F grading policy for the course. The credit hours earned with a grade of S count toward graduation, but the S grade will not be calculated in the grade point average. However, an F grade is computed in the grade point average. The number of courses taken on an S/F basis does not affect the number of courses permissible on a P/F basis.

Incompletes

A grade of I (Incomplete) indicates that a student made successful progress in a course and completed a majority of the course work satisfactorily but, because of a compelling nonacademic reason, did not complete all of the course work by the end of the grading period. The course instructor establishes the criteria, procedure, and time limit for the removal of the I grade. The time limit, however, may not exceed one calendar year, after which time the I grade, if not changed by the instructor, automatically becomes an F.

Special Credit Policy

The School of Allied Health Sciences may award special credit to students who are enrolled at Indiana University seeking a degree and who possess, by previous education or experience, a background in an allied health discipline represented in the school. The mechanisms by which a student may be awarded credit include credit by credentials, credit by experience, and credit by examination. Each discipline has policies that define how these mechanisms apply to a student seeking credit from that discipline. Students may obtain a copy of the school’s Special Credit Policy and Procedure by contacting any of the allied health administrative offices.

Withdrawal from a Course

With appropriate approval of the faculty, withdrawal is permitted at or before midterm with an automatic grade of W. A student withdrawing during the third quarter of each semester will receive a W or an F depending upon the student’s performance in the course. In the last quarter of each semester, students may withdraw with a grade of either W or F at the instructor’s discretion with the approval of the instructor and the dean or campus designee and dependant upon student performance at the time withdrawal is requested.

Double Major

A double major does not exist in the School of Allied Health Sciences, and second major options have not been established between the school and any other academic unit. Each degree in the School of Allied Health Sciences is a separate academic curriculum, and students may not pursue a double major.

Multiple Degrees

Students earning more than one degree at the same level are required to meet the academic requirements for the degree in each school and must be recommended for the degree by the faculty of each school. Students receiving a degree from the School of Allied Health Sciences are required to complete the professional component in sequence with their class of admission.

Grade Replacement Policy

For IUPUI students only) The purpose of this policy is to allow students who have done poorly in a course to repeat the course and remove the weight of the earlier grade from the student’s cumulative grade point average when the student is applying for admission into a School of Allied Health Sciences program. This policy expands the FX policy by extending the replacement option to courses in which students receive any grade rather than just grades of E. Schools retain the right to consider the student’s complete academic record for...
purposes of admission to the school, granting of honors, or meeting the minimum grade point average required for conferral of the degree. Use of the grade replacement policy is for admissions purposes only and in no way affects the student's official university grade point average.

1. The effective date is the beginning of the fall 1996 semester. Any course being used to replace an earlier taking of the course must be taken in the fall of 1996 or later.

2. The provisions apply to students pursuing an undergraduate degree only.

3. A student may exercise the grade replacement policy for a maximum of 15 credit hours. The 15 credit hour limit includes any course previously replaced using the FX policy.

4. Grade replacement replaces the use of the FX option. Grades previously granted FX will be honored subject to statement 3 above.

5. A student may exercise the grade replacement policy no more than twice for a single course. Each attempted replacement will count toward the 15 credit hour limit.

6. Once it is invoked, a student may not subsequently request reversal of the grade replacement granted to a particular course.

7. Any grade may be replaced. The replaced grade will then be excluded from the cumulative grade point average. However, the course listing and the replaced grade will remain on the student's academic record with an "X" denoting that the grade is excluded from the cumulative grade point average.

8. Invocation of the forgiveness option does not preclude a student from using grade replacement for work taken subsequent to re-enrollment as defined by the Forgiveness Policy.

Grade replacement is available for courses taken at Indiana University. Schools retain the right to consider records of performance from other universities in determining admission to the school and granting of honors. This assumes that if the student's initial course was taken on another IU campus, that campus is willing to place the student's initial course was taken on another IU campus, that campus is willing to place the replacement flag on the course at the request of the IUPUI registrar.

Remedial Courses Generally, remedial and refresher courses will not satisfy any course requirement for any allied health sciences degree. Contact the program for further information.

Academic Policies

Students in Good Standing Students must maintain a minimum cumulative grade point average of 2.00 (C) and a minimum grade point average of 2.00 for the most recent academic session and meet additional program, academic, and professional standards in order to be considered in good standing. Students are informed of program, academic, and professional standards during program orientation.

Class Standing Within Indiana University, class standing is based on the total number of credit hours a student has earned. However, within the school, class standing is assigned according to a student's progress in the professional curriculum.

Semester Load To be considered a full-time student by the university for each session, the student must register for a minimum of 12 credit hours each fall and spring semester and 6 credit hours each summer I and II. The maximum load is 18 credit hours. The number of credit hours determining full-time student status may vary with the nature of the program. For any enrollment period required by a program, the student is considered to be full-time regardless of the number of credit hours taken during that period. Students who want to carry more than 18 credits must obtain permission of the program director and the dean or the dean's campus representative. In addition, students should have a cumulative 3.00 (B) average or have earned a 3.00 (B) average in their last full semester.

Probation Upon the recommendation of the faculty in the student's program, a student is placed on probation. Probationary recommendations are made when the student does not meet standards of academic performance or professional behavior. A student will be placed on academic probation for the academic session following the one in which the student fails to attain a minimum 2.00 (C) cumulative and/or semester grade point average. Individual programs may have additional academic and/or professional standards. A student who fails to meet these program-specific standards may also be placed on probation. Students are informed of program-specific standards upon entering the program. A student will be removed from probation after satisfactorily completing the program's specified requirements. Students are notified in writing of probationary actions by the school's dean or the dean's campus representative.

Dismissal Upon the recommendation of the faculty in the student's program, a student may be dismissed from the school. Dismissal is based on the failure to meet academic or professional standards. The student will be informed of the dismissal in writing by the school's dean or the dean's campus representative. A student who has been dismissed from the school may not apply for readmission to the program in which the student was enrolled at the time of dismissal. Under special circumstances, a waiver may be requested by the program and forwarded to the school's appeals committee for action.

Academic Standards A student may be dismissed from the School of Allied Health Sciences when, in the judgment of the faculty, the student has ceased to make satisfactory progress toward a degree. When an undergraduate student fails to attain a 2.00 (C) grade point average in any two consecutive academic sessions, has a cumulative grade point average below 2.00 (C) for two consecutive semesters, or fails to earn higher than a 1.00 (D) grade point average in any one semester, the student is automatically considered to be making unsatisfactory progress toward a degree and is thereby eligible for dismissal.

In addition, a student who fails to meet program-specific academic requirements is considered not to be making satisfactory academic progress toward a degree and may be dismissed. At the time of program orientation, each student receives a copy of the program-specific academic requirements.

Professional Standards A student failing to meet the standards of professional and personal conduct may be recommended for dismissal.

Withdrawal and Readmission A student may be readmitted to the school after withdrawal as follows:

Temporary Withdrawal Students in good standing who voluntarily and temporarily withdraw from a program assume temporary inactive status with the School of Allied Health Sciences. At the time of departure, it is the student's responsibility to arrange in writing a continuation agreement with the individual program director. The student is allowed to re-enroll as specified in the continuation agreement. The student must meet any specific academic/clinical requirements associated with re-enrollment under the continuation agreement. Students failing to re-enroll as specified in the continuation agreement are subject to dismissal from the School of Allied Health Sciences.

Other Withdrawal A student who withdraws without arranging in writing for a continuation agreement with the program director, or fails to enroll in any semester, will not be allowed further enrollments in the school and will be considered as not making satisfactory progress toward a degree. Such students who want to re-enroll must file an application for admission and will be considered as new applicants. New prerequisites and standards must be met. These students may be considered for advanced standing in the program provided the completed work meets the current standards of the program.

Honor

The School of Allied Health Sciences offers the following honors to recognize superior student performances.

Degrees Awarded with Distinction The university recognizes a student's superior performance in course work by awarding the associate or bachelor's degree with one of three levels of distinction: distinction, high distinction, or highest distinction. A student must meet the following criteria to receive a degree awarded with distinction.

1. Baccalaureate and associate degree candidates must rank within the highest 10 percent of their graduating class. The determination of eligibility for graduation with academic distinction will be made by the School of Allied Health Sciences so that candidates will be ranked with classmates who received the same type of degrees (e.g., B.S. in Occupational Therapy, B.S. in Radiologic Science).

2. If the 10 percent determination of any class results in a fractional value, the number will be rounded upward (e.g., a graduating class of 11 would have two individuals eligible for distinction).

3. Calculation of the grade point average for graduation with distinction will be based upon the total number of credit hours completed at Indiana University. A candidate for a baccalaureate degree must have completed a minimum of 60 credit hours at Indiana University; associate degree candidates must have completed at least half of the credit hours required for their degree at Indiana University.

4. No more than 10 percent of the Indiana University credit hours may be eliminated from the grade point average determination by utilization of the mechanisms of Pass/Fail or special credit.
5. A minimum cumulative grade point average of 3.50 must have been achieved.

6. Three levels of distinction will be recognized and determined as follows: 3.50 through 3.74—Distinction; 3.75 through 3.89—High Distinction; 3.90 through 4.00—Highest Distinction.

7. The determination of candidates who will wear honor cords at the May graduation ceremonies should include all academic credit earned at IU including the spring semester prior to commencement.

8. Unique cases and appeals should be forwarded to the dean of the School of Allied Health Sciences or the dean’s campus designee for consideration.

Dean’s List Each semester, students who excel academically have the privilege of being listed on the School of Allied Health Sciences Dean’s List. To be eligible, students must carry 9 or more credit hours. Additionally, associate degree students must earn a semester grade point average of 3.50; baccalaureate degree students must earn a grade point average of 3.70.

Program Awards School of Allied Health Sciences programs offer awards recognizing academic excellence, leadership, career potential, and service. Students should refer to specific programs for descriptions of these awards.

IUPUI Honors Degree Qualified students at IUPUI may work toward the General Honors Degree, which can be earned at the baccalaureate or associate degree level.

At the baccalaureate level, the student must fulfill both general and departmental requirements. Minimum requirements for an honors degree are 24 hours of honors credit, at least 6 of which are outside the major. A student passing in an honors course will receive credit toward graduation; however, only grades of A or B count for honors credit. There is a grade point average requirement of 3.30 overall and 3.50 for honors courses.

At the associate level, students must complete all regular associate degree requirements. In addition, they must complete a minimum of 12 credit hours in honors work of which no more than 5 may be in skills courses. In their required courses, they must include 3 credit hours (usually honors courses) outside the department or school in which they are majoring. Students must earn a grade point average of 3.30 overall and 3.50 for honors work.

Students in the School of Allied Health Sciences who would like to pursue courses under the IUPUI Honors Program should consult with program faculty regarding the availability of such courses within the particular program of interest.

Student Rights and Responsibilities Application to and enrollment in the university constitute the student’s commitment to honor and abide by the practices and policies stated in the university’s official announcements, bulletins, handbooks, and other published materials and to behave in a manner that is mature and compatible with the university’s function as an institution of higher learning. The Indiana University Code of Student Rights, Responsibilities, and Conduct is available in electronic format. Students are expected to read this document and, by their enrollment, agree to its contents and additional School of Allied Health Sciences statements, which appear below.

Academic Advising A professional advisor is available to assist students who are working on the prerequisites for a professional program. Once admitted to a professional program, students are advised by faculty within the program. It is the student’s responsibility to seek counseling and guidance. The student is responsible for planning a program to meet degree requirements.

Appeals The School of Allied Health Sciences abides by the appeals procedures discussed in the Indiana University Code of Student Rights, Responsibilities, and Conduct. Students may obtain a copy of the school’s Appeals Policy and Procedure from any of the school’s administrative offices.

Attendance Students are responsible for complying with all attendance requirements that may be established by the school faculty.

Cheating and Plagiarism Faculty and students have rights and responsibilities for learning, teaching, and scholarship within the entire university community. Academic functions are characterized by reasoned discourse, intellectual honesty, mutual respect, and openness to constructive change. Individuals must remain active in avoiding violation of academic ethics.

Cheating Dishonesty of any kind with respect to examinations, course assignments, alteration of records, or illegal possession of examination questions shall be considered cheating.

It is the responsibility of the student not only to abstain from cheating but, in addition, to guard against making it possible for others to cheat. Any student who helps another student to cheat is as guilty of cheating as the student assisted. Students should also do everything possible to induce respect for the examination process and for honesty in the performance of assigned tasks in or out of class.

Plagiarism Honesty requires that any ideas or materials taken from another source for either written or oral use must be fully acknowledged. Offering the work of someone else as one’s own is plagiarism. The language or ideas thus taken from another may range from isolated formulas, sentences, or paragraphs to entire articles copied from books, periodicals, speeches, or the writings of other students. The offering of materials assembled or collected by others in the form of projects or collections without acknowledgment is also considered plagiarism. Any student who fails to give credit for ideas or materials that are taken from another source is guilty of plagiarism.

Clinical Affiliations Clinical affiliations (fieldwork experiences) are required in most School of Allied Health Sciences programs. The program faculty is responsible for the selection, approval, and assignment of clinical experiences. Although individual student needs and desires will be recognized, the final placement decisions are made by the program faculty. Students are responsible for transportation, fees, and self-support, and for following the rules and regulations of the center(s) to which they are assigned. In addition, student conduct must be consistent with the standards of the university and the profession.

Confidentiality of Records Indiana University, in compliance with the General Education Provisions Act, Section 438, titled Family Educational Rights and Privacy Act, provides that all of a student’s records are confidential and available only to that student and to the parents if the student is under 21 and dependent as defined by IRS standards. The student may review the record upon request and may ask for deletions or corrections of the record in a hearing process described in detail in the Indiana University Code of Student Rights, Responsibilities, and Conduct. References, recommendations, and other similar documents may carry a voluntary waiver relinquishing the student’s right to review this specific material. The student may also release the record to others by signing a written release available in the offices that maintain records. Further details regarding the provisions of the Privacy Act and a list of offices where student records are kept may be found in the Indiana University Code of Student Rights, Responsibilities, and Conduct.

Degree Applications Each fall, students preparing to graduate during the following calendar year must file an intent-to-graduate form in the office of the program in which they are enrolled. Program faculty then certify the student’s satisfactory completion of degree requirements. If changes in the anticipated date of degree completion occur, students must consult their faculty advisor and file an updated intent-to-graduate form.

Financial Aid A student may seek financial assistance through the financial aid office on the campus of interest. In addition, assistance may be available through the School of Allied Health Sciences Student Affairs Committee, professional associations, and other external groups and agencies.

Costs Students are responsible for the following costs:

Fees and Tuition Fees and tuition are established annually by the Trustees of Indiana University.

Books and Supplies Books and supplies are determined by the program.

Uniforms During clinical/fieldwork experiences, students must adhere to the dress code requirements of the program and training site. Students are responsible for providing their own uniforms.

Transportation Students are responsible for travel and lodging costs associated with clinical/fieldwork experiences.

While tuition, fees, and other related expenses change each year, the estimated cost associated with matriculating in one of the undergraduate professional programs for the 2001-2002 academic year ranged from $5,000 to $12,500. Contact the program of interest for a current cost sheet.

Liability Insurance All students participating in required fieldwork experience are covered by the
university’s medical malpractice insurance. When requested, students may be required to purchase and show proof of general liability insurance prior to being certified to begin the clinical experience.

Health  Before the beginning of the professional program, students are required to demonstrate proof of immunization for tetanus and diphtheria, rubella, rubella (measles), mumps, varicella (chicken pox), and hepatitis. All students must have a PPD tuberculin skin test within the last three months. Students may be required to complete a physical examination (see program specific requirements). All students must show proof of health insurance before beginning the professional program.

International Students  Foreign nationals enrolled in the school are subject to the same rights and responsibilities as all other students. International students should consult the office for international students on the campus of interest. A processing fee may be charged to entering students.

Orientation  School of Allied Health Sciences programs require students to attend orientation programs prior to the beginning of the professional courses. Students are responsible for attending these sessions and for the program-specific policies and standards distributed and discussed at the sessions.

Professional Conduct  Students are responsible for exhibiting conduct appropriate to their professional training and education. Each program distributes standards and policies of appropriate professional conduct at the time of program orientation.

Registration and Record Changes  It is the student’s responsibility to enroll in each required academic session and satisfactorily complete all courses required for the degree. Faculty are available to provide academic advising.

Students are responsible for filing the necessary Student Record Change form with the School of Allied Health Sciences Office of Academic and Student Affairs in Coleman Hall 120 as soon as possible following a change of name or permanent address. Additional information regarding degree requirements and academic standards may be found elsewhere in this bulletin.

Credentials/Licensure  Students completing any of the professional programs are qualified to sit for the appropriate licensure and/or credentialing examinations. Contact the program director for further information.

Allied Health Alumni Association  The Allied Health Alumni Association, which has an enrollment of more than 700 active members, was officially recognized as a constituent member of the Indiana University Alumni Association in 1976. Active membership is open to all graduates of the School of Allied Health Sciences programs.

For more information, contact the Indiana University Alumni Association, School of Allied Health Sciences Alumni Association, University Place Conference Center, room 241, 850 W. Michigan Street, Indianapolis, IN 46202-6044; (317) 274-8828.

Academic Programs

Clinical Laboratory Science/Medical Technology  The educational program in clinical laboratory science/medical technology is located on the Indiana University–Purdue University Indianapolis campus, Indiana University Medical Center.

Description of the Profession  Clinical laboratory science/medical technology is a diverse, science-oriented profession aimed at accurate performance of clinical laboratory procedures on biologic samples from patients. The results from these procedures are used by physicians in diagnosing and treating diseases. Some of the tasks that clinical laboratory scientists/medical technologists perform are listed below:

- Analysis of simple/simplex chemical components of body fluids.
- Evaluation of cellular components of blood.
- Identification of microorganisms and their antibiotic susceptibilities.
- Preparation of blood components for patient therapy.
- Evaluation of new techniques, procedures, and instruments.

These laboratory personnel continually evaluate the quality of the results from procedures and instruments and solve any problems that relate to inconsistencies. Excellent communication skills are required to interact with other members of the health care team, to teach, and to manage individuals under their supervision.

Clinical laboratory scientists/medical technologists typically work in laboratories located in hospitals, clinics, physician group practices, blood centers, medical research facilities, or medically oriented industries.

Graduates of the Program  Students who successfully complete the senior/professional year of the clinical laboratory science/medical technology program and have a baccalaureate degree are eligible to take national certification examinations. Nationally recognized certification is a requirement for employment in many settings.

Credentials Required to Practice  M.T. (ASCP), Medical Technologist; or C.L.S. (NCA), Clinical Laboratory Scientist.

Licensure Requirements to Practice  There is no state licensure in Indiana; however, some states require licensure in addition to or instead of national certification.

Bachelor of Science in Clinical Laboratory Science at Indiana University–Purdue University Indianapolis

Medical Director: Professor Eble
Program Director: Associate Professor Kasper
Professors: Allen, Davis, Glick, Leland, Ryder
Associate Professors: Baenziger, Marler, Rodak

EDUCATIONAL PROGRAM

Length of Program  Clinical laboratory science is a four-year baccalaureate degree program that is typically full-time days; however, some part-time day positions are available on the IUPUI campus. The program is structured in a 3 + 1 arrangement in which three years are spent in regular college courses in order to complete prerequisite courses and the fourth year is the senior/professional year. The professional year includes both didactic and supervised clinical experiences.

Additional Cost  In addition to regular university fees, the student should expect to pay for program-related expenses. Contact program for current cost sheet.

Description of Program Facilities  The Clinical Laboratory Science Program at IUPUI has program offices, a classroom, and a student laboratory located on the fourth floor of Pesler Hall.

Location of Clinicals  Facilities utilized for clinical experiences include University Hospital, Riley Hospital, Wishard Memorial Hospital, and Richard Roudebush Veterans Administration Medical Center.

Opportunity for Students to Work  Students who must work should limit employment hours to 8-10 hours a week if possible.

Accreditation  The Clinical Laboratory Science Program at Indiana University–Purdue University Indianapolis is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences, 8410 W. Bryn Mawr Avenue, Suite 670, Chicago, IL 60631, phone (773) 714-8880.

ADMISSION

General Information  Students accepted into the program must complete the school’s and the following program admission requirements prior to the first day of classes.

Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program.

Criteria Used for Selection of Class  Cumulative and science/math grade point average, essay, interview, and motivation.

Class Size  24 students

Specific Requirements

In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this section of the bulletin, the following admission policies apply to the Clinical Laboratory Science Program at IUPUI.
Application Deadline  December 1 of the year prior to desired entry into the senior/professional year.

Total Number of Prerequisite Credit Hours  90

Distribution of Credit Hours in Specific Areas
Applicants must complete at least 18 credit hours in the biological sciences and 18 credit hours in chemistry. See prerequisites.

Limitations of Course Work  Courses in chemistry (upper level), microbiology, and immunology must have been taken within the previous six years.

Minimum Cumulative Grade Point Average  2.50 on a 4.00 scale. This requirement is applied at the time of program application and must be maintained. Grades from remedial courses are not used in this calculation.

Minimum Specific Grade Point Average  2.50 on a 4.00 scale in science and mathematics courses. This requirement is applied at the time of program application and must be maintained. Grades from remedial courses are not used in this calculation.

Minimum Grade in a Stated Prerequisite Course  C (2.00 on a 4.00 scale) in all required courses.

Interview  Applicants must complete the interview process. Interviews are scheduled between November and January.

Technical Standards  See School of Allied Health Sciences policy.

Indiana Residents Preference Policy  See School of Allied Health Sciences policy.

Volunteer Experience  While volunteer experience is not required, it is very helpful in making a career choice.

**CURRICULUM**

**Prerequisites**
Prior to entering the program, students must complete the following minimum prerequisites. Students should consult with their academic advisors for appropriate courses and semester sequence in order to complete prerequisites. Prerequisites may be taken at any accredited college or university. The code “G” indicates a course that meets the school’s general-education requirements.

- Written Communications (G)  2 courses
- Verbal Communications (G)  3 cr.
- Humanities (G)  3 cr.
- Social-Behavioral Sciences (G)  6 cr.

**Biological Sciences**  Applicant must complete, by entry date, at least 18 credit hours or the equivalent of biology, to include the following courses:
- Introductory Biology (G)
- Microbiology (with lab)
- Genetics
- Human Physiology
- Immunology

**Chemistry**  Applicant must complete, by entry date, at least 18 credit hours or the equivalent of chemistry, to include the following courses:
- Qualitative (with lab) (G)
- Quantitative (with lab)
- Organic I (with lab)
- Advanced Chemistry Elective
- (Suggested Chemistry Electives: Organic II, Biochemistry, Analytical Chemistry, or Clinical Chemistry)

**Mathematics**  Applicant must complete, by entry date, the following courses:
- Mathematics (Algebra and Trigonometry or higher) (G)
- Statistics

**Suggested Electives**
While not inclusive or mandatory, the following is a list of suggested elective areas: human anatomy, introduction to computers, medical terminology, and medical microbiology.

**Suggested Plan of Study**
The following is a suggested three-year plan of the prerequisites. Changes in this schedule can be made. Students should check with their advisors to make sure all of the requirements are met.

### Freshman

**Fall**
- Elementary Composition I  3 cr.
- Algebra and Trigonometry  3 cr.
- Biology—Plants  5 cr.
- Principles of Chemistry I (with lab)  3 cr.

**Total**  16 cr.

**Spring**
- Speech Communications or Interpersonal Communication  3 cr.
- Algebra and Trigonometry  3 cr.
- Biology—Animals  5 cr.
- Principles of Chemistry II (with lab)  3 cr.

**Total**  16 cr.

### Sophomore

**Fall**
- Organic Chemistry  3 cr.
- Organic Chemistry Lab  2 cr.
- Human Physiology  5 cr.
- Electives  6 cr.

**Total**  16 cr.

**Spring**
- Microbiology (with lab)  3-4 cr.
- Chemistry Elective  3 cr.
- Sociology  3 cr.
- Humanities Elective  3 cr.
- Elective  3 cr.

**Total**  15-16 cr.

### Junior

**Fall**
- Immunology  3 cr.
- Genetics  3 cr.
- Electives  6 cr.

**Total**  12 cr.

**Spring**
- Statistics  3 cr.
- Psychology  3 cr.
- Electives  6 cr.
- Written Communication  3 cr.

**Total**  15 cr.

### Professional Program
Courses in the professional program are sequential and must be taken in the order specified by the program faculty.

**Fall**
- Urine Analysis AHLT C410  2 cr.
- Diagnostic Medical Microbiology AHLT C411  4 cr.
- Diagnostic Microbiology Laboratory AHLT C421  2 cr.
- Serology AHLT C409  1 cr.
- Serology Laboratory AHLT C429  1 cr.
- Principles of Immunohematology AHLT C408  1 cr.
- Techniques in Immunohematology AHLT C428  1 cr.
- Hematology AHLT C407  3 cr.
- Hematologic Techniques and Procedures AHLT C427  3 cr.

**Total**  18 cr.

**Spring**
- Clinical Chemistry AHLT C406  4 cr.
- Clinical Chemistry Instrumentation and Methodologies AHLT C426  2 cr.
- Mycology/Parasitology AHLT C420  2 cr.
- Hemostasis AHLT C404  1 cr.
- Hemostasis Techniques AHLT C424  1 cr.
- General Externship I AHLT C401  2 cr.
- General Externship II AHLT C402  2 cr.

**Total**  14 cr.

**Summer Session I**
- General Externship III AHLT C403  2 cr.
- General Externship IV AHLT C405  2 cr.
- Topics in Medical Technology AHLT C412  1 cr.

**Total**  7 cr.

**Scholarships**  A limited number of scholarships are available for accepted students. Contact the program when notified of admission.

**Awards**  Based on academic performance, the program faculty will recommend students for degrees awarded with distinction in accordance with the school’s honors criteria. The program recognizes one superior student meeting specific academic performance criteria for the senior/clinical year with the Clinical Laboratory Science Academic Achievement Award.

For further information, contact Professor Linda Kasper, Director of the Clinical Laboratory Science Program, IUPUI, Fesler Hall 409, 1120 South Drive, Indianapolis, IN 46202-5113; (317) 274-1264; Fax: (317) 278-0643; E-mail: lmkasper@iupui.edu.

**Courses in Clinical Laboratory Science/Medical Technology**
“P” refers to a course prerequisite and “C” to a course that must be taken concurrently.

**AHLT C401 General Externship I (2 cr.)**
Supervised clinical experience in clinical chemistry. Student rotates through various areas of clinical chemistry.

**AHLT C402 General Externship II (2 cr.)**
Supervised clinical experience in clinical hematology.
AHLT C403 General Externship III (2 cr.) Supervised clinical experience in clinical microbiology. Student rotates through various areas of microbiology, serology, virology, and parasitology.

AHLT C404 Hemostasis (1 cr.) Hemostasis is a course covering the basic principles of the hemostasis mechanism, including an overview of the laboratory techniques used to evaluate disorders of hemostasis. Emphasizes the major components of hemostasis, interaction of these components, and laboratory evaluation of the major hemostatic disorders.

AHLT C405 General Externship IV (2 cr.) Supervised clinical experience in blood banking. Student rotates through various areas of modern blood bank, including donor room, transfusion service, antibody identification, component therapy, transplantation therapy, and quality control.

AHLT C406 Clinical Chemistry (4 cr.) Emphasis on metabolic processes that maintain chemical homeostasis in humans, the application of clinical chemistry assay values in evaluating the integrity of these processes, and the correlation of abnormal results with metabolic dysfunction and/or disease states.

AHLT C407 Hematology (3 cr.) Study of functions, maturation, and morphology of blood cells in addition to factors regulating production, metabolism, and kinetics of blood cells. The etiologic and morphologic classifications of blood disorders and diseases; correlations with bone marrows and cytocolours. Study of cellular contents of other body fluids.

AHLT C408 Principles of Immunohematology (1 cr.) Emphasis on major blood group antigens and antibodies including their role in transfusion medicine. Current practices in blood donation, apheresis, and quality control are also covered.

AHLT C409 Serology (1 cr.) Lectures describing and comparing all pertinent serologic procedures utilized in diagnosis of rheumatoid arthritis, rubella, streptococcal disease, syphilis, various febrile conditions, fungal infections, parasitic infections, and infectious mononucleosis. Selected lectures in viral culturing methods.

AHLT C410 Urine Analysis (2 cr.) Routine urine examination and special tests; laboratory and special lectures.

AHLT C411 Diagnostic Medical Microbiology (4 cr.) An in-depth study of the clinically significant microorganisms with special emphasis on their clinical significance, cultural and biochemical characteristics, and susceptibility testing patterns.

AHLT C412 Topics in Medical Technology (3 cr.) Selected topics in medical technology covered by lecture and clinical experience.

AHLT C420 Mycology/Parasitology (2 cr.) Lecture and laboratory experience covering clinically significant fungi and parasites. Clinical manifestations, collection and procedures for processing of specimens, and identification techniques will be employed.

AHLT C421 Diagnostic Microbiology Laboratory (2 cr.) Laboratory experience in the performance of skills and procedures needed for the isolation, identification, and susceptibility testing of clinically significant microorganisms.

AHLT C424 Hemostasis Techniques (1 cr.) Laboratory course emphasizing the major screening and definitive test for the evaluation of normal and abnormal hemostasis. Tests will include evaluation of platelets, blood vessels, coagulation, and fibrinolysis.

AHLT C426 Clinical Chemistry Instrumentation and Methodologies (2 cr.) Emphasis is on utilization of basic and intermediate methodologies and instrumentation and their application to assaying a variety of body constituents in a clinical chemistry laboratory.

AHLT C427 Hematologic Techniques and Procedures (3 cr.) Experience in blood cell identification on stained smears; blood cell, platelet, and reticulocyte counting procedures. Techniques of sedimentation rates, hematocrits, corpuscular indices, hemoglobin determination, and smear preparation staining. Introduction to instrumentation and quality control. Special procedures including bone marrow preparations, flow cytometry, and automated differential counters.

AHLT C428 Techniques in Immunohematology (1 cr.) Emphasis on laboratory techniques used in blood banks, including blood typing, crossmatching, antibody identification, record keeping, and quality control.

AHLT C429 Serology Laboratory (1 cr.) Laboratory experience in performance of various testing procedures utilized in serologic diagnosis of infectious diseases and various syndromes. Techniques include precipitation, flocculation, and various hemagglutination and hemagglutination inhibition techniques, fluorescent antibody testing, and complement fixation.

AHLT C431 Clinical Correlation and Theory (2 cr.) Lectures in theoretical and clinical areas designed to emphasize the relationship between laboratory tests and disease states.

AHLT C431 Hematology I (2 cr.) Collecting, staining, and counting blood cells; supervised experience with patients. Experience with specimens of spinal fluid, special determinations (platelets, reticulocytes), and pathologic smears.

AHLT C432 Hematology II (2 cr.) P: C431. C432 and C434 offer more experience than C431 allows in the same techniques and offer additional techniques such as sedimentation rate, hematocrit, and the figuring of indices.

AHLT C434 Hematology III (2 cr.) P: C431, C432. Continuation of practice and experience in hematologic techniques. Individual projects assigned if student is sufficiently advanced.

AHLT C440 Bacteriology I (2 cr.) Diagnostic procedures as means to familiarize student with techniques; work on specimens received from hospital patients under supervision; practical experience with all types of human specimens for bacteriologic and mycologic study.

AHLT C441 Bacteriology II (2 cr.) P: C440. Agglutination and precipitin techniques and their special application to agglutination titers and the use of antibiotics. Special assignments to provide experience with organisms infrequently encountered.

AHLT C442 Bacteriology III (2 cr.) P: C440. C441. At the end of this course, student should be able to handle usual and somewhat unusual hospital bacteriologic and mycologic problems independently.

AHLT C450 Serology I (2 cr.) Introduction to serologic and immunologic principles.

AHLT C451 Serology II (2 cr.) P: C450. Additional experience (for students with satisfactory proficiency in C450) in adapting complement fixation, agglutination, hemagglutination, precipitin, and flocculation techniques to diagnostic procedures.

AHLT C471 Clinical Chemistry I (2 cr.) Training and experience with more frequently used chemistry tests, e.g., determination of glucose and urea nitrogen; automated and manual methods.

AHLT C472 Clinical Chemistry II (2 cr.) P: C471. Limited experience with less frequently performed special procedures.

AHLT C473 Clinical Chemistry III (2 cr.) P: C471 and C472. Special equipment utilization; preparation and maintenance of solutions.

AHLT C474 Chemistry IV (2 cr.) P: C471, C472. Advanced procedures, method developments, special projects.

AHLT C477 Chemistry V (2 cr.) P: C471, C472. Training and experience in special technical and methodological microprocedures.

AHLT C491 Blood Bank I (2 cr.) * Review of serologic principles and technical fundamentals of transfusion practice; comprehensive consideration of blood groups and Rh factors, extensive practice with pretransfusion techniques and safety practices. Other blood types, antigen-antibody relationships with techniques for demonstrating them. Elementary knowledge of genetics is helpful.

AHLT C492 Blood Bank II (2 cr.) * P: C491. Transfusion service bloods provide problem cases in isoinmunization and sensitization, Rh titration, etc. Responsibility for blood bank operation and application to special transfusion problems placed before the student.

AHLT C493 Blood Bank III (2 cr.) P: C491, C492. Required for students working toward special certificate in blood banking. Emphasis on supervision, reference techniques, and such accessory functions as plasma production.

*This medical technology course is offered intermittently and is NOT part of the standard curriculum.

Cytotechnology

An educational program in cytotechnology is located on the Indiana University–Purdue University Indianapolis campus.
Description of the Profession  
Cytotechnology is a medical laboratory specialty in which microscopic studies of exfoliated, abraded, and aspirated cells from the human body are performed. The cytotechnologist studies cell samples from various body sites to detect cellular changes indicative of cancer. In providing a means of early detection, cytology makes possible the early diagnosis of cancer, thus increasing the chances of a cure. Cytology also serves as a diagnostic tool during the course of cancer treatment programs. In addition, it aids in establishing the diagnosis of benign disease processes, such as endocrine disorders, and in detecting some pathogenic microorganisms.

Graduates of the Program  
The Cytotechnology Program is designed to provide its graduates a comprehensive, fundamental knowledge of clinical cytology that will enable them to function as competent cytotechnologists and will provide a basis for continuing education and professional growth. Graduates will be eligible for the certification examination administered by the Board of Registry leading to certification and registration in cytotechnology with the American Society of Clinical Pathologists. Graduates should be prepared for management, supervisory, and educational responsibilities and should seek ways to contribute to the growing body of knowledge in clinical cytology. The program is designed to prepare graduates to realize their position in the total health care structure and understand their legal, ethical, and moral responsibilities to the employers and communities they serve. Cytotechnologists normally practice in hospitals, laboratories, or research laboratories.

Credential Required to Practice  
B.S.; CT(ASCP), cytotechnology certification by American Society of Clinical Pathologists.

Licensure Requirements to Practice  
No license is required to practice in Indiana.

Bachelor of Science in Cytotechnology at Indiana University–Purdue University Indianapolis  

Medical Director: Associate Professor Cramer  
Program Director: Associate Professor Crabtree  
Clinical Assistant Professor: Frain

EDUCATIONAL PROGRAM
Length of the Program  
Four years, including three years (90 semester hours) of prerequisite course work plus 11 months (37 semester hours) of professional course work.

Structure of the Program  
The prerequisites may be taken on a part-time basis; the professional program is presented in a full-time, day format only.

Design of the Professional Curriculum  
An integral relationship between the program and the cytology service laboratory provides students with maximum exposure to a functioning cytology laboratory. The learning process follows a structured, logical sequence for the presentation of essential concepts and skills.

Student inquiry and research that will foster greater understanding and possible revision of presented material are encouraged. Opportunity is provided for the student to pursue special interests in the field of cytology.

Location of Clinicals  
All clinical sites for the program are located within the Indianapolis area.

Additional Cost  
In addition to regular university fees, the student should expect to pay for program-related expenses. Contact program for current cost sheet.

Opportunity for Students to Work  
Some students have part-time jobs.

Program Facilities  
The Cytotechnology Program is offered at the IUPUI campus, which has modern educational and medical facilities. Classroom facilities and faculty offices are located in the Medical Sciences Building B029. The combined student and cytology service laboratory is located on the third floor of Indiana University Hospital. Cytology laboratories located in Wishard Memorial Hospital, Methodist Hospital, and the Veterans Administration Hospital are also utilized.

Accreditation  
The curriculum of the Cytotechnology Program is fully accredited by the Commission on Accreditation of Allied Health Education Programs.

ADMISSION

General Information  
As grade point average is a reflection of self-motivation, self-discipline, and the desire to achieve, favorable consideration is given to applicants with high grade point averages. In addition, proficiency must be demonstrated in biological and physical sciences. Candidates for this program should work well with others, have a genuine desire to improve the health of humanity, and be willing to accept the responsibilities of providing health care service. Students accepted into the program must complete the school’s and the following program admission requirements prior to the first day of classes. Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program.

Criteria Used for Selection of Class  
Cumulative grade point average, biology grade point average, interview.

Class Size  
Eight each fall semester.

Specific Requirements  
In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this section of the bulletin, the following admission policies apply to the Cytotechnology Program.

Application Deadline  
December 1 of the year prior to anticipated entry.

Total Number of Prerequisite Credit Hours  
90

Distribution of Credits in Specific Areas  
25 credit hours in biology.

Limitations of Course Work  
Biology credits earned more than seven years prior to application must be updated by taking 3 additional credit hours related to cell biology within a period of time not to exceed 12 months prior to admission. Remedial courses will not fulfill prerequisite hours.

Minimum Cumulative Grade Point Average  
2.50 on a 4.00 scale. This requirement is applied at the time of program application and must be maintained.

Minimum Specific Grade Point Average  
Biology grade point average of 2.50 on a 4.00 scale. This requirement is applied at the time of program application and must be maintained.

Minimum Grade Requirement in a Stated Prerequisite Course  
C (2.00 on a 4.00 scale).

Interview  
All qualified applicants must participate in an interview. Interviews are conducted the second week of January.

Technical Standards  
See School of Allied Health Sciences policy.

Medical Requirements  
Students accepted into the professional program must complete a health form, immunization card, chest X-ray, and eye examination before classes begin.

Indiana Residents Preference Policy  
See School of Allied Health Sciences policy.

Volunteer Experience  
While volunteer experience is not required, it is very helpful in making a career choice.

CURRICULUM

Prerequisites  
Prior to entering the program, the student must complete the following minimum prerequisites. Students should consult with their academic advisors for appropriate courses and semester sequence in order to complete prerequisites. Prerequisites may be taken at any accredited college or university. The code “G” indicates a course that meets the school’s general-education requirements. Courses taken via correspondence will not be accepted as fulfilling stated prerequisites. No more than 15 semester hours of correspondence course work will be counted toward the degree.

Written Communications (G) 2 courses
Verbal Communications (G) 3 cr.
Humanities (G) 3 cr.
College Algebra (G) 3 cr.
Introductory Biology (G) 4-5 cr.
Social-Behavioral Science (G) 6 cr.
Chemistry 1 (with lab) for science majors (G) 4-5 cr.
Chemistry—sequential course(s) (for science major beyond above) (4 cr. minimum; 5-8 cr. preferred)
Human Anatomy-Physiology 5-10 cr.

Advanced Science  
In addition to the courses listed above, students must also take upper-level biology courses to total a minimum of 25 credit hours including Human Anatomy—Physiology. Recommended courses include microbiology with laboratory, developmental anatomy or embryology with laboratory, genetics with laboratory, molecular or cellular biology, histology, and immunology.
Questions regarding alternative biology courses should be directed to the Cytotechnology Program faculty.

Suggested Electives

It is recommended that the following courses be taken as electives: microbiology, embryology, genetics, animal cell physiology, and immunology. While not inclusive or mandatory, the following is a list of suggested elective areas: medical microbiology, endocrinology, parasitology, virology, cytogenetics, computer science, management, organic chemistry, biochemistry, physics, advanced mathematics, and statistics.

A Suggested Plan of Study

The following is a suggested three-year plan of prerequisites.

Freshman

Fall

Elementary Composition I 3 cr.
Algebra and Trigonometry 3 cr.
Biology—Plants 5 cr.
Elementary Chemistry I or Principles of Chemistry I 5 cr.
Total 16 cr.

Spring

Speech Communication or Interpersonal Communication 3 cr.
Biology—Animals 5 cr.
Elementary Chemistry II 5 cr.
Electives 3 cr.
Total 16 cr.

Sophomore

Fall

Humanities Elective 3 cr.
Beginning Psychology or higher 3 cr.
Human Anatomy 5 cr.
Electives 6 cr.
Total 17 cr.

Spring

Elementary Composition II or Professional Writing 3 cr.
Biology Elective 3 cr.
Biology Elective 4 cr.
Sociology 3 cr.
Total 13 cr.

Junior

Fall

Human Physiology 5 cr.
Electives 9 cr.
Total 14 cr.

Spring

Biological Elective 3 cr.
Electives 12 cr.
Total 15 cr.

Professional Program

Courses in the professional program are sequential and, therefore, must be taken in the order specified by the program faculty.

Senior

Fall

Gynecologic Cytology, Normal
AHLT A412 3 cr.
Gynecologic Cytology, Abnormal
AHLT A422 3 cr.

Techniques in Medical Cytology
AHLT A462 2 cr.
Seminar in Cytology AHLT A470 2 cr.
Medical Care I AHLT W374 3 cr.
Pulmonary Cytology AHLT A432 3 cr.
Total 16 cr.

Spring

Cytology of Body Fluids AHLT A442 2 cr.
Urinary Tract Cytology AHLT A454 2 cr.
Seminar in Cytology AHLT A470 2 cr.
Medical Care II AHLT W471 3 cr.

Cytology of the Gastrointestinal Tract
AHLT A453 2 cr.
Certification Internship AHLT A465 3 cr.
Total 14 cr.

Summer

Investigations in Cytopathology
AHLT A490 2 cr.
Cytology of Fine Needle Aspiration
AHLT A455 2 cr.
Certification Internship
AHLT A465 3 cr.
Total 7 cr.

Scholarships  Students interested in scholarship information for the professional year should contact the program office.

Awards  Recommendations for degrees awarded with distinction are based upon superior academic performance. The Cytotechnology Program recognizes superior academic and professional conduct with the Liang-Che Tao Outstanding Student Award, which is awarded to a graduating senior.

Graduation Requirements  Satisfactory completion of 126 credit hours to include 90 credit hours of prerequisite and general-education courses and 37 credit hours of professional courses. All course work must be completed in compliance with the program's and school's academic and professional policies.

For further information, contact Professor William Crabtree, Director, Cytotechnology Program, IUPUI, Corporate Square West, 5610 Crawfordsville Road, Building 24, Suite 2401, Speedway, IN 46224, (317) 481-6746, E-mail: werabste@iupui.edu or www.pathology.iupui.edu.

Courses in Cytotechnology

"P" refers to a course prerequisite and “C” to a course that must be taken concurrently.

AHLT A412 Gynecologic Cytology, Normal (3 cr.) Detailed microscopic study of normal squamous, endocervical, and endometrial epithelial cells, as well as other non-epithelial cells. Cellular changes seen with microbiological infections, repair, inflammation, degeneration, artifact, and vitamin deficiency status.

AHLT A422 Gynecologic Cytology, Abnormal (3 cr.) Histopathology and cytopathology of lesions of the female genital tract. Detailed studies in the cytopathologic diagnosis of dysplasia, carcinoma in situ, and invasive cancer of this anatomic area. Differential diagnosis of these lesions includes the severity, site of origin, and grade where appropriate.

AHLT A432 Pulmonary Cytology (3 cr.) Systematic study of normal, nonmalignant, and malignant cells in the lower respiratory system.

AHLT A442 Cytology of Body Fluids (2 cr.) Cytology of the eye, central nervous system, synovial membranes, and serosal cavities in fluids associated with nonmalignant and malignant disease processes.

AHLT A453 Cytology of the Gastrointestinal Tract (2 cr.) Study of cells associated with nonmalignant and malignant diseases of the gastrointestinal tract, including the oral cavity, esophagus, stomach, and small and large intestines.

AHLT A454 Urinary Tract Cytology (2 cr.) Clinical cytologic study of cells from normal, nonmalignant, and malignant diseases of the urinary tract, to include the urethra, ureters, renal pelvis, bladder, prostate, seminal vesicles, and kidney.

AHLT A455 Cytology of Fine Needle Aspiration (2 cr.) The study of nonmalignant and malignant cells aspirated from lung, thyroid, salivary glands, breast, liver, prostate, lymph nodes, soft tissue masses, and miscellaneous organs; and the study of fine needle aspiration techniques.

AHLT A462 Techniques in Medical Cytology (2 cr.) Fixation and staining procedures, preparation of smears and cell blocks from fluids and other exfoliates; use of filter techniques and microscopy.

AHLT A465 Certification Internship (3 cr.) Includes six months of clinical internships. Students gain further practical experience by working with routine cytology material. Conferences and lectures are used to provide additional experience.

AHLT A470 Seminar in Cytology (2 cr.) Review of current literature pertaining to diagnostic cytology. Reports and discussions by students and faculty.

AHLT A490 Investigations in Cytopathology (1-3 cr.) P: A470. To provide the student with an experience in the realm of scientific investigation related to cytopathology. The investigation may be conducted as a research project or a literature review.

Emergency Medical Services

Educational Program  An educational program in Emergency Medical Technician-Basic and Paramedic Science is located on the Indiana University-Purdue University Indianapolis campus.

Description of the Profession  Emergency Medical Technicians (EMTs)—Basic and Paramedic—care for people at the scene of emergencies and transport them to hospitals or other health care institutions. EMTs (basic and paramedic) determine the nature and the extent of victims’ medical and trauma-related emergencies and provide
initial emergency care. EMT-Paramedics administer medications, supply intravenous therapy, perform heart monitoring, and provide other life-saving interventions for the victims of acute illness or injury. The EMT-Basic is the entry level of the emergency medical field. The EMT-Paramedic is the advanced practitioner with more independence.

Graduates of the Program The EMT-Basic and the Associate of Science in Paramedic Science degree programs are designed to prepare the EMT to deliver emergency patient care in the prehospital setting. Graduates of both programs primarily provide emergency care in ambulance or fire services at their level of training. Nontraditional areas of employment are available in hospitals and industry.


Licensure Required to Practice Graduates of either program must successfully challenge a state-administered certification examination prior to credentialing. The certification examination may vary from state to state. The EMT-Basic exam in Indiana is the written and skill exam from the Indiana Public Safety Training Institute. The Paramedic exam in Indiana is the written and skill exam for the National Registry of EMT-Ps.

Emergency Medical Technician-Basic at Indiana University–Purdue University Indianapolis

Medical Director: Professor McGrath
Acting Program Director: Clinical Assistant Professor Bell
Faculty: Clinical Assistant Professor Hallam
Adjunct Faculty: Ervin, Abram, Jerin, Hutchinson

EDUCATIONAL PROGRAM

Length of Program Two semesters, which may be taken in the same or back-to-back semesters. A new course begins each fall semester.

Additional Costs Students are encouraged to purchase their own stethoscope.

ADMISSIONS

General Information Students accepted into the program must complete the school and program admission requirements prior to the first day of classes.

Prerequisites Current credential in CPR.

Proposed Class Size 24 each fall semester.

Technical Standards See School of Allied Health technical standards.

CURRICULUM

Prerequisites Current credential in health care provider-level CPR.

Fall
EMTB-II AHLT E202 3 cr.

Spring
EMTB-I AHLT E201 3 cr.
EMTB-II AHLT E202 3 cr.

Students may take EMTB-II AHLT E202 in either the fall or spring semester.

Courses in Emergency Medical Services

AHLT E201 Emergency Medical Technician Basic I (3 cr.) This course focuses on well-being of the EMT, basic patient assessment and airway management, and special considerations for the pediatric and geriatric patient.

AHLT E202 Emergency Medical Technician Basic II (3 cr.) The content of the course covers specific medical emergencies, trauma, and basic pharmacology.

Associate of Science in Paramedic Science at Indiana University–Purdue University Indianapolis

Medical Director: Professor McGrath
Acting Program Director: Clinical Assistant Professor Bell
Faculty: Clinical Assistant Professor Hallam
Adjunct Faculty: Ervin, Abram, Jerin, Hutchinson

EDUCATIONAL PROGRAM

Length of the Program Two years; one year (29 credit hours) of prerequisite work plus 12 months of professional course work.

Structure of the Professional Program The prerequisites may be taken on a part-time basis; the professional program is a full-time program conducted primarily during the day. Clinical activities occur during the evening or on weekends.

Design of the Professional Curriculum The curriculum is a competency-based education program of clinical, didactic, and practical instruction integrated with field internship in advanced emergency care and services.

This program will serve students seeking careers in emergency medical services. It will serve students entering the program immediately after high school as well as nontraditional students. The majority of students will be nontraditional in that they have begun to pursue a career in the emergency medical services field on a part-time, full-time, or volunteer basis before deciding on a full-time role in emergency medicine as an EMT-P.

The program follows guidelines established by the Committee on Allied Health Education and Accreditation (CAIEA) of the American Medical Association, integrating general-education course work and paramedic science course work leading to an Associate of Science degree. The degree program will build on resources established in the largest and most comprehensive EMT-paramedic program in Indiana, the program at Wishard Hospital. In addition to classroom and laboratory facilities located on the Indiana University–Purdue University Indianapolis campus, area health care facilities involved in the preparation of EMT-paramedics in this program include Wishard Hospital, Wishard Ambulance Service, Avon Fire Department, and Riley Hospital for Children.

Location of Clinicals The primary locations of the clinical rotations are in Indianapolis. A few rotations may be required in central Indiana.

Additional Costs In addition to regular university fees, students will need to purchase a personal stethoscope, EKG caliper, and uniform for the clinical rotation. Contact the program for a current cost sheet.

Opportunity for Students to Work Some students have part-time jobs while completing the professional course work.

Description of Facilities The program offices are located at Wishard Memorial Hospital. The classroom and laboratory are located in the Wayne Township Training Academy. The primary clinical site is at Wishard Ambulance Service. Other clinical sites may be available in central Indiana.

ADMISSIONS

General Information Students accepted into the program must complete the school’s and the program admission requirements prior to the first day of classes. Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program.

Criteria Used for Selection of Class Grade point average, personal interview, and EMT experience.

Proposed Class Size 10 each fall semester.

Specific Requirements In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this section of the bulletin, the following apply to the paramedic science degree program.

Application Deadline December 1 of the year prior to anticipated entry.

Total Number of Prerequisite Credit Hours 29.

Distribution of Credit Hours in Specific Areas See prerequisites.

Limitations of Course Work Remedial courses will not fulfill prerequisites or count as credit hours toward the degree.

Minimum Cumulative Grade Point Average 2.30 on a 4.00 scale. This requirement is applied at the time of program application and must be maintained.

Minimum Grade Requirement in a Stated Prerequisite Course C (2.00 on a 4.00 scale).

Interview All qualified applicants must participate in an interview. Interviews are generally conducted in February.

Technical Standards See School of Allied Health Sciences policy.
Volunteer Experience While volunteer experience is not required, it is helpful in making a career choice.

**CURRICULUM**

**Prerequisites** In addition to the following prerequisites, each applicant must currently be certified in Indiana as an EMT and have a minimum of 20 hours of patient care activity as an EMT in the patient care area of an ambulance. Students should consult with their academic advisors for appropriate courses and semester sequence in order to complete prerequisites. Prerequisites may be taken at any accredited college or university. The code “G” indicates a course that meets the school’s general education requirements. Correspondence courses will not be accepted for any of the prerequisite course work.

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Anatomy (G)</td>
<td>5 cr.</td>
</tr>
<tr>
<td>Human Physiology (G)</td>
<td>5 cr.</td>
</tr>
<tr>
<td>English Composition (G)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Speech (G)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Mathematics (G)</td>
<td>4 cr.</td>
</tr>
<tr>
<td>Psychology (G)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Sociology (G)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Computer Technology (G)</td>
<td>3 cr.</td>
</tr>
</tbody>
</table>

**Suggested Plan of Study**

**Freshman**

**Fall**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition (W131)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Human Anatomy (N261) or Human Biology with lab (B212, B213) and Human Biology with lab (B214, B215)</td>
<td>4-5 cr.</td>
</tr>
<tr>
<td>Mathematics (M110 or M111)</td>
<td>4 cr.</td>
</tr>
<tr>
<td>Sociology (R100)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Total</td>
<td>14-15 cr.</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speech or Interpersonal Communication (C110 or C180)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Human Physiology (N217)</td>
<td>5 cr.</td>
</tr>
<tr>
<td>Psychology (B104 or B105)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Computer Technology (CPT106)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Total</td>
<td>14 cr.</td>
</tr>
</tbody>
</table>

**Professional Program**

Courses in the professional program are sequential and must be taken in the order specified by the program faculty.

**Sophomore**

**Fall**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Paramedic Pharmacology AHLT E215</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Medical Emergencies I AHLT E210</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Techniques Laboratory I AHLT E212</td>
<td>2 cr.</td>
</tr>
<tr>
<td>Clinical Rotation I AHLT E213</td>
<td>6 cr.</td>
</tr>
<tr>
<td>Total</td>
<td>14 cr.</td>
</tr>
</tbody>
</table>

**Spring**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatrics AHLT E214</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Medical Emergencies II AHLT E220</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Trauma AHLT E221</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Techniques Laboratory II AHLT E222</td>
<td>2 cr.</td>
</tr>
<tr>
<td>Clinical Rotation II AHLT E223</td>
<td>5 cr.</td>
</tr>
<tr>
<td>Total</td>
<td>16 cr.</td>
</tr>
</tbody>
</table>

**Summer I**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Rotation III AHLT E233</td>
<td>5 cr.</td>
</tr>
<tr>
<td>Total</td>
<td>5 cr.</td>
</tr>
</tbody>
</table>

**Summer II**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Rotation IV AHLT E243</td>
<td>5 cr.</td>
</tr>
<tr>
<td>Total</td>
<td>5 cr.</td>
</tr>
</tbody>
</table>

**Scholarships** Scholarship opportunities may be available through the Office of Scholarships and Financial Aid.

**Awards** Based on academic performance, the program faculty will recommend students for degrees awarded with distinction in accordance with the school’s honors criteria.

**Graduation Requirements** Satisfactory completion of all prerequisites and 40 credit hours of professional course work. All course work must be completed in compliance with the program’s and school’s academic and professional policies. All professional courses (AHLT E courses) must be completed within 24 months after beginning the professional program.

**For further information, contact Leon Bell, Acting Director, Paramedic Sciences Program, Ott Building 115, Wishard Hospital, 1001 W. 10th Street, Indianapolis, IN 46202, (317) 630-7614, E-mail: lbell1@iupui.edu.**

**Courses in Emergency Medical Services**

“P” refers to a course prerequisite and “C” to a course that must be taken concurrently.

**AHLT E210 Medical Emergencies I (3 cr.)**

This course introduces the student to the role of the paramedic, radio communications, and general patient assessment and a review of body chemistry. The student learns to assess and manage the emergency involving the respiratory and cardiovascular systems.

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHLT E212 Techniques Laboratory I (2 cr.)</td>
<td>3 cr.</td>
</tr>
<tr>
<td>Clinical Rotation I AHLT E213</td>
<td>6 cr.</td>
</tr>
<tr>
<td>Total</td>
<td>14 cr.</td>
</tr>
</tbody>
</table>

**AHLT E215 Emergency Paramedic Pharmacology (3 cr.)**

This course focuses on the use of specific emergency medications during life-threatening situations as well as the use of prescribed medications for specific chronic illnesses.

**AHLT E220 Medical Emergencies II (3 cr.)**

This course prepares the student to assess and manage medical emergencies involving the endocrine, gastrointestinal, neurological, gynecological, and genitourinary systems. Also included are obstetrics, behavioral, and environmental emergencies.

**AHLT E221 Trauma (3 cr.)**

This course focuses on the assessment and management of the trauma victim. Also included are rescue techniques, mass casualty and triage principles, and stress management techniques.

**AHLT E223 Techniques Laboratory II (2 cr.)**

This course provides a hands-on setting in which students will learn to manage trauma victims. This course includes PHTLS, PALS, and ACLS certification courses.

**AHLT E225 Clinical Rotation II (5 cr.)**

This course provides students an opportunity to manage the trauma victim and the obstetrical patient in the hospital and prehospital settings.

**AHLT E223 Clinical Rotation III (5 cr.)**

This course provides students an opportunity to interact with patients in the hospital and in urban, rural, and private prehospital settings. Students function as team members with the prehospital team.

**AHLT E224 Clinical Rotation IV (5 cr.)**

This course provides a clinical setting in which students practice as paramedics in urban, rural, and private ambulance services. Students will be expected to function as the team leaders of the prehospital team.

**AHLT E299 Independent Study in Paramedic Science (1-4 cr.)**

Special topics, projects, or readings for students enrolled in paramedic science.

**Health Information Administration/Health Information Technology**

The educational program in health information administration is located on the Indiana University–Purdue University Indianapolis campus. Educational programs, to include certificate programs, in health information technology are located on the following Indiana University campuses: Indiana University Northwest, Indiana University Southeast.

A program is being developed at Indiana University Kokomo. For further information, contact Dr. Robert
While many health graduates of the program • Assure that the medical documentation • Act as liaison to other departments. • Serve on standards, improvement, and utilization department managers follow:
• Supervise and train clerical and technical personnel.
• Determine health information policies.
• Design health information collection, storage, and report systems.
• Select computer systems for processing and storing clinical data.
• Serve on standards, improvement, and utilization review committees.
• Act as liaison to other departments.
• Determine departmental budget and resource needs.
• Assure that the medical documentation requirements of various accrediting and governmental agencies are met.

Graduates of the program While many health information administrators are employed in hospitals, others work for insurance companies, nursing homes, psychiatric facilities, computer companies, physician group practices, drug companies, and government agencies. They also coordinate quality management programs for health care facilities, teach in colleges and universities, and perform consulting activities.

The program graduate is eligible to seek registration as a Registered Health Information Administrator (RHIA) by successfully passing a national qualifying examination offered by the American Health Information Management Association. RHIA registration is an important credential when seeking employment as a health information administrator.

Credentials Required to Practice RHIA, Registered Health Information Administrator. Licensure Requirements to Practice State licensure does not apply.

Bachelor of Science in Health Information Administration at Indiana University–Purdue University Indianapolis

Acting Program Director: Lecturer Forgey
Assistant Professor: Miller
Adjunct Assistant Professors: Gannaway, Hogan, Michau
Adjunct Lecturers: Clearwater, Hurd, Keith, Leeds, Traves, Walker
Clinical Assistant Professor: Welsh

EDUCATIONAL PROGRAM
Length of the Program Four years; 90 semester hours of prerequisite course work plus one year (40 credit hours) of professional course work. The professional component of the program is offered as the senior year of a Bachelor of Science undergraduate degree. The program begins in the fall semester and ends with summer session I.

Structure of the Program The prerequisites and the professional program may be taken on a part-time or full-time basis. Professional courses are offered primarily during the day.

Design of the Professional Curriculum The professional courses focus on the management of health information systems and utilization of computerized clinical data. The professional component of the curriculum integrates lecture and laboratory courses with technical and professional practice experiences in hospitals and other health care facilities and related settings. A four-week professional practice experience is arranged for each student in summer session I.

Opportunity for Students to Work Because the class schedule for full-time students in the professional program is rigorous, it is difficult to pursue full-time employment. Some students have part-time or weekend jobs.

Additional Cost In addition to regular university tuition and fees, students should expect to pay program-related expenses. Contact the program for a current cost sheet.

Program Facilities The Health Information Administration Program is offered at the Indiana University Medical Center, which has modern educational and medical facilities. The program offices and most classrooms are located in Coleman Hall. Classes also meet in other Medical Center buildings. Professional practice is provided by health care facilities and agencies in Indiana and surrounding states.

Accreditation The Health Information Administration Program is accredited by the Commission on Accreditation of Allied Health Education Programs.

ADMISSION General Information
Students accepted into the program must complete the school’s and the following program admission requirements prior to the first day of classes. Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program.

Criteria Used for Selection of Class Grade point average, interview, and school’s residency policy.

Class Size 20 each fall semester.

Specific Requirements In addition to the School of Allied Health Sciences admission policies, the school’s and the following program admission policies apply to the Health Information Administration Program at Indiana University–Purdue University Indianapolis.

Application Deadline November 1 of the year preceding the planned date of entry.

Total Number of Prerequisite Credit Hours 90.

Distribution of Credit Hours in Specific Areas See prerequisites.

Limitations of Course Work Remedial course work will not count toward the 90 required prerequisite credit hours.

Minimum Cumulative Grade Point Average 2.50 on a 4.00 scale. This requirement is applied at the time of program application and must be maintained. Grades for remedial courses are included in the cumulative grade point average.

Minimum Grade Requirement in a Stated Prerequisite Course C (2.00 on a 4.00 scale) in anatomy, physiology, computer science, statistics, business administration, management and behavior in organizations and personnel or supervisory management.

Interview All qualified applicants will be interviewed prior to admission.

Technical Standards See School of Allied Health Sciences policy.

Indiana Residents Preference Policy See School of Allied Health Sciences policy.

Volunteer Experience While volunteer experience is not required, it is very helpful in making a career choice.

CURRICULUM Prerequisites
Prior to entering the program, students must complete the following minimum prerequisites.

Students should consult with their academic advisors for appropriate courses and semester sequence in order to complete prerequisites. Prerequisites may be taken at any accredited college or university.

The code “G” indicates a course that meets the school’s general-education requirements.

English Composition (G) 3 cr.
Business Communications 3 cr.
Additional Written Communication (G) 2-3 cr.
Psychology (G) 3 cr.
Sociology (G) 3 cr.
Speech (G) 3 cr.
Ethics, Biomedical Ethics, or Medical Ethics 3 cr.
Humanities (G) 6 cr.
Human Anatomy (with lab) (G) 3-5 cr.
Human Physiology (with lab) (G) 3-5 cr.
Microbiology 3 cr.
Statistics (G) 3 cr.
Management and Behavior in Organizations 3 cr.
Management 3 cr.
Computer Science/Technology 8 cr.
Business/Commercial Law 3 cr.

Suggested Electives
The following suggestions for electives are made to aid the student in the prerequisite courses and in the professional course work: management information systems, office management, personnel and/or
supervisory management, methods of employee training, health administration, computer sciences, research methods, interpersonal communications, medical terms from Greek and Latin, and foreign languages.

A Suggested Plan of Study
The following is a suggested three-year plan of prerequisites. Variations of this schedule can be made. Students should check with their advisors to make sure all requirements are met.

Freshman
Fall
Elementary Composition I 3 cr.
Humanities Elective 3 cr.
Psychology 3 cr.
Computer Science/Technology 3 cr.
Introduction to Business Administration 3 cr.
Total 15 cr.
Spring
Elementary Composition II or Professional Writing 3 cr.
Sociology 3 cr.
Humanities Elective 3 cr.
Computer Science/Technology Elective 3 cr.
Total 15 cr.
Sophomore
Fall
Speech 3 cr.
Human Anatomy 5 cr.
Computer Science/Technology Elective 3 cr.
Introduction to Accounting I 1-3 cr.
Total 12-14 cr.
Spring
Microbiology 3-4 cr.
Business Law 3 cr.
Business Communications or Professional Writing 3 cr.
Electives 6-7 cr.
Total 15-17 cr.
Junior
Fall
Human Physiology 5 cr.
Introduction to Accounting II 3 cr.
Personnel Psychology or Supervisory Management 3 cr.
Statistics 3 cr.
Electives 2 cr.
Total 16 cr.
Spring
Ethics 3 cr.
Management and Behavior in Organizations 3 cr.
Electives 9 cr.
Total 15 cr.
Professional Program
Courses in the professional program are sequential and, therefore, must be taken in the order specified by the program faculty. A minimum grade of C (2.00) is required in each professional course.

Senior
Fall
Medical Record Science I
AHLT M411 5 cr.
Directed Practice Experience I
AHLT M441 4 cr.
Medical Terminology AHLT M330 3 cr.
Medical Care I AHLT W374 3 cr.
Hospital Organization and Management AHLT M322 2 cr.
Clinical in Medical Record Technology AHLT M357 1 cr.
Total 18 cr.
Spring
Medicine and the Law AHLT M445 2 cr.
Medical Care II AHLT W471 3 cr.
Medical Specialty Lectures
AHLT M310 2 cr.
Medical Record Science II
AHLT M412 5 cr.
Directed Practice Experience II
AHLT M442 6 cr.
Total 18 cr.
Summer Session I
Clinical in Medical Record Administration AHLT M459 4 cr.
Total 4 cr.
Scholarships
Four Van Ausdall and Farrar Scholarships are awarded to full-time senior students in the Health Information Administration Program, two in the fall and two in the spring. Awards are predicated on demonstrated financial need and ability to successfully complete the program. Preference is given to students who plan employment in Indiana.

Two Gertrude L. Gunn Memorial Fund Scholarships, established in memory of the founder of the program, are awarded to senior health information administration students. They are based on scholarship and demonstrated financial need.

The Mary L. McKenzie Scholarship is awarded to a senior health information administration student. It is based on scholarship and demonstrated financial need.

The Indiana Health Information Management Association annually awards one scholarship to a senior health information administration student. The criteria for selection include scholastic ability, leadership attributes, professionalism, and potential contribution to the profession.

The Elton T. Ridley Minority Scholarship is awarded to a minority student who is a member of a class of individuals who are traditionally underrepresented in the program.

Four Medical Coding Services Scholarships are awarded in memory of Kathy Wilmoth, a graduate of the Health Information Administration Program. The scholarships are awarded by selection of the Health Information Administration Program Scholarship Committee.

Awards
Based on superior performance and in accordance with Indiana University—Purdue University Indianapolis policies, the program faculty will recommend that qualified students be awarded degrees with distinction.

Graduation Requirements
Satisfactory completion of 130 credit hours to include 90 credit hours of prerequisite and general-education courses and 40 credit hours of professional courses. All course work must be completed in compliance with the program’s and school’s academic and professional policies.

For further information, contact Danita Forgey, Acting Director of the Health Information Administration Program, IUPUI, Coleman Hall 303, 1140 W. Michigan Street, Indianapolis, IN 46202-5119, (317) 274-1572, E-mail: dforgey@iupui.edu.

Courses in Health Information Administration
“P” refers to a course prerequisite and “C” to a course that must be taken concurrently.

AHLT M310 Medical Specialty Lectures (2 cr.)
P: Anatomy, Physiology. Lectures on disease and treatment in the areas of medicine, surgery, obstetrics, gynecology, and pediatrics. Selected clinical areas, e.g., pharmacology, radiology, clinical laboratory, pathology, and radiation therapy, will also be included.

AHLT M322 Hospital Organization and Management (2 cr.) P: Junior standing. Orientation to hospital departments; hospital organization; inter-intra-relationships of hospital and community agencies.

AHLT M330 Medical Terminology (3 cr.)
(2 lectures—2 lab hrs.) P: BIOL N261, P215, and MICR J200 or equivalents. Understanding and use of medical vocabulary; emphasis on speaking, reading, and writing skills.

AHLT M357 Clinical in Medical Record Technology (1 cr.) Professionally supervised assignments in the technical aspects of health information services in an approved clinical site.

AHLT M411 Medical Record Science I (5 cr.)
History, content, form, numbering, filing, securing, preserving, coding, and indexing medical records; computer applications and statistics; the professional health information administrator and his/her relationship to the health facility, the medical staff, and committees.

AHLT M412 Medical Record Science II (5 cr.)
Principles and practices of health information services administration in the hospital and in specialized health care facilities.

AHLT M441 Directed Practice Experience I (4 cr.) Supervised laboratory practice with onsite observations of medical record technical and administrative systems. Application of health information management procedures in the clinical setting.
AHLT M442 Directed Practice Experience II (6 cr.) Seminar in health information administration topics. Planning and layout of health information services. Inservice presentations for health information personnel. Computer applications in medical and administrative systems. Individualized instruction in health information practice. Project assignments in the quality improvement area for health information services.

AHLT M445 Medicine and the Law (2 cr.) P: BUS L201 or L203. Presentation of concepts of law in medical and/or health-related areas as applied to the physician, the hospital, health institutions, the medical record, and the individual health worker.

AHLT M459 Clinical in Medical Record Administration (4 cr.) Professionally supervised internship in an approved clinical site for management experiences in health information services.

Educational programs, to include certificate programs, in health information technology are located on the following Indiana University campuses: Indiana University–Purdue University Fort Wayne, Indiana University Northwest, Indiana University Southeast.

A program is being developed at Indiana University Kokomo. For further information, contact Dr. Robert Roales, Chairperson of the Division of Allied Health Sciences, (765) 455-9371.

Health Sciences Education

The educational program in Health Sciences Education is located on the Indiana University–Purdue University Indianapolis campus.

Description of the Profession Health sciences educators plan, implement, and evaluate educational programs designed to prepare persons to practice in the health care delivery system. Additionally, educators may be involved in in-service or continuing professional education.

Graduates of the Program While most health sciences educators are employed in college or university settings, others work in secondary schools, hospitals, vocational-technical institutions, health care facilities, and agencies. They also coordinate in-service and continuing professional education programs for health care facilities, agencies, and associations.

The program graduate is eligible to seek teacher certification as a secondary teacher in health occupations education in the state of Indiana. However, this requires completion of the teacher certification option. This certification is important when seeking employment as a health occupations teacher in the secondary schools.

Credentials Required to Practice Current credentials in health care specialty.

Licensure Requirements to Practice State teaching license, if required. License to practice in credentialed area if required by state.

Bachelor of Science in Health Sciences Education at Indiana University–Purdue University Indianapolis

Program Director: Associate Professor Gable

EDUCATIONAL PROGRAM

Length of the Program A total of 129-130 credit hours is required for the noncertification option while the teacher certification option requires 139 credit hours. The length of the program depends upon the number of credit hours in which the student enrolls per semester to complete the requirements for the degree.

Structure of the Program The program can be completed on either a full-time or part-time basis. Program courses are frequently scheduled during evening hours.

Design of the Professional Curriculum The professional courses focus on the planning, implementation, and evaluation of educational episodes and programs. The professional component of the curriculum integrates knowledge bases of educational philosophy, psychology, methodology, and evaluation with practical experiences in health care sciences educational settings. A 12 credit hour capstone teaching practicum is required.

Opportunity for Students to Work Most students continue their employment as full-time health care practitioners while completing program and degree course work on a part-time basis.

Program Facilities The office for the Health Sciences Education Program offered at the Indiana University Medical Center is located in Coleman Hall. Classes convene in Coleman and other IUPUI buildings. Practicum experiences are completed in schools, hospitals, vocational-technical institutions, colleges, and universities in Indiana.

ADMISSION

General Information Students accepted into the program must complete the university’s, school’s, and program’s admission requirements.

Specific Requirements In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this section of the bulletin, the following admission policies apply to the Health Sciences Education Program.

Credentials Applicants must possess current and appropriate credentials representing their health care field.

Work Experience Applicants must show evidence of a minimum of two years (or equivalent) full-time employment in their credentialed health care field.

Application Deadline There is no application deadline. Students may begin course work the semester following their acceptance.

Distribution of Credit Hours in Specific Areas Applicants must have official transcripts identifying educational preparation in their credentialed health care field.

Limitations of Course Work Remedial course work will not count toward the cumulative grade point average at application or as credit toward the degree.

Minimum Cumulative Grade Point Average 2.50 on a 4.00 scale. This requirement is applied at the time of program application and must be maintained.

Interview Qualified applicants will be interviewed prior to admission.

Technical Standards See School of Allied Health Sciences policy.

Medical Requirements Admitted students must be able to present evidence of acceptable health status upon request.

Indiana Residents Preference Policy See School of Allied Health Sciences policy.

CURRICULUM

Prerequisites

Prior to entering the program, the student must complete an educational program that leads to an appropriate credential and/or licensure in a nationally recognized health care field.

Program Plan of Study

Based on the student’s prior educational experiences, the program director and the student formulate an academic program plan to assure that the student obtains a general-education component representing principles identified on the IUPUI campus. These principles will permeate the general-education component of a minimum of 45 credit hours of course work made up of humanities, social and behavioral sciences, and life and physical sciences. If the minimum of 52 credit hours of course work in the health care sciences component of the degree has not been met by the student’s prior educational preparation, further course work will be identified and required. The specific health sciences education component of the program represents 32-42 credit hours depending on the program option selected. Courses in the professional component may be sequential and, therefore, must be taken in the order specified by program faculty.

Awards Based on superior performance and in accordance with Indiana University–Purdue University Indianapolis policies, the program faculty will recommend that qualified students be awarded degrees with distinction. Additionally, students may choose to participate in the IUPUI Honors Program and may be qualified for appropriate recognition.

Graduation Requirements Satisfactory completion of 129-142 credit hours (depending on the program option selected) to include 45 credit hours in general education, 52 credit hours in health care preparation, and 32-42 credit hours in health sciences education and a capstone teaching practicum. All course work must be completed in compliance with the program’s, school’s, and university’s academic and professional policies.

For further information, contact Professor Karen E. Gable, Director of the Health Sciences Education Program, School of Allied Health Sciences, IUPUI, Coleman Hall 304, 1140 W.
Master of Science in Health Sciences Education at Indiana University–Purdue University Indianapolis

Program Director: Associate Professor Gable

The Master of Science is an advanced degree program for credentialed health care practitioners intending to work in educational and clinical settings. The program curriculum integrates knowledge from educational philosophy, psychology, methodology, and evaluation with existing skills from a specialized health care field.

The program accommodates the needs of students employed full time as health care practitioners and can be completed on either a full-time or part-time basis. Program courses are scheduled during evening hours.

Program Requirements

The graduate program consists of a minimum of 39 credit hours including a required 6 credit hour practicum or thesis. The program curriculum consists of four components: (1) core foundation courses, (2) health sciences education courses, (3) elective courses outside of health sciences education, and (4) completion of a capstone practicum or research-based thesis that includes at least 6 credit hours and two semesters of course work. The program director and the student formulate an academic program plan to assure relevance to the student's long-range professional plans.

ADMISSION

Requirements

Students accepted into the program must complete the university’s, school’s, and program’s admission requirements. The minimum admission requirements are as follows:

1. Undergraduate academic achievement with a grade point average of at least a 3.00 on a 4.00 scale.
2. Acceptable performance on the Graduate Record Examination.
3. Three letters of recommendation describing clinical expertise and potential, experience and potential as a health care educator, and potential of academic achievement as a graduate student.
4. Applicants must possess current and appropriate credentials representing their health care field.
5. Applicants should show evidence of a minimum of two years (or equivalent) of full-time employment in their credentialed health care field.

Exceptions to these requirements may be granted by the School of Allied Health Sciences Graduate Studies Committee upon written petition from the applicant and with written recommendation from the coordinator of graduate studies of the Health Sciences Education Program. The petition must include a full statement of conditions justifying the exception. Conditional admission will be for a stated time period and will entail specific conditions to be met to receive regular admission status.

No student will be permitted to work toward a degree without first being admitted to the Master of Science Program.

Prior Course Work Applied Toward Degree Requirements

A maximum of 6 graduate credit hours earned at Indiana University prior to admission may be applied toward a degree. Upon the recommendation of the coordinator of graduate studies of the Health Sciences Education Program and with the approval of the School of Allied Health Sciences Graduate Studies Committee, up to 8 credit hours of graduate work at other institutions may be transferred in partial fulfillment of degree requirements. No course may be transferred from another institution unless the course was completed with a grade of B or better within five years prior to matriculation in the Master of Science degree program.

Application Materials

An applicant must submit completed application forms to the Office of Research and Graduate Studies. Transcripts from all universities attended must be included. Indiana University graduates should request that the Registrar’s Office send unofficial copies of their transcripts. Non–Indiana University graduates must submit at least one official transcript from each university attended.

A nonrefundable application fee is required from all applicants who have never attended Indiana University.

For further information, contact Professor Karen E. Gable, Director and Coordinator of Graduate Studies, Health Sciences Education Program, School of Allied Health Sciences, Coleman 322B, 1140 W. Michigan Street, Indianapolis, IN 46202-5119, (317) 278-1353, Fax: (317) 274-1795, E-mail: kgable@iupui.edu.

Courses in Health Sciences Education

“P” refers to a course prerequisite and “C” to a course that must be taken concurrently.

AHLT Z298 Credit by Experience

AHLT Z299 Credit by Credentials

AHLT Z477 Teaching Methodology in Health Sciences Education (3-5 cr.) P: EDUC P255 or equivalent, EDUC H340 or equivalent, EDUC M300 or equivalent if teacher certification is sought. Teaching methods and techniques and choices of material and equipment, with emphasis on evaluation.

AHLT Z486 Student Teaching in Health Sciences Education (12 cr.) P: AHLT Z477, AHLT Z497, two years of experience in health specialty. Each student assumes responsibility under a supervising teacher for teaching in a cooperating secondary, postsecondary, or technical program.

AHLT Z490 Topics in Health Sciences Education (1-3 cr.) Permission required. Special electives offered by the faculty. Prerequisites vary with topic. Honors credit may be available. Students may repeat this course as long as the topic changes each time of enrollment.

AHLT Z497 Principles and Purposes of Health Sciences Education Programs (3 cr.) Historical, legislative, and theoretical foundations of health occupations training and service. Emphasis on roles, responsibilities, and functions of the health occupations/sciences educator.

AHLT Z501 Scientific Inquiry Applied to Health Sciences Education (3 cr.) Analysis and interpretation of data, introduction to theory of advanced statistical techniques, and principles of research design appropriate to didactic, student laboratory, or clinical settings.

AHLT Z507 Evaluation in Health Sciences Education (3 cr.) Principles of construction and interpretation of written achievement tests and other evaluative procedures applied to allied health education in academic, laboratory, and clinical settings.

AHLT Z518 Occupational Education in Health Care Delivery Systems (3 cr.) Historical development of educational and training programs for health sciences/occupations education with emphasis on the educational routes leading to credentialing of a practitioner. Investigation of selected educational trends.

AHLT Z525 Curriculum and Instruction in Health Sciences Education (3 cr.) Principles of curricular construction and design. Content, materials, and methods of instruction in health sciences education.

AHLT Z526 Workshop: Selected Topics in Health Sciences Education (1-3 cr.) Individual and group study dealing with current topics for improving teaching and practice in the health sciences.

AHLT Z530 Clinical Education and Performance Evaluation in Health Sciences Education (3 cr.) Analysis of health care facilities as instructional sites. Emphasizes the educational purpose of clinical experiences, effective use of sites, and legal aspects of clinical educational and clinical performance evaluation.

AHLT Z540 Continuing Education of Health Care Professionals (3 cr.) Orientation to the processes of continuing education as they relate to health care professions, with emphasis on professionalization as a process and its implications for continuing education. Includes exploration of processes of needs determination and instructional episode planning, design, implementation, and evaluation.

AHLT Z590 Individual Study in Health Sciences Education (1-3 cr.) Analysis of select readings; study of health sciences education/ allied health sciences research; or critique of research problems, methodology, or theoretical bases with faculty guidance.

AHLT Z594 Administration in Health Sciences Education (3 cr.) Principles of effective organization, supervision, and administration of educational programs in the health sciences. Techniques of program management, budgeting and accounting, and records and reports applied to educational programs in allied health sciences.
AHLT Z595 Practicum in Health Sciences Education (3-6 cr.) Relating educational theory to practice through developmental activities or supervised teaching experience in a health setting. Emphasis upon planning, structuring, and evaluating learning experiences.

AHLT Z599 Thesis in Health Sciences Education (3-6 cr.) Individual investigation in the form of an organized scientific contribution or a comprehensive analysis in a specified area related to health sciences education.

The following graduate courses are integrated into the graduate program.

AHLT W510 Trends and Issues in Allied Health (3 cr.) A seminar course to review pertinent literature and other sources of information as a basis for discussing trends and issues affecting the therapeutic professions and the health care delivery system.

AHLT W520 Research Methodology in Allied Health (3 cr.) P: Graduate-level statistics course. Fundamentals of research methodology, design, techniques, and procedures applicable to research problems in the allied health disciplines. Introduction to computer data analysis.

AHLT W560 Topics (1-3 cr.) Permission required. Prerequisites vary with topic. Exploration of a selected topic related to allied health sciences disciplines at an advanced level. May be repeated once for credit if topics differ.

AHLT W570 Research Communication in Allied Health Sciences (3 cr.) P: consent of major advisor. Focuses on the conceptualization and writing of research communications in a variety of formats including but not limited to abstracts, peer-reviewed original publications, theses, and grant submissions. Limited to allied health students.

AHLT W799 Master's Thesis Continuation (1 cr.) Used as continuation credits for completing the master's thesis in a format acceptable to the student's advisory committee, leading to successful defense of the final product. May be repeated for credit.

Histotechnology

The nontraditional educational certificate program in histotechnology is based on the Indianapolis campus of Indiana University, with didactic course work delivered via audio teleconferencing to clinical affiliates where the practicum courses are pursued. An Associate of Science in Histotechnology degree is offered to graduates of the certificate program and to histotechnology practitioners who have previously earned certification as a Histologic Technician (HT) or Histotechnologist (HTL) from the Board of Registry of the American Society of Clinical Pathologists.

Description of the Profession A histology technician processes surgical, autopsy, or research tissue specimens for microscopic examination. Although most histology technicians work in human health care facilities, many are employed in veterinary, industrial, or research laboratories.

Graduates of the Program After completion of the certificate program, students are eligible to take the national certification exam offered by the Board of Registry of the American Society of Clinical Pathologists. Those who pass the Board of Registry exam may use the initials HT(ASCP) after their name. Students who have completed the program and are certification exam eligible are qualified to practice prior to taking the exam. Although graduates of the associate degree program generally maintain their employment in histopathology laboratories, they often enjoy enhanced opportunity for advancement in the profession.

Associate of Science in Histotechnology at Indiana University–Purdue University Indianapolis

EDUCATIONAL PROGRAM

Length of Program Ten months of certificate level course work, or prior Histologic Technician certification by the Board of Registry of the American Society of Clinical Pathologists, plus additional time for completion of degree requirements. Students should have as their goal to complete the course work in no more than five years from the time they first enroll in the program.

Structure of Program Designed for the employed histologist, the professional course work is offered by distance education. General-education courses may be completed at Indiana University, at other accredited colleges or universities, or through distance education courses.

Design of Professional Curriculum Completion of the certificate-level course work (24 credit hours) is required before pursuit of the associate degree. Alternately, the previously-certified HT(ASCP) may apply for special credit in lieu of completion of the certificate course work. Required general-education courses may be transferred from any accredited college or university, in accordance with university and school policy, or completed through Indiana University's School of Continuing Studies’ independent study courses. The Histotechnology Capstone, offered by distance education via audio teleconferencing, will be taken as the student nears completion of the degree.

Program Facilities The Histotechnology Program office is in Coleman Hall at Indiana University–Purdue University Indianapolis.

Additional Costs of the Program In addition to tuition and fees incurred for course registration, the student is responsible for books and/or laboratory fees which may be assessed.

Opportunity to Work The program is designed with the employed histologist in mind; full- or part-time employment is assumed.

ADMISSION

General Information Students accepted into the program must complete the school’s and the following program admission requirements prior to the first day of classes. Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program. Enrollment in the associate degree program is not limited, therefore most qualified applicants are admitted. However, in the event that enrollment exceeds program resources, applicants who are residents of Indiana are given preference for admission before out-of-state applicants.

Criteria Used for Selection of Class Successful completion of the certificate-level course work. Alternately, prior certification by the ASCP BOR as an HT or HTL and application for the program’s special credit option.

Specific Requirements In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this bulletin, the following admission policies apply to the Associate of Science in Histotechnology degree.

Application Deadline Applications are accepted year-round.

Minimum Academic Requirements High school graduate or equivalent. A minimum grade point average of 2.00 on a 4.00 scale in prerequisite courses is required for admission and must be maintained in all courses throughout the program.

Minimum Cumulative Grade Point Average 2.00 on a 4.00 scale. This requirement is applied at admission and must be maintained. Grades earned in remedial courses are not used to calculate the cumulative grade point average.

Minimum Grade Requirement in Prerequisite Courses C (2.00 on a 4.00 scale).

Technical Standards See School of Allied Health Sciences policy.

Professional Program All required general-education courses (except for anatomy and chemistry courses) are offered by distance delivery through the School of Continuing Studies at Indiana University; however, courses may be completed elsewhere and transferred to IUPUI. General-education courses may be completed in any sequence. The Histotechnology Capstone course is designed to be taken near the completion of the associate degree.

Fall Semester

Histotechnology I AHLT H101 3 cr.
Histotechnology Practicum I AHLT H111 3 cr.
Histotechnology II AHLT H102 3 cr.
Histotechnology Practicum II AHLT H1182 3 cr.
Spring Semester

Histotechnology III AHLT H103 3 cr.
Histotechnology Practicum III AHLT H183 3 cr.
Histotechnology IV AHLT H104 3 cr.
Histotechnology Practicum IV
AHLT H184 3 cr.
Total 24 cr.

Degree Completion Courses The following courses must be satisfactorily completed for the associate degree. The code “G” indicates a course that meets the school’s general-education requirements.

Introductory Psychology (G) 3 cr.
Introduction to Sociology (G) 3 cr.
College Pre-Calculus Math (G) 3 cr.
Elementary Composition (G) 3 cr.
Professional Writing Skills (G) 3 cr.
Interpersonal Communication (G) 3 cr.
Introduction to Microcomputers and Computing (G) 3 cr.
Contemporary Biology (G) 3 cr.
Medical Terms from Greek and Latin (G) 2 cr.
Anatomy (G) 3 cr.
Elementary Chemistry (G) 3 cr.
Histotechnology Capstone 6 cr.
Total Professional and Degree Completion Courses 62 cr.

Special Credit Policy Practicing histologists certified by ASCP (HT or HTL) may apply for special credit courses H105 and/or H185, in lieu of taking certificate-level courses, when working toward the associate degree at IUPUI. Special credit courses H105 and H185 are not transferable to other colleges or universities.

Scholarships The American Society for Clinical Pathologists, the National Society for Histotechnology, and several states’ histology professional organizations sponsor scholarships for students in histotechnology. Other scholarship and financial aid opportunities may be available through the IUPUI Office of Scholarships and Financial Aid.

Graduation Requirements Satisfactory completion of 62 credit hours to include 32 credit hours of general-education courses and 30 credit hours of professional courses. All course work must be completed in compliance with the program’s and school’s academic and professional policies.

For further information, contact Glenda Hoye, Director, Histotechnology Program, IUPUI, Coleman Hall 322, 1140 W. Michigan Street, Indianapolis, IN 46202-5119, (317) 278-1599 or 278-1690, Fax: (317) 278-1820, E-mail: ghoye@iupui.edu.

Certificate in Histotechnology at Indiana University–Purdue University Indianapolis

Medical Director: Ulbright
Program Director: Hoye

EDUCATIONAL PROGRAM

Length of the Program 10 months of professional course work beginning with fall semester. The course of study consists of eight courses (24 credit hours), including four didactic courses and four practicum courses.

Structure of the Program Histotechnology didactic course teleconferences are delivered once per week during the day; practicum course work is done at qualified clinical sites and can be completed at any time approved by the supervisor in the student’s laboratory.

Design of Professional Curriculum Students employed in laboratories that qualify as clinical affiliate sites are accepted into the Histotechnology Program to begin the course of study in the fall semester. The curriculum consists of didactic and practicum courses delivered by distance learning to students pursuing on-the-job training in histology laboratories. The 120-minute interactive audio-teleconference lectures are delivered once per week and are accompanied by related assignments that require approximately 3.5 hours per week for completion. The practicum course modules are designed to be accomplished in approximately 16 hours per week; however, as part of on-the-job training, students’ full-time technical training at their place of employment is assumed. The Histotechnology Program is designed to:

- Provide educational and clinical experiences in all areas of histologic technology to prepare students for beginning a career as a histologic technician.
- Provide the medical communities nationwide with individuals qualified to effectively carry out the functions of the histotechnology discipline.
- Assist the affiliate site’s histology trainers in effectively meeting students’ needs in accomplishing the course work.
- Assist students in reaching their goals by providing academic, occupational, and personal guidance.

Program Facilities The Histotechnology Program office is located in Coleman Hall at Indiana University–Purdue University–Indianapolis (IUPUI). “Classrooms” for delivery of teleconferences, as well as practical training sites; are located in institutions throughout the United States that qualify as clinical affiliates where students are located. Clinical affiliate sites may vary from year to year, as training needs change.

Additional Costs of the Program In addition to Indiana resident tuition and course fees, students are required to purchase books. Completion of course requirements may necessitate the purchase of laboratory supplies not ordinarily used at the student’s training facility laboratory. Clinical training laboratories may cover some expenses for laboratory supplies and mailing costs for submission of assignments to the program office. Additional training costs to the student and/or laboratory are estimated at $400.00 per year.

Feasibility of Work for Students Since the program is designed with the on-the-job student in mind, full-time employment in a histology laboratory is assumed.

Accreditation The Histotechnology Program at Indiana University–Purdue University Indianapolis is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 W. Bryn Mawr Avenue, Chicago, IL 60631; (773) 744-8880.

ADMISSION

Criteria Used for Selection of Class High school graduate (or equivalent), completion of prerequisites, employed in or having appropriate access to a qualified laboratory, and recommended by the laboratory supervisor. Admission to the program is limited by the number of teleconference connections available for delivery of lectures; therefore, completion of the program application does not guarantee admission.

The Histotechnology Program is designed to reach students in all parts of the nation. However, preference for admissions is ranked as follows: (1) students in laboratories with multiple noncertified students; (2) students in laboratories with one noncertified student. Other applicants will be admitted as class capacity allows.

Class Size Class size is limited by the teleconference ports available for delivery of lectures to distance sites. Affiliate sites may accommodate more than one student, depending on the laboratories’ capacity for training; the training facility may accommodate students from additional local sites for teleconference purposes. Theoretically, there is no limit to class size.

Specific Requirements

In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this section of the bulletin, the following admission policies apply to the Histotechnology Program.

Application Deadline
May 1 of the year of anticipated entry.

Minimum Academic Requirements High school graduate or equivalent. A minimum grade point average of 2.00 on a 4.00 scale in prerequisite courses is required for admission, and must be maintained in professional courses. See prerequisites.

Minimum Grade Requirement in Prerequisite Courses C (2.00 on a 4.00 scale).

Technical Standards See School of Allied Health Sciences policy.

Volunteer Experience Although volunteer experience is not required of applicants, it is highly recommended that students with no histology laboratory experience spend time in a histology laboratory to assure serious interest before proceeding with application to the program.

Scholarships The American Society for Clinical Pathologists, the National Society for Histotechnology, and several states’ histology professional.
organizations sponsor scholarships for students in histotechnology. Other scholarship and financial aid opportunities may be available through the Office of Scholarships and Financial Aid.

**CURRICULUM**

**Prerequisites**

Students are required to have completed, within 10 years prior to admission, courses in chemistry, biology, and mathematics. High school or college courses with a minimum grade point of 2.00 on a 4.00 scale are acceptable. All prerequisite courses must be completed before admission to the program.

**Professional Program**

Paired didactic and practicum subject courses must be taken concurrently. Courses are offered and must be completed in sequence. Students register for classes as follows:

**Fall**

Histotechnology I AHLT H101 3 cr.
Histotechnology Practicum I AHLT H181 3 cr.
Histotechnology II AHLT H102 3 cr.
Histotechnology Practicum II AHLT H182 3 cr.
Total 12 cr.

**Spring**

Histotechnology III AHLT H103 3 cr.
Histotechnology Practicum III AHLT H183 3 cr.
Histotechnology IV AHLT H104 3 cr.
Histotechnology Practicum IV AHLT H184 3 cr.
Total 12 cr.

**Program Completion Requirements**

Satisfactory completion of 24 credit hours of professional courses. All course work must be completed in compliance with the program’s and school’s academic and professional policies.

For further information, contact Glenda Hoye, Director, Histotechnology Program, IUPUI, Coleman Hall 322, 1140 W. Michigan Street, Indianapolis, IN 46202-5119, (317) 278-1599 or (317) 278-1690, Fax: (317) 278-1820. E-mail: ghoye@iupui.edu.

**Courses in Histotechnology**

“P” refers to a course prerequisite and “C” to a course that must be taken concurrently.

**AHLT H101 Histotechnology I (3 cr.) C: H181.** Teleconference lectures and related written supplemental assignments with focus on specimen receipt and accessioning, laboratory safety, laboratory chemistry and math, instrumentation and fixation.

**AHLT H102 Histotechnology II (3 cr.) P: H101; C: H182.** Teleconference lectures and related written supplemental assignments with focus on decalcification, tissue processing and embedding, microscopy, general staining theories, and nuclear and cytoplasmic staining.

**AHLT H103 Histotechnology III (3 cr.) P: H102; C: H183.** Teleconference lectures and related written supplemental assignments with focus on special staining methodology to include connective tissue, carbohydrates, amyloid, lipids, microorganisms, pigments and minerals.

**AHLT H104 Histotechnology IV (3 cr.) P: H103; C: H184.** Teleconference lectures and related written supplemental assignments with focus on special staining methodology to include nerve and special cells and enzyme and immuno histochemical staining, with an overview of selected topics.

**AHLT H105 Histotechnology Credential Theory (12 cr.)** Special credit awarded for ASCP registry status or for histology experience and accomplishment of partial registry exam. Contact program director for further information.

**AHLT H181 Histotechnology Practicum I (3 cr.) C: H101.** Clinical practicum experience in topics covered in H101, performed under direct supervision of designated registered histologist.

**AHLT H182 Histotechnology Practicum II (3 cr.) P: H181; C: H102.** Clinical practicum experience in topics covered in H102, performed under direct supervision of designated registered histologist.

**AHLT H183 Histotechnology Practicum III (3 cr.) P: H182; C: H103.** Clinical practicum experience in topics covered in H103, performed under direct supervision of designated registered histologist.

**AHLT H184 Histotechnology Practicum IV (3 cr.) P: H183; C: H104.** Clinical practicum experience in topics covered in H104, performed under direct supervision of designated registered histologist.

**AHLT H185 Histotechnology Credential Practicum (12 cr.)** Special credit awarded for ASCP registry status or for histology experience and accomplishment of partial registry exam. Contact program director for further information.

**AHLT H201 Comprehensive Experience in Histotechnology (6 cr.) P: Completion of 50 credit hours toward Associate of Science in Histotechnology, to include completion of the technical writing course requirement. Course emphasizes critical thinking, problem-solving skills and literature searches associated with technical and scholarly writing. Introduces students to management issues, supervision, quality assurance principles, and other issues associated with histotechnology laboratory employment.

**Medical Imaging Technology**

An educational program in medical imaging technology is located on the Indiana University–Purdue University Indianapolis campus. This program is an advanced program for the registered radiographer.

**Description of the Profession**

The medical imaging technologist in radiologic sciences is a skilled radiographer qualified to provide patient service in interventional procedures, computed tomography, ultrasonography, and magnetic resonance imaging. These areas represent the most advanced imaging in diagnostic radiology. Effective medical imaging technologists utilize principles of radiation protection as they determine exposure factors and position patients for a variety of examinations. Many of the patient examinations are highly specific, utilizing computers or computerized equipment. Medical imaging technologists are also capable of assisting in the surgical procedures performed during the examination, assessing the technical quality of the image, and providing basic patient care. The technologist must function as a member of the health care team.

**Graduates of the Program**

Graduates receive a Bachelor of Science degree and are eligible to take specialty examinations depending on their major area of concentration.

**Credentials Required to Practice**

RT(R)(ARRT) Registered Radiographer. Advanced qualification credentials are available and may be required by some employers. Currently, depending on the clinical major completed, graduates may be eligible for one or more of the following credentials in addition to the RT(R)(ARRT) required for entry into the program: from the ARRT, cardiovascular-interventional technology (CV), computed tomography (CT), mammography (M), and magnetic resonance imaging (MR), ultrasound (U); from the ARDM, medical sonography (RDSM) and vascular technology (RTV).

**Indiana Certification Requirements to Practice**

State certification is required to operate an X-ray machine. The state accepts the ARRT Registry for Certification.

**Bachelor of Science in Medical Imaging Technology at Indiana University-Purdue University Indianapolis**

**Medical Director:** Professor Cohen
**Program Director:** Associate Professor Hernandez
**Coordinator:** Assistant Professor Kehrein
**Associate Professor:** Long
**Assistant Professor:** Cox
**Adjunct Lecturers:** Hinchman, Smith

**EDUCATIONAL PROGRAM**

This program is designed to prepare qualified medical imaging technologists. The principal aim of the major is to provide students with educational experiences that will permit them to develop the competencies required to function effectively as advanced imaging technologists. Theory and clinical experiences are provided in interventional procedures, computed tomography, magnetic resonance imaging, and ultrasound. Students receive theory in all areas and select one major for clinical experiences.

**Length of the Program**

A new class begins with summer session II each year and continues through the end of the spring semester the next year (10.5 months).

**Structure of the Program**

Students have professional classes or clinical experiences from 8 a.m. to 4 p.m., Monday through Friday. Some evening clinical hours may be required.
Design of the Professional Curriculum  The lecture material and clinical experiences are integrated.

Opportunity for Students to Work  Generally, employment as a part-time radiographer is available at one of the medical centers or area hospitals.

Additional Cost  In addition to regular university tuition and fees, students should expect to pay program-related expenses. Contact the program for a current cost sheet.

Program Facilities  The Medical Imaging Technology Program is offered in Indianapolis at the Indiana University Medical Center. The offices, classrooms, and laboratory facilities are located on the first floor of the Clinical Building. Clinical education sites are in the Indianapolis metropolitan area. Students are responsible for their transportation to these sites.

ADMISSION

General Information  Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program.

Criteria Used for Selection of Class  Previous academic record, evidence of registration by the American Registry of Radiologic Technologists (ARRT), an essay, recommendation letters, and availability of major clinical concentration.

Class Size  Based on the availability of clinical education sites for each major area.

Specific Requirements  In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this bulletin, the following admission policies apply to the Medical Imaging Technology Program.

Application Deadline  November 15 of the year prior to anticipated entry.

Total Number of Prerequisite Credit Hours  82.

Minimum Cumulative Grade Point Average  2.50 on a 4.00 scale at the time of application. All college courses taken, including remedial courses and courses that do not meet prerequisite requirements, are considered when calculating the minimum cumulative grade point average.

Minimum Specific Grade Point Average  Cumulative 2.30 on a 4.00 scale for all life and physical science course work. All college life and physical sciences courses taken, including remedial courses and courses that do not meet prerequisite requirements, are considered when calculating the minimum life and physical science grade point average. 2.70 for all radiologic technology courses and 3.00 for clinically related courses.

Minimum Grade Requirement in a Stated Prerequisite Course  C (2.00 on a 4.00 scale).

Interview  An interview is not required.

Technical Standards  See School of Allied Health Sciences policy.

Indiana Residents Preference Policy  See School of Allied Health Sciences policy.

Experience  While radiography experience beyond the initial radiography program is not required, it is highly recommended.

Awards  The program faculty will recommend to the university graduating students with superior academic performance for degrees awarded with distinction. Also, students with outstanding academic and clinical achievement during their professional program may be recognized by the program at the time of graduation.

CURRICULUM

Prerequisites  Prior to entering the program, students must complete the following minimum prerequisites. Students should consult with their academic advisors for appropriate courses and semester sequence in order to complete prerequisites. Equivalent prerequisites may be taken at any accredited college or university. The code “G” indicates a course that meets the school's general-education requirements.

General-Education Areas

Verbal Communication (G) 2-3 cr.

Written Communication (G) two courses

(The second writing course should focus on writing a research paper.)

Humanities Elective (G) 3 cr.

Social/Behavioral Science Elective (G) 3 cr.

Introductory Psychology (G) 3 cr.

College Algebra, Trigonometry, or Calculus (G) 3-5 cr.

General Physics (G) 4-5 cr.

Elementary Chemistry (with lab) (G) 4-5 cr.

Anatomy and Physiology I (with lab)* (G) 4-5 cr.

Anatomy and Physiology II (with lab)* (G) 4-5 cr.

*Individual Anatomy and Physiology courses with labs equaling 8-10 credits may be substituted.

Introduction to Computers 2-3 cr.

Preprofessional Radiography Course Work 40 cr.

Radiography

This area is complete for applicants who have earned 40 college credit hours in radiography.

Students who received their radiography education without transferable university credit and who have full credentials in radiography (ARRT) may be awarded credit for their credentials and experience and/or may petition to test out of professional radiography courses. The Special Credit Policy is available upon request. Each applicant will be evaluated individually.

Students must select additional courses in radiography or in areas that support, complement, or extend their radiography background if they lack 40 semester hours of earned college credit in radiography.

Suggested Electives  (To bring total credit hours up to 82). The number of elective credit hours will differ for each student to complete a total of 82 credit hours of prerequisite course work. Additional electives may be required, before or during the professional program, to complete a minimum of 122 credit hours of academic work for graduation.

Professional Program  Courses in the professional program are sequential and, therefore, must be taken in the order specified by the program faculty.

Senior

Summer Session II

Sectional Imaging Anatomy

AHLT R404 2 cr.

Seminar: Medical Imaging

AHLT R407 1 cr.

Topics: Introduction to MIT Project I AHLT R408 1 cr.

Total 4 cr.

Fall

Medical Care I AHLT R374 3 cr.

Topics: Introduction to MIT Project II AHLT R408 1 cr.

Medical Imaging Theory

AHLT R451 3 cr.

Clinical Practicum: A choice of 6 credit hours from one or a combination of the following courses; some restrictions apply according to major.

Interventional Imaging

AHLT R481 1-6 cr.

Computed Tomography

AHLT R482 1-6 cr.

Magnetic Resonance Imaging

AHLT R483 1-6 cr.

Ultrasound Imaging AHLT R484 1-6 cr.

Total 15 cr.

Spring

Medical Care II AHLT W471 3 cr.

Senior Project in Medical Imaging Technology AHLT R409 3 cr.

Medical Imaging Applications

AHLT R452 3 cr.

Clinical Practicum: A choice of 6 credit hours from one or a combination of the following courses; some restrictions apply according to major.

Interventional Imaging

AHLT R481 1-6 cr.

Computed Tomography

AHLT R482 1-6 cr.

Magnetic Resonance Imaging

AHLT R483 1-6 cr.

Ultrasound Imaging AHLT R484 1-6 cr.

Total 15 cr.

Graduation Requirements  Satisfactory completion of 122 credit hours. All course work must be completed in compliance with the program’s and school's academic and professional policies.
Courses in Medical Imaging Technology

“P” refers to a course prerequisite and “C” to a course that must be taken concurrently.

AHLT R404 Sectional Imaging Anatomy (2 cr.)
An in-depth study of sectional anatomy pertinent to ultrasound, computed tomography, and magnetic resonance imaging. Standard transverse, parasagittal, and coronal planes are included, utilizing images from all three imaging modalities. A discussion of technique, artifact, and pathology-related alterations of cross-sectional anatomic appearances is included.

AHLT R407 Seminar (1-5 cr.)
Independent and group study focusing upon advances in medical imaging. May be repeated once for credit if topics differ.

AHLT R408 Introduction to MIT Projects I and II (0.5-4 cr.)
Study of selected topics in radiologic sciences. May be repeated once for credit if topics differ.

AHLT R409 Senior Project in Medical Imaging Technology (3 cr.)
Independent readings and research on a selected medical imaging topic. A paper in publishable form must be written as part of the project.

AHLT R451 Medical Imaging Theory (3 cr.)
P: Math, Physics, AHLT R404. Lectures on the physical principles of advanced imaging modalities including computed tomography, magnetic resonance, ultrasound, and interventional imaging. Image evaluation of normal studies is stressed. Student presentations and journal reports are required.

AHLT R452 Medical Imaging Applications (3 cr.)
P: AHLT R451. Lectures on and evaluations of the computed tomographic, magnetic resonance, ultrasound, and interventional images as applied to pathologic conditions of specific body areas. Student presentations and journal reports are required.

AHLT R481 Clinical Practicum: Intervventional Imaging (5-8 cr.)

AHLT R482 Clinical Practicum: Computed Tomography (5-8 cr.)

AHLT R483 Clinical Practicum: Magnetic Resonance Imaging (5-8 cr.)
P: AHLT R404. Clinical experience in the performance of magnetic resonance imaging studies.

AHLT R484 Clinical Practicum: Ultrasound Imaging (5-8 cr.)

AHLT R485 Clinical Practicum (5-8 cr.)

Specific area of experience will be determined by availability of instruction.

Nuclear Medicine Technology

An educational program in nuclear medicine technology is located on the Indiana University–Purdue University Indianapolis campus.

Description of the Profession
The graduate nuclear medicine technologist is qualified to provide patient diagnostic and therapeutic services using ionizing radiation in the form of gamma rays, X rays, and beta rays. These radiations emanate from radioactive materials. Nuclear medicine technologists perform patient organ imaging procedures, radioactive analysis of biological specimens (blood, urine), and some therapeutic applications of radioactive materials. Effective nuclear medicine technologists utilize principles of radiation protection as they prepare and administer radioactive materials for a variety of examinations. They are capable of performing quality control procedures on the instrumentation and radioactive materials. Nuclear medicine technologists also assist physicians in clinical procedures, give intravenous injections, draw blood, assess the technical quality of the studies, and provide basic patient care. The nuclear medicine technologist must function as a member of the health care team.

Graduates of the Program
Graduates receive a Bachelor of Science degree and are eligible to take the certification examination of the American Registry of Radiologic Technologists (ARRT) and the Nuclear Medicine Technology Certification Board (NMTCB) to become certified as a nuclear medicine technologist, R.T.(N) or C.N.M.T.

Credentials Required to Practice
R.T.(N) (ARRT), Registered Nuclear Medicine Technologist or C.N.M.T. (NMTCB), Certified Nuclear Medicine Technologist.

Bachelor of Science in Nuclear Medicine Technology at Indiana University University–Purdue University Indianapolis

Medical Advisor: Professor Schauwecker
Program Director: Associate Professor Hernandez
Educational Program Director: Associate Professor Kosegi
Associate Professors: English, Mock, Mulholland
Assistant Professors: Richard, Anger
Instructor: Lewis
Lecturers: Hall, Kuster, Shiplett, Fain

EDUCATIONAL PROGRAM

Length of the Program
A new class begins summer session II each year and continues for 22 months.

Structure of the Professional Program
The curriculum is designed for persons with no previous experience in nuclear medicine, although experienced technologists may apply for admission. During the junior year, students have classes on Monday, Wednesday, and Friday plus eight hours of clinical practicum on each Tuesday and Thursday and four hours on Friday mornings. Senior students have eight hours of clinical practicum on each Monday, Wednesday, and Friday plus classes on Tuesday and Thursday. Clinical practicums may also require some evening and off-hour assignments.

Design of the Professional Curriculum
This degree is designed to prepare qualified nuclear medicine technologists. The principal aim of the degree is to provide students with educational experiences that will permit them to develop the competencies required to function effectively as nuclear medicine technologists. The curriculum integrates theory and clinical experience.

Opportunity for Students to Work
Some part-time employment may be available in the radiology departments at the Indiana University Medical Center. There are no restrictions on the number of hours a student may work during the program as long as work does not interfere with program requirements. However, the student must recognize that the professional curriculum requires approximately 25 to 35 clock hours per week of on-campus participation in classroom, laboratory, and clinical course work. Study time and completion of general education courses must also be considered. While most of the professional course activities are scheduled during daytime hours Monday through Friday, there are some clinical experiences that may require student participation during evenings or other off hours. Please contact the program for more information.

Additional Cost
In addition to regular university tuition and fees and textbook expenses, students should expect to pay program-related expenses. Contact the program for a current cost sheet.

Program Facilities
The nuclear medicine technology program is offered in Indianapolis at the Indiana University Medical Center. The offices, classrooms, and library are located on the first floor of the Clinical Building. Students obtain clinical experience in the nuclear medicine areas of radiology departments located in University, Riley, Wishard, and Veterans Administration hospitals. Other clinical education sites in the Indianapolis area may also be used.

Accreditation
The bachelor’s degree in nuclear medicine technology is fully accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology.

ADMISSION

General Information
Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program.

Class Size
Seven students each summer session II (late June).

Specific Requirements
In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this section of the bulletin, the following apply to the Nuclear Medicine Technology Program.

Application Deadline
November 15 of the year prior to anticipated entry.
Total Number of Prerequisite Credit Hours

60.

Minimum Cumulative Grade Point Average

2.50 on a 4.00 scale. This requirement is applied at the time of program application and must be maintained. The grades from all college courses taken, including remedial courses and courses that do not meet prerequisite requirements, are considered when calculating the minimum cumulative grade point average.

Minimum Specific Grade Point Average

2.50 on a 4.00 scale for all life and physical science course work. This requirement is applied at the time of program application and must be maintained. The grades from all college life and physical sciences courses taken, including remedial courses and courses that do not meet prerequisite requirements, are considered when calculating the minimum specific grade point average.

Minimum Grade Requirement in a Stated Prerequisite Course

C (2.00 on a 4.00 scale).

Interview

Qualified applicants must participate in an interview. Interviews are conducted in January or early February.

Technical Standards

See School of Allied Health Sciences policy.

Indiana Residents Preference Policy

See School of Allied Health Sciences policy.

Volunteer Experience

Volunteer experience is not required. However, applicants must observe in a nuclear medicine facility before an interview will be scheduled.

Awards

The faculty will recommend to the university graduating students with superior academic performance for degrees awarded with distinction. Also, students with outstanding academic and clinical achievement during their professional program may be recognized by the program at the time of graduation.

CURRICULUM

Prerequisites

Prior to entering the program, students must complete the following minimum prerequisites.

Students should consult with their academic advisors for appropriate courses and semester sequence in order to complete prerequisites. Prerequisites may be taken at any accredited college or university. The code “G” indicates a course that meets the school’s general-education requirements.

Written Communications

(2 courses) (G) 4-6 cr.
(The second writing course should focus on writing a research paper.)

Verbal Communications (G) 2-3 cr.
Introductory Psychology (G) 3 cr.

Elementary Chemistry I (with lab) (G) 4-5 cr.
Elementary Chemistry II (with lab) (G) 4-5 cr.

Physics (G) 4-5 cr.

Anatomy and Physiology I (with lab)* 4-5 cr.
Anatomy and Physiology II (with lab)* 4-5 cr.

*Individual Anatomy and Physiology courses with labs equaling 8-10 credits may be substituted.

College Algebra and Trigonometry

or Algebra and Survey of Calculus (G) 5-6 cr.

Introduction to Computers 1-3 cr.

Science Electives 6 cr.

*Electives (to complete 60 credit hours selected from the following graduation requirements)

Humanities elective (G) 3 cr.
Social/Behavioral Science electives (G) 6 cr.

General electives 9 cr.

Total 60 cr.

A Suggested Plan of Study

Freshman

Fall

English Composition 3 cr.

Verbal Communications course 3 cr.

Algebra 3 cr.

Chemistry I (with lab) 5 cr.

Total 14 cr.

Spring

English Composition 3 cr.

Psychology 3 cr.

Trigonometry or Brief Survey of Calculus 3 cr.

Chemistry II (with lab) 5 cr.

Total 14 cr.

Sophomore

Fall

Anatomy & Physiology I 4 cr.

Introduction to Computers 3 cr.

Science elective 3 cr.

Total 6 cr.

Anatomy & Physiology II 4 cr.

Social/Behavioral Science elective 3 cr.

Total 7 cr.

Spring

General Physics 5 cr.

Anatomy and Physiology II 4 cr.

Social/Behavioral Science elective 3 cr.

Total 12 cr.

Junior

Summer Session I

Fall

Patient Care in Radiologic Sciences AHLT R104 2 cr.

Medical Terminology AHLT R185 1 cr.

Seminars: Professional Values AHLT R207 1 cr.

Radiation Protection in Nuclear Medicine AHLT R437 1 cr.

Total 5 cr.

Fall

Projects in Nuclear Medicine Technology AHLT R410 1 cr.

Physics and Instrumentation of Nuclear Medicine I AHLT R412 2 cr.

Applications of Radionuclides I AHLT R432 3 cr.

Clinical Nuclear Medicine Practicum I AHLT R445 6 cr.

Elective (if needed for graduation) 3 cr.

Total 15 cr.

Spring

Topics: Medical Assisting in Radiology AHLT R208 2 cr.

Seminars: Nuclear Medicine In-Service I AHLT R407 1 cr.

Projects in Nuclear Medicine Technology AHLT R410 1 cr.

Physics and Instrumentation of Nuclear Medicine II AHLT R417 2 cr.

Radionuclide Measurement AHLT R422 2 cr.

Clinical Nuclear Medicine Practicum I AHLT R445 4 cr.

Elective (if needed for graduation) 3 cr.

Total 15 cr.

Senior

Summer Session II

Fall

Topics: Nuclear Medicine Management AHLT R408 1 cr.

Clinical Nuclear Medicine Practicum II AHLT R446 2 cr.

Elective (if needed for graduation) 3 cr.

Total 6 cr.

Fall

Medical Care I AHLT W374 3 cr.

Seminars: Nuclear Medicine In-Service II AHLT R407 1 cr.

Radiopharmaceuticals AHLT R427 2 cr.

Clinical Nuclear Medicine Practicum III AHLT R447 6 cr.

Total 12 cr.

Spring

Medical Care II AHLT W471 3 cr.

Seminars: Nuclear Medicine In-Service III AHLT R407 1 cr.

Projects in Nuclear Medicine Technology AHLT R410 3 cr.

In Vivo and In Vitro Studies AHLT R430 1 cr.

Applications of Radionuclides II AHLT R433 2 cr.

Clinical Nuclear Medicine Practicum III AHLT R447 6 cr.

Total 16 cr.
Graduation Requirements  Satisfactory completion of a minimum of 122 credit hours. All course work must be completed in compliance with the program’s and school’s academic and professional policies.

For further information, contact Professor Sarah Baker, Nuclear Medicine Admissions Advisor, or Judy Kosegi, Educational Director, Nuclear Medicine Technology Program, IUPUI, Clinical Building 120, 541 Clinical Drive, Indianapolis, IN 46202-5111, (317) 274-3802, Fax: (317) 274-4674, E-mail: ssbaker2@iupui.edu or jkosegi@iupui.edu.

Courses in Nuclear Medicine Technology

The AHLT courses with R100- or R200-level numbers are found in the radiography section of this bulletin.

“P” refers to a course prerequisite and “C” to a course that must be taken concurrently.

AHLT R408 Topics in Radiologic Sciences (.5-4 cr.) Study of selected topics in radiologic sciences. May be repeated once for credit if topics differ.

AHLT R410 Project in Nuclear Medicine Technology (1-3 cr.) Independent readings and research on a selected topic in nuclear medicine technology. A paper in publishable form must be written as part of the project.

AHLT R412 Physics and Instrumentation of Nuclear Medicine I (2 cr.) An introduction to the physical disciplines of nuclear medicine. Lectures and laboratory exercises on radiation physics, computer programming, and the statistics of radiation measurements.

AHLT R417 Physics and Instrumentation of Nuclear Medicine II (2 cr.) A continuation of AHLT R412. Lectures and exercises on electronic principles, the operational fundamentals of radiation counting devices and imaging systems, and quality assurance programs.

AHLT R422 Radionuclide Measurements (2 cr.) Lectures and laboratory sessions emphasizing the clinical utilization of nuclear counting and imaging systems and principles of quantitative measurements.

AHLT R427 Radiopharmaceuticals (2 cr.) Lectures and laboratories concerning properties and preparation of radiopharmaceuticals.

AHLT R430 In Vivo and In Vitro Studies (1 cr.) This course will introduce the principles of tracer methodology and apply that methodology to the measurement of dynamic and steady state systems within the body. Special emphasis will be placed on measuring physiological and hematological functions.

AHLT R432 Application of Radionuclides I (3 cr.) Lectures covering the clinical aspects of nuclear medicine procedures, including the physiological and technical procedures for each type of study.

AHLT R433 Application of Radionuclides II (2 cr.) P: AHLT R432. Lectures covering the clinical aspects of nuclear medicine procedures. Includes pathology related to procedures and the role technologists play in helping physicians gather information for accurate interpretations.

AHLT R437 Radiation Protection in Nuclear Medicine (1 cr.) Lectures on the principles of radiation protection in nuclear medicine.

AHLT R440 Radiobiology in Nuclear Medicine (1 cr.) Lectures on the biological effects of ionizing radiation.

AHLT R445 Clinical Nuclear Medicine Practicum I (4-8 cr.) Practical clinical application of nuclear medicine theory.

AHLT R446 Clinical Nuclear Medicine Practicum II (4-8 cr.) Continuation of AHLT R445.

AHLT R447 Clinical Nuclear Medicine Practicum III (2-8 cr.) Continuation of AHLT R446.

Nutrition and Dietetics

The Nutrition and Dietetics Program offers three post-baccalaureate programs: two certificate programs—the Dietetic Internship and the Pediatric Nutrition Fellowship—and the master of science program in nutrition and dietetics. The three programs require separate enrollments; the internship may not be completed concurrently with the master's program or Pediatric Nutrition Fellowship. However, the Pediatric Nutrition Fellowship may be completed as part of the master’s degree in nutrition and dietetics. In addition to graduate course work, the Nutrition and Dietetics Program also offers two undergraduate nutrition classes.

Program Director: Clinical Professor O’Palka
Professors Emeriti: Hopp, Irwin, Van Ness, Wilson
Professors: Brady, Richard
Associate Professor: Ernst
Clinical Associate Professor: Blackburn

Dietetic Internship at Indiana University–Purdue University Indianapolis

The Dietetic Internship Program is accredited by the American Dietetic Association and accepts 16 interns annually. Admission requirements for the internship include a bachelor’s degree from an accredited college or university, a minimum grade point average of 2.90 (4.0 scale) overall, completion of current academic requirements of the American Dietetic Association (must be verified by approved undergraduate dietetic program), and work experience. For further information, contact the Nutrition and Dietetics Program.

Master of Science in Medical Sciences (Nutrition and Dietetics) at Indiana University–Purdue University Indianapolis

EDUCATIONAL PROGRAM

Location of the Program The program is located at the Indiana University Medical Center in Indianapolis and utilizes facilities throughout central Indiana.

Description and Purpose of the Program This graduate program, offered through Indiana University Graduate School, is designed for health care professionals who have already earned a baccalaureate degree in nutrition or dietetics. The objective of this program is to provide an opportunity for health care professionals and nutrition students to deepen their knowledge base, improve critical thinking skills, and develop research skills in nutrition and dietetics.

The curriculum is designed for the student with a special interest in health promotion or in the nutritional requirements and provision of medical nutrition therapy in acute and chronic conditions such as diabetes or in the care of special populations such as preterm infants. Program affiliations throughout central Indiana provide the opportunity for the student to work with patient populations in both outpatient and inpatient settings as well as with the general public.

This curriculum will not prepare the student to sit for the Registration Examination for Dietitians. Concurrent enrollment in the Master of Science in Nutrition and Dietetics and the Pediatric Nutrition Fellowship is possible. However, concurrent enrollment in the Master of Science in Nutrition and Dietetics and the Dietetic Internship Program is not permitted.

Course Requirements Students will be required to take graduate-level courses in biochemistry, statistics or biostatistics, and physiology. Other courses and clinical study (open only to students who are registered dietitians) may be selected from the graduate-level offerings of the Nutrition and Dietetics Program and from other schools and departments on the Indiana University–Purdue University Indianapolis campus.

Minimum Requirements for the Degree To earn the M.S. degree, a minimum of 37 credit hours (43 if the Pediatric Nutrition Fellowship is included) at the graduate level are required. Candidates for this degree may petition to apply up to 8 credit hours of graduate work from other institutions or programs to this degree. A thesis is required.

ADMISSION

General Information

Admission requirements The School of Allied Health Sciences offers the M.S. in Nutrition and Dietetics through the University Graduate School. Students accepted into the program must meet all the requirements of both the University Graduate School and the School of Allied Health Sciences. The minimum admission requirements are: a bachelor’s degree from an accredited institution; a current health care practice credential or proof of completion of undergraduate major in nutrition or dietetics; cumulative undergraduate GPA of at least 3.0 on a 4.0 scale; an appropriate level of achievement on the Graduate Record Examination; and for international students, a suitable level of achievement on the TOEFL Examination.

Applicants must submit the following: 1) official undergraduate transcripts; 2) a 300- to 500-word personal statement of academic and professional goals; 3) three letters of recommendation from those familiar with the applicant’s academic and professional performance; 4) official scores of the Graduate Record Examination (GRE) and the GRE Writing Assessment Exam, taken within the last five
For further information, contact the Pediatric Nutrition Fellowship Program, Nutrition and Dietetics Program, IUPUI, Ball Residence Hall 112, 1226 West Michigan Street, Indianapolis, IN 46202-5180, (317) 278-0933, Fax: (317) 278-3940, E-mail: krickard@iupui.edu.

Courses in Nutrition and Dietetics

“P” refers to a course prerequisite and “C” to a course that must be taken concurrently.

AHLT N265 Nutrition and Exercise (3 cr.) This course will allow the student to apply the principles of physiology, chemistry, and biology to describe the role of nutrition and exercise in the human body and to explore the interrelated and protective role of nutrition and exercise in wellness, health promotion, and disease prevention.

AHLT N270 Nutritional Sciences and Health (3 cr.) This course will allow the student to apply the principles of physiology, chemistry, and molecular biology to describe the role of nutrients within the body. Recommendations and guidelines to make personal food choices and create eating plans to support good health will be explored.

AHLT N544 Diet Therapy (2 cr.) P: Dietetic internship. Study of physiological and biochemical alterations that occur during disease states and their effect on nutritional requirements and methods of providing nutrients.

AHLT N546 Medical Lectures (cr. arr.) Lectures by professional staff and invited guests in the health care field.

AHLT N550 Human Nutritional Pathophysiology I (5 cr.) P: BS00, F503 or BIOL 557, or consent of instructor. An integrated study of the biochemical and physiological aspects of human macronutrient metabolism with special reference to fundamental nutrition issues including determination of nutrient quality, nutrient interrelationships, and energy balance in the normal human adult and in common clinical problems.


AHLT N560 Review of Nutrition Standards (3 cr.) Review of various nutrition standards including those of the United States, the United Kingdom, Canada, and the World Health Organization. Course includes a review of all cited literature for one of the nutrients listed in the Recommended Dietary Allowances.

AHLT N563 Recent Advances in Dietetics (2 cr.) P: Dietetic internship. Study of research methodology utilized in dietetics. Course includes critique of literature and preparation of research proposal.

AHLT N570 Pediatric Nutrition I (3 cr.) P: BS00, BIOL 557, undergraduate metabolic nutrition course, or consent of instructor. An application of principles of physiology, biochemistry, and nutrition to the specialized nutrient needs and nutritional care of healthy infants, children, and adolescents and those with the most common pediatric conditions/illnesses or disorders of broad nutritional significance.

AHLT N572 Advanced Pediatric Nutrition (3 cr.) P: AHLT N550, AHLT N570, or consent of instructor. An application of principles of physiology, biochemistry, and nutrition to the specialized nutrient needs and nutritional care of infants, both preterm and term, and patients with complex pediatric conditions/illnesses that have a significant nutritional component.

AHLT N590 Dietetic Internship (4-10 cr.) P: Dietetic internship. Supervised clinical experience in clinical and community nutrition and food service systems management. Course meets the requirements of the American Dietetic Association for the post-baccalaureate experience needed for dietetic registration. Previous admission into dietetic internship required. May be taken for a maximum of 23 credit hours. Not applicable to a graduate degree program.

AHLT N591 Seminar in Nutrition and Dietetics (1 cr.) Exploration of various topics and issues in nutrition. May be repeated for a maximum of 4 credits.

AHLT N593 Topics in Nutrition (1-3 cr.) P: Consent of instructor. Exploration of a selected topic in nutrition at an advanced level. May be repeated once for credit if topics differ.

AHLT N595 Readings in Nutrition (1-3 cr.) P: Consent of instructor. Individualized readings on topics not covered in regular course offerings.

AHLT N596 Clinical Dietetics (cr. arr.) Clinical study in specialized areas of dietetics. May be taken more than once with the consent of the department for a maximum of 15 credit hours.

AHLT N597 Management Issues in Dietetics (2 cr.) P: Dietetic internship. Advanced study in institutional and hospital dietetic management, including personnel, financial, operational, and regulatory issues.

AHLT N598 Research in Dietetics (cr. arr.) Original research as approved by the department.

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**Occupational Therapy**

An educational program in occupational therapy is located on the Indiana University–Purdue University Indianapolis campus. The last baccalaureate class will be admitted for fall 2002 with an anticipated graduation date of August 2004. The program will then transition to post-baccalaureate entry level. For further information, contact the School of Allied Health Sciences at (317) 274-4702.

**Description of the Profession** Occupational therapy is the art and science of assisting people to do those activities/occupations that are important to them despite impairment, disability, or handicap. In this context, “occupation” refers to all of the activities that occupy people’s time and give meaning to their lives, primarily: activities of daily living, work and productive activities, and play and leisure skills (AOTA, 1994). Occupational therapists can work in mental health, pediatric, geriatric, physical disability,
Graduates of the Program

The baccalaureate degree program in occupational therapy is designed to prepare the graduate to meet professional standards for occupational therapy practice. Upon completion of the program, a graduate will be expected to demonstrate entry-level competence in basic knowledge and application of physical, behavioral, and medical sciences to the practice of occupational therapy. Graduates of the program will be able to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR).

Credential Required to Practice

OTR, Occupational Therapist Registered.

Licensure Requirements to Practice

All states have credentialing requirements. Graduates must take the responsibility to ascertain and conform to the specific credentialing requirements of the state in which they plan to practice. State credentialing requirements are usually based on the results of the NBCOT certification examination.

Bachelor of Science in Occupational Therapy at Indiana University–Purdue University Indianapolis

Program Director: Associate Professor Hamant
Associate Professors Emeriti: Lamport, Nathan, Simek
Assistant Professor: Worrell
Clinical Associate Professor: Kiel
Clinical Assistant Professor: Griswold
Lecturers: Chase, Janson, Swinehart, Troyer
Adjunct Assistant Professor: Feinberg, Stroup
Adjunct Instructor: Hamman, Troxell
Adjunct Lecturers: Atkins, Bale, Raisor, Yoder

EDUCATIONAL PROGRAM

Length of the Program

Four years, if full time; two years (59 credit hours) of prerequisite course work plus 22 months of professional course work.

Structure of the Professional Program

The academic and fieldwork portions of the curriculum are designed as full-time experiences.

Design of the Professional Curriculum

Full-time students entering the Occupational Therapy Program will attend three academic semesters. There will be a summer clinical experience between the junior and senior years and a six-month fieldwork (clinical) experience beginning in January of the senior year. The curriculum content includes basic knowledge of occupational development; medical and psychiatric conditions; technical skills, occupational therapy theory and practice; interpersonal communication; creative problem solving; understanding human occupation as it relates to health and wellness; and beginning professional practice (Fieldwork Level I). Following the academic course work are two, three-month, full-time practice experiences (Fieldwork Level II) to provide integration of the academic material and further prepare the student for entry into the profession. Fieldwork Level II must be completed within 24 months of completing all academic course work. The curriculum content contains all of the subject matter required in an accredited occupational therapy program and is organized to emphasize the occupational model.

Additional Cost

In addition to regular university fees, students should expect to spend approximately $1,400 on textbooks. Additionally, some courses have clinical fees that are assessed at the rate of $30 per credit hour. Contact program for current cost sheet. Students should be prepared to assume living and travel expenses associated with fieldwork experiences in the spring semester of the senior year. Some assignments may be out of state.

Opportunity for Students to Work

The class schedule for full-time occupational therapy students is rigorous; part-time employment during the evening or weekend hours is possible for some students during fall and spring semesters.

Program Facilities

The Occupational Therapy Program offices are located on the third floor of Coleman Hall. Classrooms are located in Coleman Hall, Ball Residence, and other buildings on the Indianapolis campus.

Location of Fieldwork Sites

Fieldwork Level I occurs in a variety of settings, including hospitals, rehabilitation centers, nursing homes, school systems, community sites, and other health and wellness facilities within Indiana. Fieldwork Level II is directed toward physical and psychosocial dysfunction and may be located throughout the United States depending on the student’s individual assignment. Prior to starting fieldwork experience, students may be required to undergo drug testing and/or a criminal background check.

Accreditation

The Occupational Therapy Program is fully accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA) located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220. AOTA’s phone number is (301) 652-AOTA. Applicants should be advised that as of January 1, 2007, Occupational Therapy educational programs will only be accredited at the post baccalaureate degree level.

ADMISSION

General Information

Students accepted into the program must complete the school’s and the following program admission requirements prior to the first day of classes. Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program.

Criteria Used for Selection of Class

Cumulative grade point average and personal interview.

Class Size

50 each fall semester.

Specific Requirements

In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this section of the bulletin, the following admission policies apply to the Occupational Therapy Program.

Application Deadline

November 1 of the year prior to desired entry into the program.

Total Number of Prerequisite Credit Hours

59 semester hours. Applicants must have completed a minimum of 30 credit hours, including six courses from the prerequisite list, including one laboratory science, by the time of application.

Distribution of Credit Hours in Specific Areas

See prerequisites.

Limitations of Course Work

Remedial courses do not count toward the 59 prerequisite credit hours and are not calculated in the cumulative grade point average.

Minimum Cumulative Grade Point Average

Requirement

In-state residents, 3.00 on a 4.00 scale. Out-of-state students, 3.30 on a 4.00 scale. This requirement is applied at the time of program application and must be maintained throughout the admissions process.

Fresh Start/Academic Bankruptcy/Repeated Courses

The Indiana University Occupational Therapy Program adheres to the School of Allied Health Sciences Fresh Start Policy and the Repeated Courses Policy. In addition, the Occupational Therapy Program may grant Academic Bankruptcy for up to one academic year to students with a GPA of 2.00 or above. A student may use either the Fresh Start Policy or Academic Bankruptcy Policy, but not both, for purposes of admission. No requests for Fresh Start, Academic Bankruptcy, or Repeated Courses will be accepted after November 1.

Minimum Grade Requirement in a Stated Prerequisite Course

C (2.00 on a 4.00 scale).

Interview

A personal interview is required. However, if the number of applications to the program far exceeds the number of positions available, the program admissions committee reserves the right to limit the number of applicants to be interviewed to two times the number of positions available in the class. Selection of the candidates to be interviewed will be based solely on the cumulative grade point average. Interview topics are highlighted in an interview letter sent to all applicants.

Technical Standards

In addition to School of Allied Health Sciences technical standards, the Occupational Therapy Program has developed program-specific technical standards. These standards are available upon request and are sent to all applicants selected to be interviewed.

Indiana Residents Preference Policy

See School of Allied Health Sciences policy. Out-of-state candidates must have a cumulative grade point average of 3.30 on a 4.00 scale to be considered eligible.

Volunteer Experience

Although volunteer experience is not required, it is recommended as very helpful in making a career choice.
CURRICULUM—B.S. PROGRAM
Professional Program

Junior

Fall

Fundamentals of Occupational Therapy
AHLT T360 3 cr.
Occupational & Lifespan Development
AHLT T365 3 cr.
Research in Occupational Therapy I,
AHLT T367 1 cr.
Clinical Psychiatry
AHLT T373 2 cr.
Common Medical Conditions
AHLT T372 3 cr.
Functional Neuroanatomy
AHLT T375 3 cr.
Total 15 cr.

Spring

Fieldwork Level I-A, Practicum Experience
AHLT T495 6 cr.
Fieldwork Level I-B, Practicum Experience
AHLT T496 6 cr.
(AHLT T495 and AHLT T496 are two three-month internships scheduled within the nine-month period from January of the senior year through the following September.)

Total 12 cr.

Total Credits 63 cr.

Graduation Requirements for a B.S. in Occupational Therapy

Students must successfully complete a first aid class and a professional CPR class that have written examinations prior to beginning Fieldwork Level II (AHLT T495, AHLT T496). If either of the classes is graded, the course grade must be acceptable according to the Occupational Therapy Program Performance Policies. The CPR course should be the Professional Rescuer or Healthcare Provider course, not the Community CPR course. If a documented physical problem makes a person incapable of performing the activities in either or both of these areas, the person must be able to pass the written examinations required in the course.

Scholarships In addition to financial assistance obtained through the IUPUI Office of Student Financial Aid, there are scholarship opportunities available through the Occupational Therapy Program.

Awards The program faculty will recommend students with superior academic performance for degrees awarded with distinction. The Carol D. Nathan Leadership Award is presented annually to a senior selected by the senior class and the faculty as having demonstrated outstanding leadership potential. The award is in recognition of Associate Professor Emerita Carol D. Nathan, former director of the Occupational Therapy Program.

Honors The Occupational Therapy program offers students the option of participating in an Honors Degree Program. Students may enter the honors program no later than the second semester of their first year in the program. The honors degree requires 12 hours of honors credit, distributed as follows: two theory courses, two techniques or media courses, and one course in the basic sciences. No more than two honors courses may be taken per semester. Students must earn no less than a B+ (3.5) in an honors course. Students seeking to graduate with honors must maintain a cumulative grade point average of 3.3 with a 3.5 grade point average in honors course work.

Graduation Requirements for a B.S. in Occupational Therapy Satisfactory completion of 122 credit hours: 59 prerequisite credit hours and 63 credit hours of professional courses. All course work must be completed in compliance with the program’s and school’s academic and professional policies.

For further information, contact Professor Cel Hamant, Program Director, Occupational Therapy, IUPUI, Coleman Hall 316, 1140 W. Michigan Street, Indianapolis, IN 46202-5119, (317) 274-8006, E-mail: chamant@iupui.edu.

Courses in Occupational Therapy

“P” refers to a course prerequisite.

AHLT T325 Fieldwork Level I-A; Practicum Experience (1 cr.) P: AHLT T360. Fieldwork observation and practice of the occupational therapy skills and theory presented in theory and technique courses. Attendance at a weekly seminar is required.

AHLT T342 Occupational Performance, Area C—Play and Leisure Activities (2 cr.) Exploration of play/leisure as a primary occupational performance area. The focus for the course is from an occupational perspective and includes lecture/discussion and experiential activities.

AHLT T343 Occupational Performance, Area B—Work and Productive Activities (2 cr.) Exploration of work/productive activity as a primary occupational performance area. Uses hand and power tools, a variety of other work skills, and ergonomics as therapeutic occupational modalities.

AHLT T357 Professional Writing in Occupational Therapy (1 cr.) P: AHLT T360. Instruction and practice in professional documentation and writing for reimbursement, necessary in the practice of occupational therapy.

AHLT T358 Management of Occupational Therapy Services I (2 cr.) Study of the occupational therapist’s role in service management and the health care system. Managerial functions and managed care are emphasized.

AHLT T360 Fundamentals of Occupational Therapy (3 cr.) Material presented as a foundation for the development of the clinical aspects of occupational therapy practice. Emphasis is on the philosophy of using occupation as a basis of treatment.

AHLT T361 Occupational Therapy Process (2 cr.) P: AHLT T360. Introduction to and relationship of professional values, principles of occupation, and therapeutic use of self to occupational therapy standards of practice.


AHLT T365 Concepts of Occupation and Human Lifespan Development I (3 cr.) Investigation of the dynamic interrelationships among the biological, psychological, and sociological aspects of human development and their impact on occupational behavior and performance applicable from infancy through adulthood.

AHLT T367 Research in Occupational Therapy I (1 cr.) Examination and study of the research process and its implication and application in practice and academic settings.
AHLT T368 Research in Occupational Therapy II (1 cr.) Preparation for participation in the research process.

AHLT T372 Common Medical Conditions in Occupational Therapy (3 cr.) Review of major medical conditions including clinical description, etiology and pathology, medical/surgical management, treatment and prognosis.

AHLT T373 Clinical Psychiatry for Occupational Therapy (2 cr.) Review of major psychiatric disorders including clinical description, etiology, medical management, and treatment. Legal and pharmacological issues in psychiatry are presented.

AHLT T375 Functional Neuroanatomy (3 cr.) Major functional concepts of neuroanatomy presented in longitudinal systems with implications for abnormality and subsequent occupational therapy intervention.

AHLT T376 Kinesiology for the Occupational Therapist (3 cr.) Principles of human movement including analysis of biomechanics, joint structure and function, muscle physiology, and musculoskeletal function. An introduction is given to methods to improve movement quality in occupational performance.

AHLT T426 Fieldwork Level I-B: Practicum Experience (1 cr.) P: AHLT T325. Fieldwork observation and practice of the occupational therapy skills and theory presented in the theory and technique courses. Seminar attendance is required.

AHLT T452 Occupational Performance, Area A-ADL (3 cr.) Lecture and laboratory provide the student with supervised learning experiences that emphasize maximum patient/client independence in the occupational performance area of activities of daily living (ADL and IADL).

AHLT T453 Topics in Occupational Therapy (1-5 cr.) Permission of instructor required. Selected topics in occupational therapy offered by occupational therapy faculty. Students may repeat this course as long as the topic changes each time it is taken.

AHLT T455 Techniques of Splinting in Occupational Therapy (1 cr.) Lecture and laboratory course that provides supervised experiences in the construction of splints and their use as a therapeutic modality.

AHLT T457 Group Process in Occupational Therapy (2 cr.) P: AHLT T373. Principles and concepts of group process related to occupational therapy practice.

AHLT T458 Management of Occupational Therapy Services II (1 cr.) P: AHLT T358 and senior standing in the professional program or instructor’s permission. Study of occupational therapy reimbursement, credentialing, and other professional activities.

AHLT T461 Occupational Therapy for Adults with Psychosocial Dysfunction (4 cr.) P: AHLT T373. Introduction to and application of selected theories, frames of reference, and paradigms from occupational therapy, psychiatry, and psychology to the occupational therapy process specific to the treatment of adolescents and adults with mental illness.

AHLT T462 Occupational Therapy for Adults with Physical Disabilities (4 cr.) P: AHLT T372 and AHLT T375. Study and application of the principles of occupational therapy evaluation and treatment to adolescents and adults with physical disabilities.

AHLT T464 Multicultural and Ethical Issues in Occupational Therapy Practice (2 cr.) Examination of the occupational therapy ethics code and ethical decision-making in practice settings. Knowledge of cultural and ethnic development and occupational behaviors. Sensitivity and approaches to the practice of occupational therapy with specific and diverse multicultural populations in the United States.

AHLT T480 Electives in Occupational Therapy (1-3 cr.) P: Permission of instructor required; second year or senior standing in the professional program. Special electives in occupational therapy offered by occupational therapy faculty and clinicians. Students may repeat this course as long as the topic changes each time it is taken.

AHLT T495 Fieldwork Level II-A (6 cr.) P: Successful completion of all professional courses. A three-month internship in psychosocial or physical dysfunction occupational therapy facilities.

AHLT T496 Fieldwork Level II-B (6 cr.) P: Successful completion of all professional courses. A three-month internship in psychosocial, physical dysfunction or other occupational therapy facilities.

AHLT T497 Fieldwork Level II-C (Optional) (4-6 cr.) P: Successful completion of AHLT T495 and AHLT T496. Six- to twelve-week optional experience providing occupational therapy students an opportunity to specialize in a selected practice area (e.g., community, pediatrics, geriatrics, or hand rehabilitation).

AHLT T580 Graduate Electives in Occupational Therapy (2-4 cr.) Graduate electives in occupational therapy offered by occupational therapy faculty and clinicians. Students may repeat this course as long as the topic changes each time it is taken.

**Paramedic Science**

For information concerning the Associate of Science in Paramedic Science, see Emergency Medical Services.

**Physical Therapy**

An educational program in physical therapy is located on the Indiana University–Purdue University Indianapolis campus.

**Description of the Profession** As members of the health care team, physical therapists help restore clients to normal functioning of the musculoskeletal and other systems through interventions utilizing therapeutic exercise, physical agents, and assistive devices. The client’s physical therapy needs are determined through evaluation and examination of muscle strength and tone, joint status, posture, sensory status, functional mobility, exercise tolerance as it relates to cardiorespiratory status, skin condition, pain, and other medical conditions that impair physical function. Physical therapists are concerned with health promotion and disease prevention as well as restoration of function following disease, injury, or loss of a body part. In addition to patient care, the physical therapist participates in administrative, teaching, and research activities and provides consultative services. Physical therapists work in hospitals, outpatient facilities, industrial clinics, governmental and voluntary health agencies, educational settings, extended care facilities, and private practice settings.

**Graduates of the Program** The educational experiences of the Physical Therapy Program curriculum are designed to graduate a physical therapist with skills as a generalist. Graduates of the program are eligible to apply for licensure in the state in which they will practice.

**Credential Required to Practice** P.T., Physical Therapist.

**Licensure Requirements to Practice** All states require that an individual graduate from an accredited physical therapy program and successfully complete the national physical therapy licensure examination in order to practice as a physical therapist.

**Doctor of Physical Therapy at Indiana University–Purdue University Indianapolis**

**Program Director:** Associate Professor Quillen
**Professors Emeriti:** Ekstam, Ladue
**Professors:** Mackinnon, Oldridge
**Associate Professors:** Hartssel, Porter
**Assistant Professor:** Chapman
**Clinical Assistant Professors:** Bainbridge, Carey
**Visiting Assistant Professor:** Dunning

**EDUCATIONAL PROGRAM**

**Length of the Program** The course of study is 35 months (98 graduate credit hours) of graduate professional course work.

**Structure of the Program** The program is presented in a full-time, day format only.

**Design of the Professional Curriculum** The physical therapy curriculum is organized so that the lecture and laboratory course work is integrated with patient care experiences. Full-time clinical education experiences of varying length occur throughout the course of study. The Physical Therapy Program course of study develops an understanding of normal and abnormal physical structure and function. The curriculum focuses on the management of patient problems rather than procedures. The graduate of the Physical Therapy Program demonstrates competencies in physical therapy and the basic skills of research, administration, and teaching. Additionally, the graduate shows the ability and interest to continue professional development.

**Opportunity for Students to Work** Because of the intense nature of the program, students are not encouraged to seek outside employment during their enrollment.
Additional Cost  In addition to Physical Therapy Program tuition and university fees, students should expect to pay program-related expenses. Contact the program for a current cost sheet.

Facilities  Physical Therapy Program offices are located in Coleman Hall. Lecture and laboratory classes are located in Ball Hall, Long Hospital Building, and other locations on the IUPUI campus.

Accreditation  The Doctor of Physical Therapy Program has been approved by the Indiana University Board of Trustees and the Indiana Commission for Higher Education (ICHE). Indiana University has been granted Interim Accreditation for the post-baccalaureate professional education program by the Commission on Accreditation in Physical Therapy Education (CAPTE).

ADMISSION

General Information  Students accepted into the program must complete the School of Allied Health Sciences and the following Physical Therapy Program specific admission requirements prior to the first day of classes. Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program.

Criteria Used for Selection of Class  Admission into the School of Allied Health Sciences Doctor of Physical Therapy Program is based on the overall grade point average, the mathematics and science prerequisite courses grade point average, student's suitability for physical therapy profession as reported by volunteer experience supervisor evaluation of generic abilities, and a statement of personal values.

Class Size  36 students each fall semester.

Specific Requirements  In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of the bulletin, the following admission policies apply to the Physical Therapy Program.

Application Deadline  June 1 prior to anticipated August entry.

Total Number of Prerequisite Credit Hours  Applicants may have no more than two (2) DPT Program prerequisite courses unfinished at the time of program application (see below). NO WAIVERS FOR DEGREE COMPLETION OR COURSE PREREQUISITES WILL BE GRANTED BY THE PHYSICAL THERAPY PROGRAM.

Limitations of Course Work  The prerequisite credit hours in human anatomy, human physiology, chemistry, and physics must be completed no more than seven years prior to date of entry.

Minimum Cumulative Grade Point Average  3.0
on a 4.0 scale. The minimum grade point average must be met at the time of application and maintained until admission.

Minimum Specific Grade Point Average  3.0
on a 4.0 scale in all credit hours attempted in mathematics and science prerequisite courses. The minimum grade point average must be met at the time of application and maintained until admission.

Minimum Grade Requirement in a Stated Prerequisite Course  C (2.0 on a 4.0 scale).

Technical Standards  See School of Allied Health Sciences technical standards.

Medical Requirements  Basic immunizations as determined by Student Health Services must be completed by the first day of classes. Students must demonstrate proof of health insurance prior to entry into the program and must maintain health insurance throughout their enrollment.

Volunteer Experience  Students must complete the equivalent of a one-day (8 hours) volunteer observational experience at two or more different types of Physical Therapy treatment facilities and have the supervising physical therapist complete the Program's student evaluation form.

Additional Requirements  Accepted applicants, conditionally accepted applicants and applicants on the alternate list must complete all requirements for their baccalaureate degree prior to enrolling in the Doctor of Physical Therapy Program and maintain the following:

• a 2.0 grade point average in each semester following notification of their status;  
• a minimum cumulative grade point average of 3.0 on a 4.0 scale in all attempted credit hours; and,  
• a minimum grade point average of 3.0 on a 4.0 scale in all credit hours attempted in mathematics and science prerequisite courses.

International Student Applicants  There are special application procedures for those who are not citizens of the United States or who have had their previous schooling outside of the United States. International student applicants interested in the Doctor of Physical Therapy Program should obtain an International Application packet from the IUPUI Office of International Affairs. Information and an International Application packet may be downloaded from the Web at www.international.iupui.edu. Because of the extra procedures required in evaluating foreign credentials, the application fee for international students is currently $55, in addition to DPT Program application fee. International student applicants, except those whose native language is English, are expected to submit results of the Test of English as a Foreign Language (TOEFL). The TOEFL is given worldwide throughout the year. IUPUI's school code number for the TOEFL application is 1325. The Physical Therapy Program faculty has established a minimum TOEFL test score of 600 paper-based/250 computer-based for Program eligibility. All newly admitted international students are also required to take the IUPUI English (ESL) examination administered by the IUPUI ESL Program and Office of International Affairs prior to registration for class. Students are required to take any ESL courses that are deemed to be necessary by this testing until they have fulfilled university and program requirements for English proficiency.

CURRICULUM

Prerequisites  Prior to entering the DPT Program, students must have completed requirements for their baccalaureate degree and the following prerequisite courses. Students should consult with their academic advisers for appropriate courses and semester sequence in order to complete prerequisites. Listed credit hours are minimums.

Humanities/Social Sciences  6 cr.
(2 courses such as sociology, anthropology, art, history, or philosophy)

Introductory Statistics  3 cr.

Human Anatomy— one course with laboratory 3-4 cr.

Human Physiology— one course with laboratory 3-4 cr.

Chemistry—two courses with laboratory 8 cr.

Physics—two courses with laboratory 8 cr.
(Note: Level of the anatomy, physiology, chemistry, and physics courses must be appropriate for science majors.)

Psychology— Introductory 3 cr.

Human Lifespan Development 3 cr.

Students must demonstrate proficiency in medical terminology prior to entering the professional program. Students will need to be competent writers and demonstrate computer literacy including e-mail, Internet, database searches, spreadsheet, and word processing capabilities.

Professional Program

Credit Hours

Semester 1, Year 1, Fall Semester
P511 Clinical Decision Making 1
P512 Muscle Physiology 2
P513 Functional Anatomy and Clinical Biomechanics 3
D850 Gross Anatomy 8 14

Semester 2, Year 1, Spring Semester
P646 Physical Agent/Modality Interventions 2
P515 Introduction to Physical Therapy Examination and Interventions 6
P534 Introduction to Motor Sciences 2
P530 Medical Conditions and Pathophysiology 4 14

Semester 3, Year 1, Summer Session 1 (8 weeks)
P514 Foundations of Research I 2
P643 Psychosocial Dimensions of Physical Therapy Practice 2
P570 Pharmacology for Physical Therapists 3 7

Semester 4, Year 2, Fall Semester
D852 Neuroscience and Clinical Neurology 5
P532 Legal and Ethical Issues in Physical Therapy 2
P533 Lifespan Motor Development 2
P526 Physical Therapy Examination/Interventions II 4
P645 Foundations of Research II 2 15
Courses in Physical Therapy

P511 Clinical Decision Making (1 cr.) An overview of the profession of physical therapy and a framework for the process of clinical decision-making. Includes the role of physical therapy in contemporary health care delivery, the disablement model, and an introduction to the APTA Guide to Practice as components of the clinical reasoning process.

P512 Muscle Physiology (2 cr.) Essential concepts of muscle physiology critical to the scientific development and application of physical therapy interventions; includes energy transfer during exercise, nutritional considerations, exercise and functional capacity evaluation and body composition.

P513 Functional Anatomy and Clinical Biomechanics (3 cr.) Integration of foundational knowledge of gross anatomy with structure and function of the neuromusculoskeletal system and human motion. Includes the study of the concepts of biomechanics, joint structure and function as they apply to physical therapy interventions.

P514 Foundations of Research I (2 cr.) Introduction to clinical research methodology and critical interpretation of the professional literature.

P515 Introduction to Physical Therapy Examination and Interventions (6 cr.) First of two courses covering examination, evaluation and intervention aspects of physical therapy practice. Emphasis is on history taking, systems review, functional examination and intervention, and documentation.

P522 Musculoskeletal Practice Parameters II (4 cr.) Physical therapy management of patients with impaired joint mobility, motor function, muscle performance associated with spinal dysfunction, connective tissue disorders, trauma and surgical procedures.

P524 Cardiopulmonary Practice Patterns (3 cr.) Provides the essential knowledge base for development of exercise prescriptions for well populations and for physical therapy interventions for patients with cardiopulmonary pathologies or dysfunctions.

P526 Physical Therapy Examination and Interventions II (4 cr.) The second of two courses covering examination, evaluation and intervention aspects of physical therapy practice. Regional application is emphasized along with corresponding documentation.

P530 Medical Conditions and Pathophysiology (4 cr.) Overview of pathophysiology and medical management for common disorders of the endocrine, immune, neurological, genitourinary and gastrointestinal systems. Included are fundamental principles of pharmacology and diagnostic imaging as utilized in medical management.

P532 Legal and Ethical Issues in Physical Therapy (2 cr.) Includes essential information related to ethical, legal and professional practice regulations and standards of care. Interpersonal communication skills for the healthcare environment are also presented.

P533 Lifespan Motor Development (2 cr.) Overview of human neuromusculoskeletal development across the lifespan.

P534 Introduction to Motor Sciences (2 cr.) Principles and concepts of motor learning and motor control for the development of physical therapy interventions.

P641 Musculoskeletal Practice Patterns I (4 cr.) Physical therapy management of patients with impaired posture, joint mobility, motor function, and muscle performance. Integrates previous coursework involving evaluation and interventions.

P670 Pharmacology for Physical Therapists (3 cr.) Survey of contemporary pharmacology including pharmacokinetic principles with special emphasis on the relation of drug therapy to therapeutic interventions provided by physical therapists.

P599 Clinical Education I (3 cr.) Initial full-time clinical experience of 6 weeks duration. This course will serve as the introduction to clinical integration of physical therapy knowledge and skills. Students will be assigned to specific sites.

P622 Musculoskeletal Practice Parameters II (4 cr.) Physical therapy management of patients with impaired joint mobility, motor function, muscle performance associated with spinal dysfunction, connective tissue disorders, trauma and surgical procedures.

P641 Neuromuscular Practice Patterns I (4 cr.) Physical therapy management of individuals with motor and sensory integration dysfunctions associated with peripheral nerve injuries, polyneuropathies and spinal cord injury.

P642 Neuromuscular Practice Patterns II (5 cr.) Physical therapy management of individuals throughout the lifespan with supraspinal central nervous system disorders.
Radiation Therapy

Educational programs in radiation therapy are located on the Indiana University–Purdue University Indianapolis and Indiana University Northwest (Gary) campuses.

Description of the Profession Radiation therapy involves the use of different forms of ionizing radiation for the treatment of benign and malignant tumors. Radiation therapists administer the prescribed dose of ionizing radiation to specific sites of the patient's body as directed by the physician. They operate varied types of equipment, including high energy linear accelerators, and work with radioactive materials. In addition, radiation therapists observe the clinical progress of the patient undergoing radiation therapy, observe the first signs of any complication, and determine when treatment should be withheld until a physician may be consulted.

Graduates of the Program The Radiation Therapy Program is designed to prepare graduates to meet the scope of practice standards for radiation therapy. Upon completion of the program, graduates are eligible to take the radiation therapy certification examination given by the American Registry of Radiologic Technologists (ARRT). Having successfully passed this exam, certificate holders are classified as Registered Radiation Therapists, R.T.(T)(ARRT).

Licensure Required to Practice Licensure of radiation therapists is not required in Indiana, but licensure requirements are mandated in some states.

Bachelor of Science in Radiation Therapy at Indiana University–Purdue University Indianapolis

Medical Advisor: Professor Randall
Program Director: Assistant Professor Dunn
Clinical Assistant Professor: Schneider

EDUCATIONAL PROGRAM

Length of the Program The radiation therapy program is a four-year baccalaureate degree program and has two tracks: one for the nonradiographer and one for the radiographer. For the nonradiographer, the program is composed of 50 credit hours of prerequisite and general-education requirements and a 22-month professional core in the junior and senior years. For the radiographer, the program includes general-education requirements and a 20-month professional core.

Structure of the Program The classroom and clinical experiences are provided Monday through Friday from 8 a.m. to 4:30 p.m. with continuous enrollment during the professional core.

Opportunity for Students to Work Students often seek employment in part-time positions outside the program, which must be balanced with evening study.

Additional Cost In addition to regular university tuition and fees, students should expect to pay program-related expenses. Contact the program for a current cost sheet.

Program Facilities The Radiation Therapy Program offices are located in Ball Residence, Rooms 119 and 120. Classrooms and laboratories are located in Goleman Hall, in radiation oncology departments of area hospitals, and in other buildings on the Indiana University–Purdue University Indianapolis campus.

Location of Clinicals The clinical practicums are provided at a variety of clinical sites located within a 60-mile radius of Indianapolis.

Accreditation The program is accredited by the Joint Review Committee on Education in Radiologic Technology, 20 North Wacker Drive, Suite 900, Chicago, IL 60606-2901.

ADMISSION—NON-RADIOPHGRAPHER General Information

Admission into the School of Allied Health Sciences radiation therapy program is based on an admission index that is composed of a cumulative grade point average, the mathematics and science grade point average, prerequisite courses grade point average, and an interview.

Specific Requirements

In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this bulletin, the following admission policies apply to the radiation therapy program.

Application Deadline December 1 of the year prior to desired entry into the program.

Minimum Number of Prerequisite Credit Hours 50.

Minimum Cumulative Grade Point Average 2.50 on a 4.00 scale. This requirement is applied at the time of program application. Grades from remedial courses are not calculated in the grade point average of the prerequisite courses to determine the admission index.

Minimum Specific Grade Point Average Science and math grade point average of 2.30 and a 2.50 grade point average in stated prerequisite courses (on a 4.00 scale). This requirement is applied at the time of program application and must be maintained. Grades from remedial courses are not calculated in the mathematics and science grade point average to determine the admission index.

Minimum Grade Requirement in a Prerequisite Course C (2.00 on a 4.00 scale).

Interview A personal interview is required. However, if the number of applications to the program far exceeds the number of positions available, the program's admissions committee reserves the right to limit the number of applicants to be interviewed to two times the number of positions available in the class. Interviews are conducted in January.

Technical Standards See School of Allied Health Sciences policy.

Medical Requirements All required immunizations must be completed before the start of the program. Verification of immunizations and the health form must be submitted during orientation.

Indiana Residents Preference Policy See School of Allied Health Sciences policy.

Volunteer Experience The student must observe in a radiation oncology facility prior to applying to the program.

CURRICULUM—NON-RADIOGRAPHER Prerequisites

The following prerequisite course of study must be completed to be eligible for admission into the professional program. Students should consult with their academic advisors for appropriate courses and semester sequence.

General-Education Areas

Verbal Communications (G) 2-3 cr.
Written Communications (G) 6 cr.
(Second writing course must focus on research and professional writing skills)
Humanities Elective (G) 3 cr.
Social/Behavioral Science Elective (G) 3 cr.
Introductory Psychology (G) 3 cr.
College Algebra and Trigonometry (G) 5-6 cr.
General Physics (with lab) (G) 4-5 cr.
Human Anatomy (with lab) 4-5 cr.
Human Physiology 4-5 cr.
Medical Terminology 1 cr.
Introduction to Computers 2-3 cr.
Business/Education Electives 6 cr.

Suggested Electives  (To bring total credits up to 50.) The number of elective courses will differ for each student to complete a total of 50 credit hours of prerequisite course work. Additional electives may be required, before or during the professional program, to complete a minimum of 122 credit hours of academic course work for graduation.

A Suggested Plan of Study

Freshman
Fall
Elementary Composition 3 cr.
Humanities 3 cr.
Algebra and Trigonometry 3 cr.
Human Anatomy 5 cr.
Total 14 cr.

Spring
Speech Communications or Interpersonal Communication 3 cr.
Algebra and Trigonometry 3 cr.
Introductory Psychology 3 cr.
Human Physiology 5 cr.
Total 14 cr.

Sophomore
Fall
English Composition II or Professional Writing Skills 3 cr.
General Physics (with lab) 4-5 cr.
Introduction to Computers 2-3 cr.
Business/Education Elective 3 cr.
Total 13-14 cr.

Spring
Social/Behavioral Science Elective 3 cr.
Business/Education Elective 3 cr.
Medical Terminology 1 cr.
Electives 4-5 cr.
Total 11-12 cr.

Professional Program—Non-Radiographer
Summer Session II (Junior)
Patient Care in Radiologic Sciences
AHLT R104 2 cr.
Introduction to Clinical Radiography
AHLT R103 2 cr.
Seminar: Ethics AHLT R207 1 cr.
Total 5 cr.

Fall (Junior)
Physics Applied to Radiology
AHLT R250 3 cr.
Medical Imaging and Processing in Radiation Oncology AHLT J307 2 cr.
Simulation/Treatment Procedures
AHLT J300 6 cr.
Clinical Dosimetry I AHLT J305 2 cr.
Clinical Experience: Basic
AHLT J350 3 cr.
Total 16 cr.

Spring (Junior)
Radiation Oncology Techniques I
AHLT J302 3 cr.
Clinical Dosimetry II AHLT J306 2 cr.
Radiation Oncology Patient Care
AHLT J404 2 cr.
Quality Management in Radiation Oncology AHLT J404 3 cr.
Clinical Practicum I AHLT J351 3 cr.
Total 13 cr.

Summer Session I (Junior)
Clinical Practicum III AHLT J451 6 cr.
Total 6 cr.

Fall (Senior)
Physics of Radiation Oncology I AHLT J401 2 cr.
Clinical Oncology I AHLT J303 3 cr.
Senior Project in Radiation Oncology
AHLT J409 3 cr.
Clinical Practicum IV AHLT J452 5 cr.
Total 13 cr.

Spring (Senior)
Physics of Radiation Oncology II
AHLT J402 2 cr.
Clinical Oncology II AHLT J403 3 cr.
Radiation and Cancer Biology
AHLT J406 2 cr.
Clinical Practicum V AHLT J453 5 cr.
Total 12 cr.

ADMISSION—RADIOGRAPHER
Specific Requirements
In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this section of the bulletin, the following admission policies apply to the radiation therapy program.

Application Deadline  December 1 of the year prior to desired entry into the program.

Minimum Number of Prerequisite Credit Hours
Satisfactory completion of general-education and technical specialty requirements.

Minimum Cumulative Grade Point Average
2.50 on a 4.00 scale; this requirement is applied at the time of program application. Grades from remedial courses are not calculated into the grade point average of the prerequisite courses to determine the admission index.

Minimum Specific Grade Point Average
Science or math grade point average of 2.30 and a 2.50 grade point average in stated prerequisite courses (on a 4.00 scale); this requirement is applied at the time of program application and must be maintained. Students must attain a cumulative grade point average of 2.30 for all radiography courses. Grades from remedial courses are not calculated into the mathematics and science grade point average to determine the admission index.

Minimum Grade Requirement in a Stated Prerequisite Course  C (2.00 on a 4.00 scale).

Interview  A personal interview is required. However, if the number of applications to the program far exceeds the number of positions available, the program’s admissions committee reserves the right to limit the number of applicants to be interviewed to two times the number of positions available in the class. Interviews are conducted in January.

Technical Standards  See School of Allied Health Sciences policy.

Medical Requirements  All required immunizations must be completed before the start of the program. Verification of immunizations and the health form must be submitted during orientation.

Indiana Residents Preference Policy  See School of Allied Health Sciences policy.

Volunteer Experience  Students must observe in a radiation oncology facility prior to applying to the program.

CURRICULUM—RADIOTHERAPIER
Prerequisites
The following prerequisite course of study must be completed for students to be eligible for admission into the professional program. Students should consult with their academic advisors for appropriate courses and semester sequence in order to complete prerequisites. Prerequisites may be taken at any accredited college or university. The code “G" indicates a course that meets the school's general-education requirements.

Verbal Communication (G) 2-3 cr.
Written Communication (G) 6 cr.
(Second course must focus on research and professional writing skills)
Humanities Elective (G) 3 cr.
Social/Behavioral Science Elective 3 cr.
Introductory Psychology (G) 3 cr.
College Algebra and Trigonometry 5-6 cr.
General Physics (with lab) (G) 4-5 cr.
Human Anatomy (with lab) 4-5 cr.
Clinical Oncology II  AHLT J403  3 cr.
Radiation and Cancer Biology AHLT J406  2 cr.
Clinical Oncology II  AHLT J403  3 cr.
Clinical Practicum V  AHLT J453  5 cr.

Total  12 cr.

Scholarships  Some hospitals and employers offer financial assistance for students pursuing radiation therapy.

Graduation Requirements for Baccalaureate Degree  To be eligible for graduation with a baccalaureate degree, students must successfully complete the general-education requirements, technical specialty (radiographers), and professional core in radiation therapy. They must also achieve clinical competency in each area identified in the clinical manual requirements.

For further information, contact Professor Donna Dunn, Director, Radiation Therapy Program, IUPUI, Coleman Hall 120, 1140 W. Michigan Street, Indianapolis, IN 46202-5119, (317) 274-1302, E-mail: dodunn@iupui.edu.

Courses in Radiation Therapy  “P” refers to a course prerequisite, and “C”, to a course that must be taken concurrently.

AHLT J101 Orientation to Radiation Therapy (2-4 cr.) Overview of radiation oncology and the role of the radiation therapist. Basic radiation protection, patient care particular to the clinical setting, and equipment procedures and techniques. Discussions of computers and hyperthermia are also presented. The 2 credit offering is an option for radiographers only.

AHLT J181 Clinical Practicum I (2 cr.) Clinical experience in the use of equipment, simulations, and delivery of radiation treatments through observation and assistance under direct supervision of a radiation therapist.

AHLT J182 Clinical Practicum II (4 cr.) P: AHLT J181 or AHLT R290. Clinical experience in patient positioning, mold construction, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care, and radiation protection under the direct supervision of a radiation therapist.

AHLT J200 Technical Radiation Oncology (5 cr.) P: AHLT J101. Technical aspects of radiation oncology emphasizing clinical utilization of simulators and treatment machines. Presentations will include distinctive properties of several pathology setup considerations, contouring methods, auxiliary equipment, and basic hand calculations.

AHLT J201 Clinical Radiation Oncology I (3 cr.) P: AHLT J101. Fundamental clinical practice in radiation oncology to include the roles and principles of tumor pathology and surgical, radiation, and medical oncology. Malignant conditions, etiology, methods of treatment, patient prognosis, treatment results, and effects of combined therapies are presented. Student case presentations required.

AHLT J202 Clinical Radiation Oncology II (3 cr.) P: AHLT P201. Fundamental clinical practice in radiation oncology- malignant conditions, etiology, methods of treatment, patient prognosis, treatment results, and effects of combined therapies. Student case studies required.

AHLT J203 Treatment Planning (3 cr.) P: AHLT J200. Concepts of clinical dosimetry and treatment planning. Delivery methods, to include single- and multiple-beam techniques, are discussed. Tumor localization, dose calculations, and summation of idosode curves are performed.

AHLT J204 Quality Assurance and Radiation Protection (3 cr.) P: AHLT R260. Identification of the team approach to quality assurance and the principles and concepts. Implementation of methods for quality control is discussed. Practical radiation protection for the radiation therapist will be presented.

AHLT J250 Physics of Radiation Therapy I  (3 cr.) P: AHLT R250. Fundamental principles of the physical qualities of radiation and atomic and nuclear theory. To include presentations on radiation therapy equipment measurement and quality of radiation and measurement of absorbed dose and calculation techniques.

AHLT J251 Physics of Radiation Therapy II  (3 cr.) P: AHLT J250. Emphasizing the principles of radioactivity, radiation detection, measurement devices, equipment calibration, brachytherapy, and calibration techniques. Principles and concepts of radiation protection are discussed.

AHLT J281 Clinical Practicum III (4 cr.) P: AHLT J182. Clinical experience in patient positioning, mold construction, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care, and radiation protection under the direct supervision of a radiation therapist.

AHLT J282 Clinical Practicum IV (4 cr.) Clinical experiences in patient positioning, mold construction, patient simulation techniques, treatment delivery, treatment planning, patient care, and radiation protection under supervision of a radiation therapist.

AHLT J300 Simulation/Treatment Procedures (6 cr.) P: AHLT R103, AHLT R104, and AHLT R185. Lecture and laboratory sessions emphasizing the clinical utilization of simulators and treatment machines.

AHLT J301 Orientation to Radiation Oncology (4 cr.) P: R.T. (R). An overview of radiation oncology and the role of the radiation therapist. Presentations will orient students to the physical and biological basis of radiation oncology equipment, procedures, tumor pathology, and patient interaction.

AHLT J302 Radiation Oncology Techniques I  (3 cr.) P: R.T. (R) or AHLT R102, J300, and J350. Lecture and laboratory sessions presenting concepts of treatment-planning techniques of head, pelvis, spine, lung, and brain. To include implant localization techniques.

AHLT J303 Clinical Oncology I  (3 cr.) P: R.T. (R) or AHLT R102, and AHLT J300. Examines the roles and principles of tumor pathology, surgical oncology, radiation oncology, and medical oncology. To include the characteristics, growth patterns, and treatment modalities utilized for tumors of the lung and central nervous system.
AHLT J304 Radiation Oncology Patient Care (2 cr.) P: R.T.(R) or AHLT R104. Concepts of radiation oncology patient care, including considerations of patients’ physical and psychological condition. Factors influencing patients’ general health during and following a course of radiation therapy treatments will be identified.

AHLT J305 Clinical Dosimetry I (2 cr.) Review of fundamental mathematics concepts as they relate to practical dosimetry and performing routine calculations pertaining to patient set-up and treatment.

AHLT J306 Clinical Dosimetry II (2 cr.) P: AHLT J305. Development of computer treatment planning skills in radiation oncology.

AHLT J307 Medical Imaging and Processing in Radiation Oncology (2 cr.) Fundamentals of radiologic exposure techniques, latent image formation, and processing of radiographs utilized in radiation oncology.

AHLT J350 Clinical Experience: Basic (3 cr.) P: AHLT R103 and AHLT R104. Clinical observation and assistance in the clinical skills of radiation therapy technology under the direct supervision of a registered radiation therapist or equivalent.

AHLT J351 Clinical Practicum I (3 cr.) P: R.T.(R) or AHLT J350. Clinical application of patient positioning, immobilization, block fabrication, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care management, and radiation protection under the direct supervision of a registered radiation therapist or equivalent.

AHLT J400 Physics of Radiation Oncology I (2 cr.) P: R.T.(R) or AHLT R250; MATH 147 and 148 or MATH 150; PHYS P201 and P218. Fundamental principles of the physical quantities of radiation and atomic and nuclear theory. To include discussions of radiation oncology equipment.

AHLT J401 Physics of Radiation Oncology II (2 cr.) P: AHLT J400. Continuation of J400 with emphasis on the interactions of ionizing radiation with matter; radiation detection and measurement devices; radiation units; equipment calibration; brachytherapy; and calculation techniques. Principles and concepts of radiation protection are discussed.

AHLT J402 Radiation Oncology Techniques II (3 cr.) P: AHLT J302. Lecture and laboratory sessions present concepts of treatment-planning techniques of breast, esophagus, mantle and inverted-Y, pituitary, total body and hemi-body, and common palliative portals.

AHLT J403 Clinical Oncology II (3 cr.) P: R.T.(R) and AHLT J305 or AHLT R102, AHLT R103, AHLT R104, AHLT R185, AHLT J300, and AHLT J303. Examines the characteristics, growth patterns, and treatment modalities utilized for tumors of the female genital, urologic, male genital, breast, head and neck, bone and soft tissue, hematopoietic, alimentary tract, lymphoreticular, and pediatric sites. Student case presentations required.

AHLT J404 Quality Management in Radiation Oncology (3 cr.) P: J300 or J301, J305, and J350. Identification and application of a comprehensive quality management program in a radiation oncology facility. Includes discussion on the operations and functions of a radiation oncology facility with emphasis on quality improvement techniques.

AHLT J406 Radiation and Cancer Biology (2 cr.) Emphasis on the modern principles of cellular and molecular biology as they relate to normal and cancer cell response both in vitro and in vivo to various radiation types, i.e., X/gamma rays, neutrons, and charged particles. Topics include dose time, fractionation, repair, tumor kinetics, hyperthermia, and radiation protection.

AHLT J409 Senior Project in Radiation Oncology (3 cr.) Individual research in radiation oncology. Research proposal requires the approval of the program director.

AHLT J450 Clinical Practicum II (6 cr.) P: AHLT J351. Clinical application of patient positioning immobilization, block fabrication, patient simulation techniques, treatment delivery, treatment planning, patient care management, and radiation protection under the direct supervision of a registered radiation therapist.


AHLT J453 Clinical Practicum V (5 cr.) P: AHLT J452. Clinical application of patient positioning immobilization, block fabrication, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care management, and radiation protection under the direct supervision of a registered radiation therapist.

AHLT J454 Radiation and Cancer Biology (2 cr.) Emphasis on the modern principles of cellular and molecular biology as they relate to normal and cancer cell response both in vitro and in vivo to various radiation types, i.e., X/gamma rays, neutrons, and charged particles. Topics include dose time, fractionation, repair, tumor kinetics, hyperthermia, and radiation protection.

AHLT J456 Clinical Practicum VI (5 cr.) P: AHLT J453. Clinical application of patient positioning immobilization, block fabrication, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care management, and radiation protection under the direct supervision of a registered radiation therapy technologist.


AHLT J459 Clinical Practicum IX (5 cr.) P: AHLT J458. Clinical application of patient positioning immobilization, block fabrication, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care management, and radiation protection under the direct supervision of a registered radiation therapy technologist.

AHLT J460 Clinical Practicum X (5 cr.) P: AHLT J459. Clinical application of patient positioning immobilization, block fabrication, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care management, and radiation protection under the direct supervision of a registered radiation therapy technologist.

AHLT J461 Clinical Practicum XI (5 cr.) P: AHLT J460. Clinical application of patient positioning immobilization, block fabrication, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care management, and radiation protection under the direct supervision of a registered radiation therapy technologist.

AHLT J462 Clinical Practicum XII (5 cr.) P: AHLT J461. Clinical application of patient positioning immobilization, block fabrication, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care management, and radiation protection under the direct supervision of a registered radiation therapy technologist.


AHLT J466 Clinical Practicum XVI (5 cr.) P: AHLT J465. Clinical application of patient positioning immobilization, block fabrication, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care management, and radiation protection under the direct supervision of a registered radiation therapytechnologist.

AHLT J467 Clinical Practicum XVII (5 cr.) P: AHLT J466. Clinical application of patient positioning immobilization, block fabrication, patient simulation techniques, treatment delivery, dosimetry, treatment planning, patient care management, and radiation protection under the direct supervision of a registered radiation therapy technologist.
Design of the Professional Curriculum  The lecture/laboratory course material and the clinical experiences are integrated throughout the program.

Additional Cost  In addition to regular university tuition and fees, students should expect to pay program-related expenses. Contact the program for a current cost sheet.

Opportunity for Students to Work  There are no restrictions on the number of hours a student may work during the program. However, the student must recognize that the professional curriculum requires approximately 25-32 clock hours per week of on-campus participation in classroom, laboratory, and clinical course work. Study time and completion of general-education courses must also be considered. While most of the professional course activities are scheduled during daytime hours on Monday through Friday, there are several clinical experiences that require student participation on weekends and evenings. Please contact the program for more information.

Program Facilities  The Radiography Program is offered in Indianapolis at the Indiana University Medical Center. The program offices, classrooms, and laboratory facilities are located on the first floor of the Clinical Building. Students obtain clinical experience in the radiology departments located in Indiana University, Riley, Wishard, and Veterans Administration hospitals and Regenstrief Health Center and St. Francis Hospital (Beech Grove). Students should expect to rotate to at least four clinical sites during the program.

Accreditation  The associate degree program in radiography is fully accredited by the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 900, Chicago, IL 60606-2901, (312) 704-5300, www.jrcert.org.

ADMISSION

General Information  Students accepted into the program must complete the school’s and the following program admission requirements prior to the first day of classes. Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program.

Criteria Used for Selection of Class  In the selection of applicants to be offered admission, the Radiologic Science Admission Committee considers academic background, including total and science/math GPA, the completion of general-education courses that are part of the associate degree curriculum, any background applicants may have in a health-care related area, including but not limited to radiography, previous application for admission to the program, and the results of a personal interview.

Class Size  36 new students are admitted each June (beginning of summer session II).

Specific Requirements  
In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this section of the bulletin, the following apply to the Radiography Program.

Application Deadline  November 15 of the year prior to anticipated entry in the program.

Total Number of Prerequisite Credit Hours  7.

Minimum Qualifications  Meeting minimum criteria listed below will qualify applicants for continuation of the admission process. It does not guarantee admission to the program. Applicants for admission to the Associate of Science in Radiography degree may qualify for admission consideration in one of two ways:

A. Applicants with fewer than 12 college credit hours  Completion of fewer than 12 credit hours of GPA-earning courses including the prerequisite courses in composition (ENG W131) and algebra (MATH 110 or 111).

Criteria Used for Selection of Class

1. High school cumulative academic GPA of at least 3.00 on a 4.00 scale. The high school GPA is calculated using college preparatory academic courses only. Other courses, such as band, chorus, physical education, etc., are removed from the GPA when it is calculated.
2. High school math/science GPA of at least 3.00 on a 4.00 scale.
3. Qualifications for regular admission to IUPUI if not already admitted.
4. College GPA of at least 2.50 on a 4.00 scale.
5. No less than a C in either of the prerequisite courses.

B. Applicants with 12 or more college credit hours  Completion of a minimum of 12 credit hours of GPA-earning courses to include the prerequisite courses in composition (ENG W131) and algebra (MATH 110 or 111).

Criteria Used for Selection of Class

1. College GPA of at least 2.50 on a 4.00 scale for all college work completed. (Course grades from all institutions attended will be used.)
2. No less than a C in either of the prerequisite courses.
3. College math/science GPA of at least 2.30 on a 4.00 scale.
4. All college courses taken, including remedial courses, are considered when calculating the minimum total GPA and math/science GPA.

Opportunity for Students to Work  Check with your school to see if you can earn college credit while in high school to complete the two prerequisite courses.

GED Applicants  Those who have completed the GED certificate must qualify under Section B above. In addition to the required prerequisite courses, the GED applicant must include a college science course in the minimum of 12 credits to qualify.

College Applicants  All applicants with more than 12 credit hours of GPA-earning courses must qualify under Section B regardless of high school background.

Interview  An interview is required for admission. However, if the number of applications to the program far exceeds the number of positions available, the program admissions committee reserves the right to limit the number of applicants interviewed to two times the number of positions available in the class. Interviews are scheduled during late January.

Technical Requirements  See School of Allied Health Sciences policy.

Indiana Residents Preference Policy  See School of Allied Health Sciences policy.

Volunteer Experience  The admissions committee urges all interested applicants to spend time observing or volunteering in a radiology department. If you cannot arrange to do so at a local hospital by calling the chief technologist and indicating your desire to learn more about the field, a time can be scheduled in one of the Medical Center hospital departments.

CURRICULUM

Prerequisites

Elementary Composition I  ENG W131  3 cr.
Algebra MATH 110 or 111  4 cr.

Professional Program

Courses in the professional program are sequential and, therefore, must be taken in the order specified by the program faculty. The code “G” indicates a course that meets the school’s general-education requirements.

First Year

Summer Session I

Prerequisites

English Composition ENG W131 (G)  3 cr.
Intermediate Algebra MATH 110 or 111 (G)  4 cr.

First Year

Summer Session II

Introduction to Clinical Radiography  AHLT R103  2 cr.
Patient Care in Radiologic Sciences  AHLT R104  2 cr.
Medical Terminology AHLT R185  1 cr.
Seminar: Professional Values  AHLT R207  1 cr.
Total  6 cr.

Fall

Radiographic Procedures I  AHLR R101  4 cr.
Principles of Radiography I  AHLT R102  3 cr.
Clinical Experience in Radiography I  AHLT R181  4 cr.
Topics: Radiography Procedures  Laboratory AHLT R208  1 cr.
Human Biology BIOL N212  2 cr.
Human Biology Laboratory  BIOL N213  1 cr.
Total  15 cr.
Spring
Radiographic Procedures II
AHLT R201 3 cr.
Principles of Radiography II
AHLT R202 3 cr.
Clinical Experience in Radiography II
AHLT R182 4 cr.
Topics: Medical Assisting in Radiology
AHLT R208 2 cr.
Human Biology BIOL N214 2 cr.
Human Biology Laboratory
BIOL N215 1 cr.
Total 15 cr.

Second Year
Summer Session I
Clinical Correlation (AHLT R281, R282, or R283) 1 cr.
Clinical Experience (AHLT R281, R282, or R283) 2 cr.
Topics: Darkroom AHLT R208 1 cr.
Total 4 cr.

Summer Session II
Clinical Experience (AHLT R281, R282, or R283) 2 cr.
Clinical Correlation (AHLT R281, R282, or R283) 1 cr.
Total 3 cr.
Fall
Pathology AHLT R200 2 cr.
Principles of Radiography III
AHLT R222 3 cr.
Physics Applied to Radiology
AHLT R250 3 cr.
Clinical Correlation (AHLT R281, R282, or R283) 2 cr.
Clinical Experience (AHLT R281, R282, or R283) 4 cr.
Oral Communications COMM R110 or C180 (G) 3 cr.
Total 17 cr.

Spring
Radiographic Procedures III
AHLT R205 3 cr.
Experiments and Quality Control
AHLT R253 2 cr.
Radiation Biology and Protection in Diagnostic Radiology AHLT R260 1 cr.
Clinical Correlation (AHLT R281, R282, or R283) 2 cr.
Clinical Experience (AHLT R281, R282, or R283) 4 cr.
Social/Behavioral Science
Elective1 (G) 3 cr.
Total 15 cr.

1 Courses that may be taken along with or prior to the professional course work. Alternative courses (IUPUI numbers): Medical Terminology (AHLT R185): AHLT W105; CLAS C209; Human Biology sequence (BIOL N212/3/4/5): BIOL N261 and BIOL N217.

Awards The faculty will recommend to the university graduating students with superior academic performance for degrees awarded with distinction. Also, students with outstanding academic and clinical achievement during their professional program may be recognized by the program at the time of graduation.

Graduation Requirements Satisfactory completion of 84 credit hours to include 22 credit hours of graduation requirements and 84 credit hours of professional courses. All course work must be completed in compliance with the program's and school's academic and professional policies.

For further information, contact Professor Emily Hernandez, Director, Radiography Program, IUPUI, Clinical Building 120, 541 N. Clinical Drive, Indianapolis, IN 46202-5111, (317) 274-3802, Fax: (317) 274-4074, E-mail: eherand@iupui.edu.

Courses in Radiologic Sciences
"P" refers to a course prerequisite and "C" to a course that must be taken concurrently.

AHLT R100 Orientation to Radiologic Technology (2 cr.) C or P: R101, R102, and R181. Introduction to the field of radiology and its history. Students learn proper ethical standards, become acquainted with the duties and responsibilities in personal care for the patient, and investigate radiation protection for the patient and personnel. Degree credit will not be given for both R100 and R104.

AHLT R101 Radiographic Procedures I (3-4 cr.) C or P: R101, R102, and R181. Concepts in radiography with emphasis on the radiographic procedures used to demonstrate the skeletal system.

AHLT R102 Principles of Radiography I (3 cr.) C or P: College Algebra, R101, R181. Basic concepts of radiation, its production, and its interactions with matter. Includes the production of the radiographic image and film processing.

AHLT R103 Introduction to Clinical Radiography (2 cr.) Introduction to the functions and basic procedures of a diagnostic radiography department. Emphasis is placed on radiographic equipment, radiation protection, positioning terminology, and procedures used on typical radiographic examinations.

AHLT R104 Patient Care in Radiologic Science (2 cr.) Introduction to health care practices in the radiology department. Includes an overview of the field of radiology, ethics, patient care, and professional standards. Degree credit will not be given for both R100 and R104.

AHLT R181 Clinical Experience in Radiography I (1-6 cr.) C or P: R100 or R104. Clinical application of radiographic positioning, exposure techniques, and departmental procedures in all phases of radiologic technology, under the direct supervision of a registered technologist until mastery of clinical objectives is reached.

AHLT R182 Clinical Experience in Radiography II (1-6 cr.) P: R101 and R181. Clinical application of radiographic positioning, exposure techniques, and departmental procedures in all phases of radiologic technology, under the direct supervision of a registered technologist until mastery of clinical objectives is reached.

AHLT R185 Medical Terminology (1 cr.) Introduction to the origin, derivation, and meaning of medical words.

AHLT R200 Pathology (2-3 cr.) P: Anatomy/Physiology. A survey of the changes that occur in the diseased state to include general concepts of disease, causes of disease, clinical symptoms and treatment, and diseases that affect specific body systems.

AHLT R201 Radiographic Procedures II (3 cr.) C or P: R101, R202, and R182. Concepts in radiography with emphasis on radiographic procedures used to demonstrate the skull and those requiring the use of contrast media.

AHLT R202 Principles of Radiography II (3 cr.) C or P: R102, R201, and R181. Continuation of R102 with emphasis on the properties that affect the quality of the radiographic image.

AHLT R205 Radiographic Procedures III (3 cr.) C or P: R201 and R222. Concepts in radiography with emphasis on special radiographic procedures and related imaging modalities.

AHLT R207 Seminar (1-5 cr.) Individual and group study focusing on the current state of the art in radiography. Student may enroll in this course multiple times depending on the topic covered.

AHLT R208 Topics in Radiography (1-4 cr.) Selected topics in radiography. May be repeated for credit if topics differ. Prerequisites may exist for some topics.

AHLT R209 Project (1-5 cr.) Individual and group activities that have a tangible result. Project examples for this course include the preparation of an exhibit, essay, or interesting radiography case file. Student may enroll in this course multiple times depending on the topic covered.

AHLT R222 Principles of Radiography III (3 cr.) P: R202. Continuation of R202 with emphasis on the application of radiography principles on imaging equipment.


AHLT R255 Radiation Experiments and Quality Control (2 cr.) P: R250. A laboratory course emphasizing the major characteristics of diagnostic X-ray systems and methods of assuring adequate function of radiographic equipment. Major topics
include anode heel effect, inverse square law, half-value layer, film sensitometry, radiation intensity, and quality control testing.

AHLT R260 Radiation Biology and Protection in Diagnostic Radiology (1-3 cr.) P: R250. Study of the biological effects of ionizing radiation and the standards and methods of protection. Emphasis is placed on X-ray interactions. Also included are discussions on radiation exposure standards and radiation monitoring.

AHLT R281 Clinical Experience in Radiography III (1-6 cr.) P: R201 and R182. Clinical application of radiographic positioning, exposure techniques, and departmental procedures in all phases of radiologic technology, under the direct supervision of a registered technologist until mastery of clinical objectives is reached.

AHLT R282 Clinical Experience in Radiography IV (1-6 cr.) P: R201 and R182. Clinical application of radiographic positioning, exposure techniques, and departmental procedures in all phases of radiologic technology, under the direct supervision of a registered technologist until mastery of clinical objectives is reached.

AHLT R283 Clinical Experience in Radiography V (1-6 cr.) P: R201 and R182. Clinical application of radiographic positioning, exposure techniques, and departmental procedures in all phases of radiologic technology, under the direct supervision of a registered technologist until mastery of clinical objectives is reached.

AHLT R290 Comprehensive Experience (1-8 cr.) P: R281, R282, and R283. Clinical application of radiographic positioning, exposure techniques, and departmental procedures in all phases of radiologic technology under the direct supervision of a registered technologist. Successful completion involves mastery of all clinical aspects of the program.

Respiratory Therapy
Educational programs in respiratory therapy are located on the following Indiana University campuses: Indiana University–Purdue University Indianapolis and Indiana University Northwest.

Description of the Profession Respiratory therapists assist patients with the “Breath of Life.” A career in respiratory therapy allows practitioners to care for individuals with cardiorespiratory disorders. The primary focus of a respiratory therapist is to care for patients, from the infant to the elderly, with heart and lung disease. Respiratory therapists are an integral part of the fast-paced world of medicine. They utilize life-support equipment to treat disease and aid in assessing and diagnosing cardiopulmonary disorders, often working in settings where respiratory therapists teach patients and their families about various respiratory diseases, smoking cessation techniques, or the equipment and drugs used to treat these problems. The Bachelor of Science in Respiratory Therapy degree provides graduates a career ladder that includes a broadened clinical emphasis within the cardiorespiratory field as well as leadership training.

Graduates of the Program The graduates of the Respiratory Therapy Program are eligible for state licensure examinations as well as examinations offered by the National Board for Respiratory Care. Completion of the program will allow a graduate to sit for the Registered Respiratory Therapist (R.R.T.) examination.

Credential Required to Practice C.R.T., Certified Respiratory Therapist; R.R.T., Registered Respiratory Therapist

Licensure Requirements to Practice The graduates of the Respiratory Therapy Program will file an application for certification as a respiratory care practitioner for the state of Indiana.

Bachelor of Science in Respiratory Therapy at Indiana University–Purdue University Indianapolis

Medical Director: Professor Hillier
Associate Medical Director: Professor Naven
Program Director: Professor Cullen
Clinical Director: Associate Professor Koss
Associate Professors: Van Scoder
Clinical Assistant Professor: Johnson
Lecturer, Part-time: Hunt

EDUCATIONAL PROGRAM

Description of the Program The Bachelor of Science program encompasses two professional years and two preprofessional years. Clinical experiences during the program include general adult and pediatric respiratory care, critical care, and pulmonary diagnostics. Emphasis is placed on clinical research, leadership skills, and communication. Senior clinical opportunities are available in adult critical care, neonatal-pediatric care, geriatrics, nicotine intervention, cardiovascular monitoring, polysomnography, and emergency care.

Length of the Program Four years; two years (55 credit hours) of prerequisite course work plus two years of professional course work.

Structure of the Program The prerequisites may be taken on a part-time basis; the professional program is a full-time program conducted primarily during the day.

Design of the Professional Curriculum The emphasis of the program is on general respiratory care as well as critical care and life-support equipment. Courses are organized to provide a diversity of experience.

Program Facilities The program offices, classroom, and laboratory are located on the second floor of Coleman Hall on the Indianapolis campus.

Location of Clinical Sites Clinical education experiences occur in a variety of settings, including hospitals, rehabilitation centers, nursing homes, physician offices, and other nontraditional health care facilities within Indiana. Most of the clinical sites are located within a 60-minute drive from downtown Indianapolis, and many are on the IUPUI campus. Students are expected to provide their own transportation to all clinical sites.

Additional Cost In addition to standard university fees, students are responsible for travel to clinics, laboratory fees, clinical fees, uniforms, vaccination costs, and CPR card fees. Students may be required to attend career seminars, professional meetings, or seminars. Occasionally small fees for attending these events may be necessary. Professional membership is required.

Opportunity for Students to Work Most students work part time while completing the program.

Accreditation The Respiratory Therapy Program is accredited by the Commission on Accreditation for Allied Health Education Programs.

ADMISSION

General Information
Students accepted into the program must complete the school's and the program’s admission requirements prior to the first day of classes. Admission to the professional program is competitive; therefore, completion of the prerequisites does not guarantee admission to the program.

Criteria Used for Selection of Class Grade point average and results of personal interview.

Class Size Approximately 30 students.

Specific Requirements In addition to the School of Allied Health Sciences admission policies and procedures found at the beginning of this section of the bulletin, the following admission policies apply to the Respiratory Therapy Baccalaureate Degree Program.

Application Deadline December 1 of the year prior to anticipated entry. Late applications may be considered on a space-available basis.

Total Number of Prerequisite Hours 55. Graduates from accredited associate degree respiratory therapy programs are eligible to apply; however, applicants must have all prerequisites.

Minimum Cumulative Grade Point Average 2.30 on a 4.00 scale. This requirement is applied at the time of program application and must be maintained.

Minimum Math/Science Grade Point Average 2.30 on a 4.00 scale. This requirement is applied at the time of program application and must be maintained.

Minimum Grade Requirement in a Stated Prerequisite Course C (2.00 on a 4.00 scale).

Interview All qualified applicants must participate in an interview. Interviews are conducted in December and/or January.

Technical Standards See School of Allied Health Sciences policy.

Medical Requirements All students are required to complete a medical history and document a complete vaccination program once accepted into the Respiratory Therapy Program.

Indiana Resident Preference Policy See School of Allied Health Sciences policy.
Volunteer Experience  Volunteer experience is very helpful in making a career choice and is highly recommended.

CURRICULUM

Prerequisites
Prior to entering the program, the student must complete the following minimum prerequisites. Students should consult with their academic advisors for appropriate courses and semester sequence in order to complete prerequisites. Prerequisites may be taken at any accredited college or university. The code “G” indicates a course that meets the school’s general-education requirements.

Written Communication (G)  6 cr.
(Second course should focus on professional and technical writing.)
Verbal Communication (G)  3 cr.
College Math (G)  5-6 cr.
Social and Behavioral Science (G)  3 cr.
Lifespan Development (G)*  3 cr.
Statistics (G)  3 cr.
Human Anatomy (with lab) (G)  3-5 cr.
Human Physiology (with lab) (G)  3-5 cr.
Chemistry (with lab) (G)  3-5 cr.
Microbiology (G)  3-4 cr.
Ethics (G)*  3 cr.
Physics (G)  3 cr.
Introduction to Computers (G)  3 cr.

Suggested Electives
The following courses, while not inclusive or mandatory, are suggested: science, cellular biology, nutrition, CPR, health care administration, exercise physiology, medical terminology, epidemiology, health, computer literacy, psychology, and ethics.

Cardiopulmonary Resuscitation  In addition to the above courses, all students are required to complete instruction for both adult, child, and infant CPR prior to entry into the program. This must be the Healthcare Provider course, not the Community CPR course. This course is offered for a fee through the American Heart Association.

A Suggested Plan of Study

First Year

Fall
Elementary Composition I  3 cr.
Chemistry (with lab)  3-5 cr.
Social and Behavioral Science  3 cr.
College Math I  3 cr.
Total  12-14 cr.

Spring
Speech Communication  3 cr.
College Math II  3 cr.
Human Anatomy (with lab)  3-5 cr.
Ethics/Philosophy  3 cr.
Total  12-14 cr.

Second Year

Fall
Professional Writing  3 cr.
Physics I  3 cr.
Human Physiology with laboratory  4-5 cr.
Introduction to Computers  3 cr.
Total  13-14 cr.

Spring
Statistics  3 cr.
Introduction to Microbiology  3-4 cr.
Lifespan or Human Development  3 cr.
Elective  3+ cr.
Total  12+ cr.

Professional Program
Courses in the professional program are sequential and, therefore, must be taken in the order specified by the program faculty.

Third Year

Fall
Cardiorespiratory Physiology
AHLT F311  3 cr.
General Respiratory Care
AHLT F325  3 cr.
Respiratory Care Techniques I
AHLT F326  2 cr.
Cardiorespiratory Assessment and Patient Care AHLT F315  1 cr.
Respiratory Care Practicum I
AHLT F345  1 cr.
Cardiorespiratory Pharmacology I
AHLT F333  2 cr.
Medical Care I
AHLT W374  3 cr.
Total  16 cr.

Spring
Cardiorespiratory Diseases
AHLT F350  3 cr.
Advanced Life Support AHLT F355  3 cr.
Respiratory Care Techniques II
AHLT F356  2 cr.
Respiratory Care Practicum II
AHLT F385  3 cr.
Pulmonary Diagnostics AHLT F371  3 cr.
Medical Care II AHLT W471  3 cr.
Total  17 cr.

Summer Session I
Respiratory Care Practicum III
AHLT F395  3 cr.

Fourth Year

Fall
Neonatal-Pediatric Respiratory Care
AHLT F405  3 cr.
Cardiorespiratory Monitoring and Special Techniques AHLT F451  3 cr.
Respiratory Care Practicum IV
AHLT F456  4 cr.

Introduction to Research in Respiratory Care AHLT F420  3 cr.
Pulmonary Rehabilitation and Geriatrics AHLT F461  2 cr.
Management and Leadership for Respiratory Care AHLT F430  3 cr.
Total  18 cr.

Spring
Cardiorespiratory Pharmacology II
AHLT F444  2 cr.
Case Study Review AHLT F425  3 cr.
Advanced Clinical Specialty I
AHLT F485  5 cr.
Seminari Cardiorespiratory Care
AHLT F445  1-5 cr.
Smoking Cessation Techniques
AHLT F480  1 cr.
Advanced Cardiac Life Support
AHLT F440  2 cr.
Application of Research for Respiratory Care AHLT F465  2 cr.
Total  16-20 cr.

Scholarships  Once accepted to the program, students are eligible for scholarships offered by the Indiana Society for Respiratory Care and the American Association for Respiratory Care.

Graduation Requirements  Satisfactory completion of 125 credit hours to include 55 credit hours of prerequisite course work and 70 credit hours of professional course work. All course work must be completed in compliance with the program’s and school’s academic and professional policies.

For further information, contact Dr. Deborah Cullen, Director of the Respiratory Therapy Program, IUPUI, Coleman Hall 224, 1140 W. Michigan Street, Indianapolis, IN 46202-5119, (317) 278-7381 or 274-7381, Fax: (317) 278-7383, E-mail: rstall@iupui.edu

Courses in Respiratory Therapy

“P” refers to a course prerequisite and “C” to a course that must be taken concurrently.

AHLT F311 Cardiorespiratory Physiology (3 cr.)
This course focuses on the normal anatomy and physiology of the cardiorespiratory system, including lung mechanics, ventilation, perfusion, diffusion, gas transport, and acid-base balance.

AHLT F315 Cardiorespiratory Assessment and Patient Care (2 cr.) This course focuses on cardiac pulmonary assessment, vital signs, laboratory studies, and charting. Normal and abnormal variations are reviewed.

AHLT F325 General Respiratory Care (3 cr.)
This course focuses on basic respiratory therapy procedures. Physiologic applications, effects on the cardiopulmonary system, and hazards for each therapeutic procedure are discussed. Topics include physical principles, airway care, humidity and aerosol
therapy, medical gas therapy, hyperinflation therapy, and chest physical therapy.

AHLT F326 Respiratory Care Techniques I (2 cr.) This course focuses on the most important clinical laboratory procedures and on procedures used by the respiratory therapist. Specifically, this course instructs students in patient assessment, oxygen administration, humidity and aerosol therapy, chest physical therapy, hyperinflation therapy, and monitoring expired gas.

AHLT F333 Cardiorespiratory Pharmacology I (2 cr.) This course provides an overview of the basics of pharmacology therapeutics, focusing on dosages and solutions and bronchodilator drugs. Indications, side effects, mechanism of action, and route of administration are discussed.

AHLT F345 Respiratory Care Practicum I (1 cr.) This course applies cardiorespiratory assessment techniques, information gathering skills, and communication skills in the clinical setting.

AHLT F350 Cardiorespiratory Diseases (3 cr.) This course outlines general cardiorespiratory diseases of the adult, including acute and chronic disorders. Respiratory therapeutics applied to these diseases are discussed.

AHLT F355 Advanced Life Support (3 cr.) This course includes care of the artificial airway, cardiovascular monitoring and supportive therapy, principles of ventilatory care, and maintenance as well as physiologic effects and complications of airway pressure therapy.

AHLT F356 Respiratory Care Techniques II (2 cr.) This course focuses on the most important clinical laboratory procedures and equipment used by the respiratory therapist to support critically ill patients. Specifically, this course instructs students in mechanical ventilators, pressure and heart rate monitors, pulmonary mechanics devices, and arterial blood gas sampling.

AHLT F357 Pulmonary Diagnostics (3 cr.) This course outlines and discusses both normal and abnormal lung volumes and capacities, mechanics of ventilation, inspiratory and expiratory flows, and diffusion of the lung. Additionally, specialty diagnostic techniques such as X-rays, bronchoscopy, ventilation perfusion scans, and exercise testing are overviewed.

AHLT F375 Respiratory Care Practicum V (4 cr.) This clinical practicum allows students to apply assessment skills, general respiratory care, and critical respiratory care techniques to the neonatal/pediatric patient and adult critical care patient with emphasis on performance of advanced life-support techniques.

AHLT F385 Respiratory Care Practicum II (3 cr.) This course applies cardiopulmonary assessment techniques, information gathering, and communication skills in providing general respiratory care in the clinical setting, including medical gas, humidity and aerosol therapy delivery, and treatment modalities.

AHLT F395 Respiratory Care Practicum III (3 cr.) This clinical practicum introduces students to variations in oxygen delivery and basic mechanical ventilation. Treatment modalities and hemodynamic monitoring on mechanically ventilated patients will be integrated.

AHLT F405 Neonatal-Pediatric Respiratory Care (3 cr.) This course outlines fetal physiology, cardiorespiratory transition, and respiratory management of neonatal pathologies, including respiratory distress syndrome. Cardiorespiratory techniques for the pediatric patient as well as pediatric trauma and transport are reviewed.

AHLT F420 Introduction to Research in Respiratory Care (3 cr.) This course examines research in respiratory care and applies basic statistics and concepts of research design.

AHLT F425 Case Study Review (3 cr.) Case studies for diseases involving acid-base balance, electrolyte balance, ventilatory management, and other advanced life-support techniques or procedures as applied to the cardiorespiratory system are reviewed. Emphasis is on decision-making skills.

AHLT F430 Management and Leadership for Respiratory Care (5 cr.) Specific theory and practice applied to directing and managing a respiratory therapy department, including the managerial functions of budgeting, controlling, organization, planning, staffing, and coordinating. Leadership and skills pertinent to these functions as well as effective communication and professionalism are included.

AHLT F440 Advanced Cardiac Life Support (2 cr.) This course introduces students to the didactic and technical skills needed for successful proficiency of Advanced Cardiac Life Support standards as set forth by the American Heart Association.

AHLT F444 Cardiorespiratory Pharmacology II (2 cr.) P: AHLT F333. An overview of pharmacologic agents and their effect on the various body systems. Drug effects on the respiratory, circulatory, and nervous systems are emphasized.

AHLT F445 Seminar in Cardiorespiratory Care (1-5 cr.) Seminar is designed to meet the specialty selected by the student. Students may repeat this course with a new specialty area requested. Each student is required to take a minimum of one hour and a maximum of five hours.

AHLT F451 Cardiorespiratory Monitoring and Special Techniques (3 cr.) This course reviews electrocardiograms, intracranial pressure monitoring, capnography, and pulmonary artery monitoring techniques. Case studies emphasizing these special procedures are presented.

AHLT F456 Respiratory Care Practicum IV (4 cr.) This course allows students to apply advanced patient assessment techniques, information gathering skills, and communication and leadership skills in the neonatal/pediatric and adult critical care clinical settings.

AHLT F461 Pulmonary Rehabilitation and Geriatrics (2 cr.) This course gives an overview of rehabilitation therapies and techniques applicable to chronic lung disease. Basic concepts of gerontology and geriatrics are presented.

AHLT F465 Application of Research for Respiratory Care (2 cr.) Review studies related to cardiorespiratory sciences. Conduct small group projects and literature review.

AHLT F475 Clinical Specialty II (4 cr.) Advanced clinical experiences in a specialty area of respiratory care supervised by registered respiratory therapists in varied clinical settings.

AHLT F480 Smoking Cessation Techniques (1 cr.) Theory and techniques of smoking education and cessation are presented. Attendance at seminars and community meetings required.

AHLT F485 Advanced Clinical Specialty I (5 cr.) Introductory clinical experience in a specialty area of respiratory care supervised by registered respiratory therapists in varied clinical settings.

General Allied Health Courses Available at IUPUI

Undergraduate

AHLT W100 Careers in Health Professions (2 cr.) P: ENG W131. Provides students interested in pursuing a health career with information on the variety of professions available in allied health, dentistry, medicine, nursing, and public health. Topics include a general description of each profession, educational requirements, salaries, employment opportunities, and educational outlook.

AHLT W101 Allied Health Keys to Success (1 cr.) P or C: ENG W131. Entering pre-allied health students, in partnership with allied health faculty and advisors, establish the foundations for success at IUPUI. This course is presented in a lecture/discussion format; each student accepts personal responsibility for learning. This course will assist students to create their personal goals for academic and career success and devise an action plan for achieving these goals. To reach these goals, students will become aware of personal and institutional resources.

AHLT W105 Medical Terms for the Health Sciences (1 cr.) This course is a programmed learning approach to the study of medical terminology. The course will cover the definition and spelling of medical word roots and combining forms, prefixes, suffixes, and medical abbreviations.

AHLT W374 Medical Care I (3 cr.) Interdisciplinary approach to the study of selected disease processes and conditions in all age groups and a survey of the medical and/or surgical management of these conditions.

AHLT W471 Medical Care II (3 cr.) Continuation of Medical Care I. Interdisciplinary approach to the study of selected disease processes and conditions in all age groups and a survey of the medical and/or surgical management of these conditions.

Graduate

AHLT W520 Research Methodology in Allied Health (3 cr.) P: 0651 or equivalent. Fundamental concepts of research, ranging from philosophical foundations to practical applications. Course will provide the conceptual framework in which graduate students may develop their own research agenda. In keeping with the diversity of research, this course strives to introduce graduate students to the entire
continuum of research paradigms, from qualitative, naturalistic inquiry to quantitative, experimental designs.

**AHLT W570 Research Communication in Allied Health** (3 cr.) P. W520 and consent of both instructor and research advisor. Instruction and consultation in the preparation of master’s thesis proposals, including computer applications for conducting on-line literature searches, developing an individual bibliographic database, designing an original research project, and devising a sound methodology. Final outcome is a completed thesis proposal for submission to a graduate student’s thesis committee. Course is open only to allied health graduate students pursuing the research/thesis track in their program of study. Students must begin the course with a specific research agenda already approved by their research advisor.

**Graduate Programs—University Graduate School**

**Therapeutic Outcomes Research**

This graduate program is offered through University Graduate School. For a more detailed description, see that section of the bulletin. This program is designed to prepare credentialed health care professionals to conduct patient outcomes research in order to evaluate the effectiveness of therapeutic interventions within their own disciplines. The chief feature of this program is the emphasis on original research to determine therapeutic benefit in terms of physiologic, symptomatic, functional, perceptual, and quality-of-life outcomes.

**Description of the Outcomes Research**

There have been three major eras in the evolution of the U.S. health-care system since the late 1940’s: expansion, cost-containment, and now assessment and accountability. In the expansion era, health care underwent remarkable growth in technology, training, and delivery. Emphasis was on the perfection of health care, with no consideration of costs or resource demands. Spiraling costs and disenchantment with the curative power of technology brought on the cost-containment era. Emphasis was now placed on limiting spending and maximizing productivity, often at the expense of patient satisfaction. Today, there is a growing understanding of the balance between use of health-care resources on one hand and patient benefits on the other, or between assessment and accountability. Based on a more sophisticated awareness of what actually constitutes the costs and benefits of treatment, emphasis is now placed on rational use of resources in light of a realistic appraisal of therapeutic benefits. Patient-centered outcomes research concentrates on the assessment of therapeutic interventions under conditions of real, not ideal, practice. Allied health professionals are particularly well positioned to conduct therapeutic outcomes research because their clinical work is oriented toward the holistic factors that outcomes research purports to measure: multidimensional assessment of health status and improvement of patient quality of life. Moreover, as demand for useful and valuable outcomes measurement continues to grow among health-care institutions and organizations, allied health professionals are increasingly being called upon to conduct outcomes assessment at their place of employment.

**Master of Science in Therapeutic Outcomes Research at Indiana University–Purdue University Indianapolis**

**Program Director:** Professor Oldridge  
**Professors:** Gullen, MacKinnon, Sothmann  
**Associate Professor:** Quillen

**EDUCATIONAL PROGRAM**

**Admission Requirements**

Students accepted into the program must meet all requirements of both University Graduate School and the School of Allied Health Sciences. Applicants must submit the following: (1) official undergraduate transcripts; (2) a 300- to 500-word personal statement of academic and professional goals; (3) three letters of recommendation from those familiar with applicants’ academic and professional performance; (4) official scores of the Graduate Record Examination (GRE); and (5) for international students, official TOEFL scores. The minimum admission requirements are:

1. A bachelor’s degree from an accredited institution.
2. Eligibility for license or credential in a health profession.
3. Total undergraduate GPA of at least 3.00 on a 4.00 scale.
4. GRE scores of at least 500 each for the verbal and analytical sections.
5. If applicable, a TOEFL score of at least 600.

**Course Requirements**

A total of 30 credit hours beyond the bachelor’s degree, of which 12 credit hours are in health outcomes, 3 credit hours are in electives, and 15 credit hours are in research (including thesis work).

**Thesis Requirement**

The capstone experience is the writing and submission of a thesis based on original research conducted by the student and supervised by a thesis committee. Curricular electives are focused on developing expertise to articulate and research a testable hypothesis in a specific content area pertaining to patient-centered outcomes under the direction of a research advisor holding graduate faculty membership in University Graduate School. Theses must follow the Indiana University Guide to the Preparation of Theses and Dissertations.

**CURRICULUM**

**Health Outcomes** (12 cr.):

- **AHLT W510 Trends and Issues in Allied Health** (3 cr.)  
- **SPEA HS17 Managerial Epidemiology** (3 cr.)  
- **SPEA H615 Health Outcomes and Decision Making** (3 cr.)

- **AHLT W560 Topics in Patient-Centered Outcomes Research** (3 cr.)

**Electives (3 cr.):**  
[In consultation with graduate advisor] (3 cr.)

**Research (15 cr.):**

- **GRAD G651 Introduction to Biostatistics I** (3 cr.)  
- **AHLT W520 Research Methodology in Allied Health** (3 cr.)  
- **AHLT W570 Research Communication in Allied Health** (3 cr.)  
- **AHLT Z599 Thesis in Health Sciences** (6 cr.)  
- **AHLT W799 Master’s Thesis Continuation** (1 cr., can be repeated)

**Total Minimum Credits:** 30 cr.

**Courses in Therapeutic Outcomes Research**

Courses offered in the School of Allied Health Sciences

“P” refers to a course prerequisite and “C” to a course that must be taken concurrently.

- **AHLT W510 Trends and Issues in Allied Health** (3 cr.) A seminar course to review pertinent literature and other sources of information as a basis for discussing trends and issues affecting the therapeutic professions and the health-care delivery system.
- **AHLT W520 Research Methodology in Allied Health** (3 cr.) P. G651 or equivalent. Fundamental concepts of research, ranging from philosophical foundations to practical applications. Course provides the conceptual framework in which graduate students may develop their own research agenda. In keeping with the diversity of research, this course strives to introduce graduate students to the entire continuum of research paradigms, from qualitative, naturalistic inquiry to quantitative, experimental designs.
- **AHLT W560 Topics in Patient-Centered Outcomes Research** (3 cr.) Explorations of selected patient-centered outcomes assessment methodology and research evidence related to allied health science professions at an advanced level.
- **AHLT W570 Research Communication in Allied Health** (3 cr.) P. W520 and consent of both instructor and research advisor. Instruction and consultation in the preparation of master’s thesis proposals, including computer applications for conducting online literature searches, developing an individual bibliographic database, designing an original research project, and devising a sound methodology. Final outcome is a completed thesis proposal for submission to a graduate student’s thesis committee. Course is open only to allied health graduate students pursuing the research/thesis track in their program of study. Students must begin the course with a specific research agenda already approved by their research advisor.
- **AHLT Z599 Thesis in Health Sciences Education** (3 cr.) Individual investigation in the form of an organized scientific contribution or a comprehensive
Acknowledging the role of specific training programs and educational opportunities in health sciences education, IUPUI offers a range of certifications and degrees. These include, but are not limited to:

- **C.T. (ASCP)**—Cytotechnologist
- **C.S.—Certified Specialist in Pediatric Nutrition**
- **C.N.M.T.(NMTCB)—Certified Nuclear Medicine Technician**
- **C.L.T.—Clinical Laboratory Technician**
- **C.L.S.—Clinical Laboratory Scientist**
- **C.C.S.—Certified Coding Specialist**
- **B.B.(ASCP)—Technologist in Blood Banking**
- **A.T.C.—Certified Athletic Trainer**
- **R.H.I.T.—Accredited Health Information Technician**
- **A.B.R.—American Board of Radiology**

**Credential Abbreviations**

- **A.B.R.**—American Board of Radiology
- **R.H.I.T.**—Accredited Health Information Technician
- **A.B.R.**—American Board of Radiology
- **M.S.**—Master of Science
- **Ph.D.**—Doctor of Philosophy
- **B.S.**—Bachelor of Science
- **D.O.**—Doctor of Osteopathic Medicine
- **R.R.T.**—Registered Respiratory Therapist

For further information, contact Neil Oldridge, Ph.D., Therapeutic Outcomes Research Program, School of Allied Health Sciences, 1140 W. Michigan Street, Indianapolis, IN 46202, (317) 278-1690. E-mail: ahlgrad@iupui.edu.

**Administrative Officers**

Dean, Mark Sothmann, Ph.D.
Associate Dean for Academic and Student Affairs, Joyce Mac Kinnon, Ed.D.

**Program Directors:**

Clinical Laboratory Sciences, Linda Kasper, M.S.
Cytotechnology, William Crabtree, M.S.
Health Information Administration, Danita Forgey, M.S., Acting
Health Sciences Education, Karen Gable, Ed.D.
Histotechnology, Glenda Hoye, B.S.
Nutrition and Dietetics, Jacqueyln O’Palka, Ph.D.
Occupational Therapy, Cel Hamant, M.S.
Paramedic Sciences, Leon Bell, M.S.Ed.
Physical Therapy, William (Sandy) Quillen, Ph.D.
Radiation Therapy, Donna Dunn, M.S.
Radiologic Sciences, Emily Hernandez, M.S.
Respiratory Therapy, Deborah Cullen, Ed.D.
Therapeutic Outcomes Research, Neil Oldridge, Ph.D.

**Faculty**

**Credential Abbreviations**

- **A.H.**—American Board of Radiology
- **R.H.I.T.**—Accredited Health Information Technician
- **A.T.C.**—Certified Athletic Trainer
- **B.B. (ASCP)**—Technologist in Blood Banking
- **C. ASCP**—Technologist in Chemistry
- **C. C.S.**—Certified Coding Specialist
- **C. M. I. C. C.**—Cytologist Member of International Academy of Cytology
- **C. L. S.**—Clinical Laboratory Scientist
- **C. L. T.**—Clinical Laboratory Technician
- **C. N. M. T. (NMTCB)**—Certified Nuclear Medicine Technologist
- **C. S.**—Certified Specialist in Pediatric Nutrition
- **C. T. (ASCP)**—Cytotechnologist

**Faculty Emeriti**

- **Ashston, Janatha R.**, R.H.L.A., B.S. (Indiana University, 1965), M.S. (Indiana University, 1978), Associate Professor Emerita of Health Information Administration
- **Carl, T. Kay., B.S. (Indiana University, 1967), O.T.R. (1967), Assistant Professor Emerita of Occupational Therapy**
- **Ekstam, Frances C., M.S. (Indiana University, 1960), P.T. (1944), Professor Emerita of Physical Therapy**
- **Feeley, Mary, Ed.D. (Indiana University, 1986), M.T. (ASCP) (1946), Professor Emerita of Medical Technology**
- **Hocker, Narcissa, M.S. (Indiana University, 1964), M.T. (ASCP) (1945), S.B.B. (ASCP) (1955), Associate Professor Emerita of Medical Technology**
- **Irwin, Louise, B.S. (Purdue University, 1939), Professor Emerita of Nutrition and Dietetics**
- **Ladue, Ruth A., M.A. (Stanford University, 1967), P.T. (1945), Assistant Professor Emerita of Physical Therapy**
- **Lamport, Nancy, M.S. (Butler University, 1984), O.T.R. (1951), Associate Professor Emerita of Occupational Therapy**
- **McKenzie, Mary L., M.S. (Indiana University, 1973), R.R.T. (1954), Associate Professor Emerita of Health Information Administration**
- **Van Ness, Ada Marie, M.S. (Ohio State University, 1962), Assistant Professor Emerita of Nutrition and Dietetics**
- **Wilson, Arlene, M.S. (Purdue University, 1956), Professor Emerita of Nutrition and Dietetics**
- **Young, Mildred R., M.S. (Butler University, 1966), M.T. (ASCP) (1942), SH (ASCP) (1980), Assistant Professor Emerita of Medical Technology**

**Faculty**

- **Bainbridge, Cheryl K. (P.T.); Clinical Assistant Professor of Physical Therapy; B.S., Indiana University, 1969, M.S.Ed., Indiana University, 1975**
- **Baker, Sarah S. [R.T. (R), EASRT, A.R.R.T.]; Associate Professor of Radiologic Sciences; A.S., Indiana University, 1973; B.S., Indiana University, 1974; M.S., Indiana University, 1979; Ed.D., Indiana University, 2001**
- **Bell, Leon H. (E.M.T.-P.); Clinical Associate Professor; B.A., DePauw University, 1976; M.S.Ed., Butler University, 1989**
- **Blackburn, Sara A. (R.D.); Associate Professor of Clinical Nutrition and Dietetics; B.S., Purdue University, 1972; M.S., Purdue University, 1973; D.Sc., Boston University, 1980**
- **Brady, (Mary) Sue (R.D., F.A.D.A.); Professor of Nutrition and Dietetics; B.S., Marian College, 1968; R.D. Dietetic Internship, Indiana University Medical Center, 1969; M.S., Indiana University, 1970; D.M.Sc., Indiana University School of Medicine, 1987**
Carey, Mary T. (P.T.); Clinical Assistant Professor of Physical Therapy; B.S., Indiana University, 1983; M.S., University of Indianapolis, 1983

Chapman, David D.; Visiting Assistant Professor of Physical Therapy; B.S., Indiana University, 1972; M.S., Indiana University, 1977; Ph.D., Indiana University, 1991

Cox, Linda A. (J.R.T.(R), M.R.(CT), A.R.R.T.); Assistant Professor of Clinical Radiologic Sciences; A.S., Indiana University, 1979; B.S., Indiana University, 1987; M.S., Indiana University, 1992

Crabtree, William N. (C.T., S.C.T.); Director and Associate Professor of Cytotechnology; B.S., University of Tennessee, 1977; M.S., Indiana University, 1983

Cullen, Deborah L. (R.R.T.); Professor and Director of the Respiratory Therapy Program; Associate Professor of the Graduate School; B.S., Central Florida University, 1974; M.A., San Diego State University, 1980; Ed.D., University of Southern California, 1989

Dunn, Donna K. (R.T.(T), A.R.R.T.); Assistant Professor and Program Director of Radiation Therapy; A.S., Indiana University, 1969; B.S., Indiana University, 1973; M.S., Indiana University, 1979

Dunning, Kari H. (P.T., N.C.S.); Visiting Assistant Professor of Physical Therapy; B.S., University of Wisconsin, 1987; M.S., University of Cincinnati, 1993

Ernst, Judith Ann (R.D.); Associate Professor of Nutrition and Dietetics; B.S., University of Illinois, 1975; R.D. Dietetic Traineeship (Columbia, Missouri), 1976; M.S., Purdue University, 1977; D.M.Sc., Indiana University, 1988

Forgey, Danita H. (H.I.A.); Lecturer and Program Director of the Health Information Administration Program; B.S., Indiana University, 1981; M.S., Indiana University, 2001

Frain, Barbara M. (C.T.); Clinical Assistant Professor of Cytotechnology; B.S., Indiana University, 1986; M.S., Indiana University, 1993

Gable, Karen E. (R.D.H.); Associate Professor and Director of the Health Sciences Education Program; B.S., Indiana University, 1976; M.S., Indiana University, 1979; Ed.D., Indiana University, 1985

Griswold, Patricia A. (O.T.R., F.A.O.T.A.); Clinical Assistant Professor of Occupational Therapy and Coordinator of Fieldwork; B.S., Indiana University, 1963; M.S., Butler University, 1971

Hallam, Judith A. (E.M.T.-P, R.N.); Clinical Associate Professor; B.S.N., Indiana University, 1982; M.S.Ed., Indiana University, 1990

Hamant, Celestine (O.T.R., F.A.O.T.A.); Associate Professor and Director of the Occupational Therapy Program; B.A., Saint Mary-of-the-Woods College, 1962; Certificate, Occupational Therapy, Washington University (St. Louis), 1964; M.S., Butler University, 1974

Hartsell, Heather D. (P.T.); Associate Professor of Physical Therapy; B.A., The University of Western Ontario, 1975; M.S., University of Alberta, 1978; Ph.D., University of Alberta, 1982; B.S., Physical Therapy, University of Western Ontario, 1987

Hernandez, Emily M. (R.T.(R)(Q.M.), A.R.R.T.); Associate Professor and Director of Radiologic Sciences; A.S., Indiana University, 1970; B.S., Indiana University, 1974; M.S., Indiana University, 1978

Hoye, Glenda E. (R.T.); Lecturer and Director of the Histotechnology Program; B.S., Indiana University, 1998

Kasper, Linda M. (M.T., S.C.); Associate Professor and Director of Clinical Laboratory Science Program; B.S., Florence State University, 1962; M.S., Indiana University, 1977

Kehrein, Suetta (R.T.(R), A.R.R.T.); Assistant Professor of Radiologic Sciences; A.S., Indiana University, 1968; B.S., Indiana University, 1970; M.S., Indiana University, 1975

Kiel, Judith L. (O.T.R.); Clinical Associate Professor of Occupational Therapy and Coordinator of Admissions; B.S., Indiana University, 1969; M.S., Indiana University, 1979

Kosegi, Judith E. (C.N.M.T., R.T.(R)(N), A.R.R.T.); Associate Professor of Radiologic Sciences; A.S., Indiana University, 1970; B.S., Indiana University, 1972; M.S., Indiana University, 1978; M.S., Indiana University, 1978

Koss, Joseph A. (R.R.T.); Associate Professor and Director of Clinical Education for the Respiratory Therapy Program; B.S., University of Wisconsin, 1964; M.S., Indiana University, 1977

Long, Bruce W. (R.T.(R)(CV), A.R.R.T.); Associate Professor of Radiologic Sciences; B.S., Murray State University, 1977; M.S., Eastern Illinois University, 1983

MacKinnon, Joyce L. (P.T.); Professor and Associate Dean for Academic Affairs; B.A., Ohio Wesleyan University, 1972; M.P.T., Baylor University, 1974; Ed.D., North Carolina State University, 1987

Marler, Linda M.; Associate Professor and Clinical Microbiology Education Coordinator of Clinical Laboratory Science; B.S., Indiana University, 1973; M.S., Indiana University, 1978

Miller, M. Devon; (R.H.I.A.) Assistant Professor of Health Information Administration; B.A., Goshen College, 1960; M.S., Indiana University, 1966

Oldridge, Neil B.; Professor and Director of Therapeutic Outcomes Research Program; B.A., Rhodes University, 1959; M.A., University of Florida, 1966; Ph.D., University of Wisconsin-Madison, 1972

O’Palka, Jacquelyn (R.D.); Professor of Clinical Nutrition and Director of the Nutrition and Dietetics Program; B.S., California State University at Northridge, 1968; M.S., Pennsylvania State University, 1970; Ph.D., Pennsylvania State University, 1973

Perry, Douglas G.; Associate Professor; A.A., Skyline College, 1973; B.S., Regents College, 1978; M.S., State University of New York at Stony Brook, 1983; M.A., City University of New York, 1989; Ph.D., City University of New York, 1991

Porter, Rebecca (P.T.); Associate Professor of Physical Therapy; Interim Executive Director of Enrollment Services, and Interim Associate Vice Chancellor for Student Services; B.S., Indiana University, 1972; Ph.D., Indiana University, 1991

Quillen, William S. (P.T., S.C.S.); Associate Professor and Director, Physical Therapy Program; B.S., Springfield College, 1973; M.Ed., University of Missouri, 1974; B.S., University of Central Arkansas, 1977; M.P.A., Golden Gate University, 1986; Ph.D., University of Virginia, 1989

Rafert, John A. (R.T.(R), A.R.R.T.); Associate Professor of Radiologic Sciences; A.S., Indiana University, 1985; B.S., Indiana University, 1970; M.S., Indiana University, 1980

Rickard, Karyl (R.D., F.A.D.A.); Professor of Nutrition and Dietetics; B.S., University of Wyoming, 1966; Dietetic Internship, V.A. Medical Center (Houston), 1967; M.S., University of Wisconsin, Madison, 1976; Pediatric Nutrition Fellowship, University of Washington Child Development Center (Seattle), 1970; Ph.D., Purdue University, 1978

Robinson, Susan. (R.T.(R), A.R.R.T.); Assistant Professor of Clinical Radiologic Sciences; A.S., Indiana University, 1972; B.S., Indiana University, 1973; M.S., Indiana University, 1997

Rodak, Bernadette E.; Associate Professor of Clinical Laboratory Science; B.S., Mount St. Agnes College, 1968; M.S., University of Kentucky, 1980

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