# Division of Allied Health Sciences of the School of Medicine

**1968-69 INDIANA UNIVERSITY BULLETIN** 

# INDIANA UNIVERSITY

Bulletins for the following academic divisions of the University may be obtained from the Office of Records and Admissions, Bryan Hall, Indiana University, Bloomington, Indiana 47401, unless specified otherwise.

COLLEGE OF ARTS AND SCIENCES DIVISION OF OPTOMETRY SCHOOL OF BUSINESS\* SCHOOL OF DENTISTRY SCHOOL OF EDUCATION\* DIVISION OF GENERAL AND TECHNICAL STUDIES GRADUATE SCHOOL SCHOOL OF HEALTH. PHYSICAL EDUCATION. AND RECREATION NORMAL COLLEGE OF THE AMERICAN GYMNASTIC UNION JUNIOR DIVISION SCHOOL OF LAW+ GRADUATE LIBRARY SCHOOL SCHOOL OF MEDICINE DIVISION OF ALLIED HEALTH SCIENCES SCHOOL OF MUSIC SCHOOL OF NURSING DIVISION OF REGIONAL CAMPUSEST GRADUATE SCHOOL OF SOCIAL SERVICE SUMMER SESSIONS DIVISION OF UNIVERSITY EXTENSION§

<sup>\*</sup> Two Bulletins are issued: graduate and undergraduate.

<sup>†</sup> Two Bulletins are issued: Bloomington and Indianapolis.

Write to this Division (Owen Hall) for a Bulletin, specifying the particular regional campus.

<sup>§</sup> Brochures on the Correspondence Study Bureau, Bureau of Public Discussion, Labor Education and Research Center, and Audio-Visual Center are available from the Division (Owen Hall).

# BULLETIN OF THE DIVISION OF ALLIED HEALTH SCIENCES OF THE SCHOOL OF MEDICINE

INDIANA UNIVERSITY

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## INDIANA UNIVERSITY BULLETIN (OFFICIAL SERIES)

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Fort Wayne	9
Beech Grove	0
Affiliated Lecturers	0

# Calendars

## **Bloomington Campus**

## 1967-68

## 1**968-6**9

New student meetings		
Junior Division		
Transfer and graduate		Sept. 9, M
Counseling		Sept. 10, 11; T, W
Registration		Sept. 11, 12, 13, 14;
-		W, Th, F, S
Classes begin		Sept. 16, M, 7:30 a.m.
Mid-term reports due	Nov. 8, W, 5 p.m	Nov. 8, F, 5 p.m.
Thanksgiving recess begins		
(after last class)	Nov. 21, T	Nov. 26, T
Classes resume	Nov. 27, M, 7:30 a.m	Dec. 2, M, 7:30 a.m.
Christmas recess begins		
(after last class)		Dec. 21, S
Classes resume	Jan. 3, W, 7:30 a.m	
Advance registration		
(for second semester)		
Classes end		Jan. 16, Th
Exams begin		
Exams end	Jan. 26, F, 5:15 p.m	Jan. 25, S, 5:15 p.m.

## Second Semester

First Semester

New student meetings	М
Counseling	29: T. W
Registration	30, 31, Feb. 1;
W,	Th, F, S
Classes begin	M. 7:30 a.m.
Mid-term reports due	F. 5:00 p.m.
Spring recess begins	
(after last class)	, S
Classes resume	M
Founders' Day*	w
Advance registration	
(for first semester)	
Classes end	F
Exams begin	M. 7:45 a.m.
Memorial Day holiday	F
Exams end	Г. 5:15 р.т.
CommencementJune 10, M, 10 a.m. June 9, 1	M, 10:00 a.m.

## Summer Sessions

## Intersession

Counseling	June	4,	Τ	June	3,	. T
Registration	June	4	Т	June	4,	W, 8:00-12:00 a.m.
Classes begin	lune	5.	W. 7:30 a.m.	June	4.	W. 1:00 p.m.
Classes end	June	19	Ŵ	June	18	3, W

## Regular Session

New student meetings and				
counseling	June	18	, Т	June 16, M
Registration	June	19	ίV	V
Classes begin	June	20	( T	Th
Monday classes meet.	ľuly.	22.	ŚŚ	
Independence Day holiday	July	4.	Τĥ	LJuly 4, F
Tuesday classes meet.	July	6.	S	
Thursday classes meet	Aug.	- 3,	S	
Classes end	Auğ.	9,	F.	August 8, F
Postsession				
Counseling	Aug.	8.	TI	h
Registration	Aug.	9	F.	Aug. 11. M. 1:00-5:00 p.m.
Classes begin	Aug.	10.	. S	
Classes end	Aug.	24	, ŝ	Aug. 26, Ť

\* 9:30, 10:30, 11:30, and 12:30 classes do not meet.

## Calendars Division of Allied Health Sciences-Medical Center Campus

1967-68		First Sem	ester				
Registration         //.T.           Classes begin         W. Sept. 13           Thanksgiving recess begins—5 p.m.         F. Sept. 15           Classes resume—8 a.m.         M. Nov. 21           Christmas recess begins—5 p.m.         M. Nov. 21           Classes resume—8 a.m.         W. Jec. 20           Classes resume—8 a.m.         W. Jan. 3           Classes resume—8 a.m.         W. Jan. 17           Exams begin         F. Jan. 19           Exams end         F. Jan. 26	M. Rec. F. Sept. 8 W, Sept. 6 T, Nov. 21 M, Nov. 27 W, Dec. 20 T, Jan. 2 T, Jan. 16 W, Jan. 17 F, Jan. 19	M. Tech. F, Sept. 8 F, Aug. 25§ W, Nov. 22 M, Nov. 27 F, Dec. 22 T, Jan. 2 Arr.	O.T. M, Sept. 11 T, Sept. 12 T, Nov. 21 M, Nov. 27 W, Dec. 20 T, Jan. 2 T, Jan. 16 W, Jan. 17 F, Jan. 19	<i>P.T.</i> M, Sept. 11 T, Sept. 12 T, Nov. 21 M, Nov. 27 W, Dec. 20 T, Jan. 2 T, Jan. 16 W, Jan. 17 F, Jan. 19	P.H. Group F, Sept. 8 M, Sept. 11 T, Nov. 21 M, Nov. 27 W, Dec. 20 T, Jan. 2 Th, Jan. 11 M, Jan. 15 F, Jan. 19	D. Hyg. F, Sept. 8 M, Sept. 11 T, Nov. 21 M, Nov. 27 Th, Dec. 21 T, Jan. 2 Th, Jan. 11 M, Jan. 15 F, Jan. 19	R. Toch. M. Sept. 18 M. Sept. 11 W. Nov. 221 M. Nov. 201 T. Jan. 2 T. Jan. 16 W. Jan. 17 F. Jan. 26
Registration M. Jan. 29	t M. Jan. 29	i M. Jan. 22	mester 1 M. Jan. 29	M. Jan. 29	(M. Tan. 29	1 M. Jan. 22	M. Feb. 5
Classes begin.       M, Jan. 29         Spring recess begins—5 p.m.       S, Apr. 6         Classes Resume—8 a.m.       M, Apr. 15         Founders' Dayt       W, May 1         Classes end—5 p.m.       F, May 17         Exams begin.       M, May 22         Commencement—10 a.m.       M, June 10	M, Jan. 22 Th, Apr. 11 M, Apr. 22 W, May 1 F, May 3 Arr.* M, June 10	M, Jan. 22 Th, Apr. 11§ T, Apr. 16 W, May 1 Arr. M, June 10	W, Jan. 24 Th, Apr. 11 M, Apr. 22 W, May 1 F, May 17 M, May 20 W, May 22 W, June 10	W, Jan. 24 Th, Apr. 11 M, Apr. 22 W, May 1 F, May 17 M, May 20 W, May 22 M, June 10	M, Jan. 29 F, Apr. 5 M, Apr. 15 W, May 1 Th, May 23 F, May 24 W, May 29 M, June 10	M, Jan. 22 Th, Apr. 4 M, Apr. 15 W, May 1 Th, May 23 F, May 24 W, May 29 M, June 10	M, Feb. 5 T, Apr. 9 Th, Apr. 18 F, May 17 M, May 20 F, May 24 Sun, Aug. 25
Provision IM June 17	,	Summer S	ession	1		,	Clinical
Classes begin			Practice	M, June 24 F, Aug. 16			Practice
1968-69		First Sem	ester				
Registration       1.T.         Classes begin       T. Sept. 3         Thanksgiving recess begins—5 p.m.       W. Sept. 4         Classes resume—8 a.m.       M. Dec. 2         Christmas recess begins—5 p.m.       F. Dec. 20         Classes resume—8 a.m.       M. Jan. 13         Classes end—5 p.m.       F. Dec. 20         Exams begin       F. Dec. 20	M. Rec. T, Sept. 3 W, Sept. 4 W, Nov. 27 M, Dec. 2 F, Dec. 20 M, Jan. 13 F, Dec. 20	M. Tech. T. Sept. 3 M, July 1 W, Nov. 27 M, Dec. 2 F, Dec. 20 Th, Jan. 2	0.T. T. Sept. 3 W, Sept. 4 W, Nov. 27 M. Dec. 2 F. Dec. 20 M. Jan. 13 F. Dec. 20	P.T. T. Sept. 3 W, Sept. 4 W, Nov. 27 M. Dec. 2 F. Dec. 20 M. Jan. 13 F. Dec. 20	P.H. Group T. Sept. 3 W, Sept. 4 W, Nov. 27 M, Dec. 2 F. Dec. 20 M, Jan. 13 F, Dec. 20	D. Hyg. M, Sept. 9§ T, Sept. 10 T, Nov. 26 M, Dec. 2 F. Dec. 20 M, Jan. 6	R. Tech. M, Sept. 9 M, Sept. 16 T, Nov. 26 M, Dec. 20 M, Jan. 6 F, Jan. 17 M, Jan. 20 W, Jan. 29
Registration   M, Jan. 13	M, Jan. 13	M, Jan. 13	M, Jan. 13	M, Jan. 13	M, Jan. 13	M, Jan. 13	M, Feb. 3
Classes begin	T. Jan. 14 F. Feb. 28 M. Mar. 17 W. May 7 F. May 16 M. June 9	1h, Jan. 2 Th, Apr. 3 T, Apr. 8 W, May 7 F, June 27 M, June 9	T, Jan. 14 F, Feb. 28 M, Mar. 17 W, May 7 F, May 16 M, June 9	T, Jan. 14 F, Feb. 28 M, Mar. 17 W, May 7 F, May 16 M, June 9	T. Jan. 14 F. Feb. 28 M. Mar. 17 W. May 7 F. May 16 M. June 9	M, Jan. 6 Th, Apr. 3 M, Apr. 148 W, May 7 Th, May 29 M, May 26 M, June 9	M, Feb. 3 F, Mar. 28 M, Apr. 7 F, May 16 M, May 19 W, May 28 Sun, Aug. 24
Pasistantian 136 June 17	1	Summer S	ession	1	5	1	1
Classes begin			Clinical Practice	M, June 23 F, Aug. 15			Clinical Practice

\* Medical Records Finals before May affiliation. Core courses end May 3. † Qualified students are excused to attend the ceremonies.

t Vacations begin at 12 noon. \$ Subject to earlier starts by some students.

# Indiana University General Statement

Indiana University. Created in 1820 by an act of the general assembly, Indiana University has grown until it is now ranked the eleventh largest university in the nation in terms of full-time enrollment. The University is composed of 12 academic schools and 5 divisions, with a faculty exceeding 2,500. To meet the needs of approximately 47,000 full- and part-time students, the University offers 5,000 courses of instruction in more than 100 departments. Its graduate divisions offer 36 advanced degrees in 62 areas.

Students from all 50 states and from many foreign nations are enrolled on its Bloomington, Medical Center, and regional campuses. Indiana University at Bloomington is in year-round operation, with two regular semesters and a three-session summer program which is one of the largest in the nation.

Campuses. The main campus of the University at Bloomington comprises 2,000 acres of woodland traversed by the meandering stream known to generations of students as the Jordan River. Most major academic buildings are confined to the area between Third and Tenth Streets and Indiana and Jordan Avenues, while residence halls, fraternity and sorority houses, and University service divisions border this area. Buildings for the most part are constructed of native limestone, enhancing the natural beauty of the campus.

Regional campuses and centers, most of them in new buildings and expanded settings, are located in East Chicago, Fort Wayne, Gary, Indianapolis, Jeffersonville, Kokomo, Richmond, South Bend, and Vincennes.

Additional University facilities include Bradford Woods, Crooked Lake, the Geologic Field Station in Montana, the Lake Monroe biology site, the Goethe Link Observatory, and Camp Brosius at Elkhart Lake, Wisconsin.

## ADMISSION

An Indiana resident who (1) graduates from a commissioned (or accredited) high school, (2) ranks in the top half of his class, (3) makes scores above average for a high school senior on the College Board Scholastic Aptitude Test (SAT) or the American College Test (ACT), and (4) completes application procedures at the appointed time may expect admission to Indiana University. Most divisions enrolling freshmen use the same procedures and standards. The Admissions Committee is authorized to make exceptions to the above standards and invites students to submit evidence of unusual skills or abilities. The Division of General and Technical Studies has different admission policies; please consult its *Bulletin*.

Preparatory courses should include four years of English (one-half unit each of speech and journalism may be included) and nine or more units in mathematics, science, foreign language, and social studies. Students seeking admission to the College of Arts and Sciences, School of Nursing, and the Division of Allied Health Sciences should include two or more years each of mathematics, science, and foreign language.

Out-of-state freshmen will be selected from applicants whose rank and test scores are in the top fourth of high school seniors.

Transfer applicants from Indiana whose grades at all colleges attended average at least C (2.0 on a 4.0 system), whose records of conduct are clear, and whose applications have been completed at the appointed time may expect admission.

Out-of-state transfer students will be admitted from applicants with an average of B or better.

Applications may be filed after completion of the junior year in high school. Early admission will be granted to superior students who have completed the required tests and are taking the necessary senior subjects. Transfer applicants may apply during the school year preceding proposed entry. Closing dates for applications are January 5 for second semester, May 15 for summer sessions, and July 15 for September. A fee of \$10 is required of each applicant who is new to the University. All questions concerning admission should be directed to the Office of Admissions, Bryan Hall, Indiana University, Bloomington, Indiana 47401.

Inter-Campus and Intra-University Transfers. Students who have been regularly admitted to Indiana University, who have attended at one campus or in one degreegranting division and who have maintained a 2.0 accumulative grade-point average may transfer to another campus or another degree-granting division or program by complying with established procedures. For this purpose compliance with prescribed filing dates given above is essential.

Transfer students applying for admission to Indiana University, to a program within the Division of Allied Health Sciences, will NOT be admitted by the Admissions Office. The Admissions Office will forward to the Division of Allied Health Sciences Office the transfer credit report. The Division Office will, in turn, forward this report to the Program Director for his/her recommendation. This procedure requires extra time; therefore, applications should be filed early. Similarly, admissions to the Division of General and Technical Studies will be forwarded for action.

## FEES

Indiana University does not charge resident students a tuition fee for the cost of instruction. Fees charged nonresidents cover in part the cost of instruction. A portion of fees is allocated for cultural and recreational uses and for health services.

Fees are paid at the time of registration each semester and are subject to change by action of the Trustees.

Fee Courtesy. Faculty and staff members and their wives receive 50 percent reduction in basic fees; there is no reduction in special fees, rentals, or deposits.

Basic Costs. Expenses for attending Indiana University at Bloomington for an academic year, including in-state fees, housing (room and board), and books and supplies, total approximately \$1,346. Expenditures for clothing, travel, entertainment, and personal items are not included in this estimate.

## Schedule of Fees, 1968-69

RATES PER SEMESTER (Flat Rates)	In-State \$195	Out-of-State
Allied Health Sciencest Radiologic Technology (IUMC)		510-525 <b>*</b> 140
RATES PER CREDIT HOUR (1-9 Hours)		
Junior Division	\$ 15 	\$ 34-35 <b>*</b> 34-35 <b>*</b>
Undergraduate Graduate		23 26
	Full Withdrawal	Partial Withdrawal
Fee Refund Schedule—First and Second Semester First Week (until Class Change Day)	100%	100%
Second and Third Week	50% or all except \$50, whichever is larger	0%
Thereafter	0%	0%

\* Matriculants.

† A special supervisory fee of \$50 is charged in the Occupational and Physical Therapy Programs.

High School Work				\$18 per	COURSE
Residents and Nonresidents			\$15	per cred	lit hour
Adult Education Courses	Fees a	as announ	iced	by each	campus

## SUMMER SESSION RATES PER CREDIT HOUR

Indergraduate       15       23         Graduate       18       26         Full       Partial         Withdrawal       Withdrawal         Fee Refund Schedule—Summer Session       100%         First Week (until Class Change Day)       100%         Second Week       50% or         all except \$50,       0%         Thereafter       0%       0%	Junior Division		\$ 15 15	\$ 34-35* 34-35*
Graduate	Lindergraduate		15	23
Full     Partial       Withdrawal     Withdrawal       Fee Refund Schedule—Summer Session     100%       First Week (until Class Change Day)     100%       Second Week     50% or       all except \$50,       whichever is larger       0%     0%	Graduate		18	26
Fee Refund Schedule—Summer Session       100%       100%         First Week (until Class Change Day)       100%       100%         Second Week       50% or       0%         all except \$50,       whichever is larger         Thereafter       0%       0%		Full Withdrawal		Partial Withdrawal
First Week (until Class Change Day)       100%       100%         Second Week       50% or       0%         all except \$50,       whichever is larger         Thereafter       0%       0%	Fee Refund Schedule-Summer Session			1000
Second Week	First Week (until Class Change Day)	100%		100%
Thereafter	Second Week	50% or all except \$50 whichever is 1	), arger	0%
	Thereafter	0%		0%
SPECIAL FEES (in addition to basic fees)	SPECIAL FEES (in addition to basic fees)			
Special Examination	Special Examination	\$ 5		

Other incidental special fees include laboratory, rentals, breakage, deposit, etc.

## HOUSING AT BLOOMINGTON

The Halls of Residence system at Indiana University, recognized as outstanding among universities throughout the country, includes housing units for graduate, married, and single students. All freshman women are required to live in either University Halls of Residence or in officially approved private dormitories, except those exempted by the Dean of Students on the basis of employment or local residence with relatives. Other housing accommodations are available in private homes, approved by the University, and in fraternity and sorority houses.

Rates in the Halls of Residence range from \$680 to \$980 an academic year for single housing and from \$50 to \$155 a month for married housing apartments or trailers. Less expensive accommodations for single students are provided in cooperative and residence scholarship housing units. Fraternity and sorority housing runs slightly higher than Halls of Residence. When requesting housing accomodations in the University Halls of Residence, the student must enclose a \$25 deposit with his application. The Off-Campus Housing Office maintains a list of private rooms. The Housing Offices are located at 801 North Jordan, Indiana University, Bloomington, Indiana 47401.

## ACADEMIC REGULATIONS

Degree Requirements. The student is held responsible for understanding all requirements for graduation and for completing them by the time he expects to graduate. Information concerning a specific school or division can be obtained by consulting the bulletin of that school.

Total hours required for the baccalaureate degree are 122 to 124, determined by the individual school. A minimum cumulative grade-point average of 2.0 (on a 4.0 basis) is necessary. Class standing is based on credit hours completed: freshman, fewer than 27; sophomore, 27-55; junior, 56-85; senior, 86 or more.

\* Matriculants.

## INDIANA UNIVERSITY

## JUNIOR DIVISION

All students entering Indiana University directly from high school and all students transferring to the University during their freshman year enter the Junior Division. The chief purpose of the Junior Division is to guide the freshman student toward his educational goal.

**Counseling.** Each freshman is assigned a faculty counselor (usually in his major department), who advises him in his program planning and assists him with any academic questions or problems.

Orientation and Registration. All new freshmen should participate in the preregistration program held from mid-July through early August, and all freshmen will be expected to participate in the fall orientation program on campus, which acquaints them with organizations and services of the University and instructs them in study techniques.

## SCHOLASTIC INFORMATION

Minimum and Maximum Semester Enrollment. Students are not permitted to enroll in fewer than 12 or more than 17 hours except with permission of the Dean. Normally a student must have earned a grade-point average of 3.0 or higher in his last completed semester to receive permission to carry more than 17 hours. Only in very exceptional cases may a student's semester enrollment exceed 19 hours.

Grades. The quality of a student's work is indicated by the following grades:

A-Unusual degree of academic performance.

B-Above average achievement.

C---Average achievement.

D-Passing work but below desired standards.

F—Failure in a course or failure to complete a course without an authorized withdrawal.

S-Satisfactory. May be used only with approval of the Dean of the School and the Dean of the Faculties. Credits earned with the grade S count toward graduation but are not computed in the grade-point average. The grade S is assigned where credit by examination is awarded by the University when the examination is of passing quality but does not clearly merit an A grade.

W-Withdrawn. Given automatically when the student, with the approval of his academic adviser and the Dean, officially withdraws during the first three weeks of a semester or first two weeks of a summer session. After these deadlines the grade W is given, in the instance of an approved and properly executed withdrawal, only if the student is passing at the time of withdrawal.

WF—Withdrawn failing. Given when the student withdraws after three weeks of a semester or two weeks of a summer session, if his work is not passing at the time of withdrawal.

I—Incomplete. May be given only when the completed portion of a student's work in the course is of passing quality. When an Incomplete is assigned, a record must be maintained in the office of the department in which the grade was given. The record will include a statement of the reason for recording the Incomplete and an adequate guide for its removal, with a suggested final grade in the event of the departure or extended absence of the instructor from the campus.

When the grade of Incomplete is given because the student missed the final examination, he will be allowed to remove the Incomplete by taking the examination only if he has the approval of the Committee on Absence and the instructor.

The student may not register in a course in which he has a grade of Incomplete.

These regulations do not apply to research and reading courses in which completion of the work of the course is not necessarily required at the end of the semester. Once a student has graduated, nothing in these regulations shall prohibit the Incomplete from remaining on the record.

Withdrawals. A grade of W is given automatically to the undergraduate student who withdraws during the first three weeks of a regular semester and during the first two weeks of a summer session on the date of his withdrawal. Thereafter, it is given only when the student withdraws with the approval of his dean, based on urgent reasons relating to health or equivalent distress, and if the student is passing on the date of withdrawal. If the student is failing on the date of withdrawal, the grade recorded on that date shall be WF (withdrawn, failing). If a student is not in attendance during the last several weeks of a semester, the instructor may report a grade of I (indicating the work is satisfactory at the end of the semester but has not been completed) if he has reason to believe the absence was beyond the student's control; if not, he shall record a grade of F. A grade of Incomplete must be removed within one calendar year of the date of its recording or the dean of the school in which the student is enrolled will authorize the grade to be changed to F. A grade of Incomplete may be removed if the student completes the work within the time limit or if the dean authorizes the change of the Incomplete to W.

Addition of Courses. No course may be added by undergraduate students after the first two weeks of a regular session or one week in a summer session unless the instructor of the course petitions that an exception be made and the request is approved by the dean of the school in which the course is offered and the dean of the school in which the student is enrolled.

Absences. Illness is usually the only acceptable excuse for absence from class and must be officially confirmed. A student's excessive absence will be reported by his instructor to the Dean of Students.

A student who misses a final examination and who has a passing grade up to that time is given temporarily a grade of incomplete if the instructor has reason to believe the absence was beyond the student's control. The Committee on Absence of the Office of the Dean of Students reviews excuses for absences from final examinations and notifies instructors of its decisions.

Academic Probation and Dismissal. A student is on academic probation whenever his accumulative grade-point average is below C (2.0). He is also on probation for the duration of the next regular semester or summer session in which he is enrolled, following the one in which he failed to attain a C (2.0) average.

Every student on academic probation must comply with such restrictions as the Office of the Dean of Students or the dean or director of the school or campus in which the student is registered may deem necessary.

Dismissal. Specific minimum standards must be met in order to be retained as a candidate for a baccalaureate degree. Junior division students will be dismissed if:

1. At the end of one semester their grade-point average falls below 0.8.

2. At the end of the second semester if their accumulative grade-point average falls below 1.5.

3. At the end of the third semester if their accumulative grade-point average falls below 1.89.

Students in the Division of Allied Health Sciences are dismissed when in the judgement of the council of program directors they have ceased to make progress toward a degree. When a student has failed to attain a C (2.0) average in any two semesters and has an accumulative average below C (2.0), or when he has failed to make higher than a D (1.0) average in any one semester, he will be dismissed as not making progress toward his degree. Opportunities for Superior Students. The honors program, offered by some schools of the University, allows the student of superior ability and achievement to follow a course of independent study and research. Special sections for accelerated work are offered in some courses, and, by special examination, one may establish advanced standing or gain exemption from certain required courses. Further information on specific honors programs may be obtained by consulting the department head or the dean of the school.

Students satisfying the requirements of a departmental honors program are granted degrees with Honors. The University also recognizes high cumulative grade averages by awarding degrees with various designations of "Distinction," "High Distinction," and "Highest Distinction."

Credit by Examination. The student may no longer receive credit for language courses by performance on placement examinations. The student who believes he is eligible for special credit because of superior preparation or independent study is especially urged to accelerate his college program by taking appropriate examinations.

## STUDENT SERVICES AT BLOOMINGTON

Scholarships and Financial Aids. Information concerning scholarships and loans available to undergraduate students may be obtained from the Director of Scholarships and Financial Aids, Room 205, Maxwell Hall, Indiana University, Bloomington, Indiana 47401. Graduate students may obtain information on scholarships and fellowships through the Office of the Graduate School.

**Employment.** Through the Office of Scholarships and Financial Aids, openings are listed for part-time jobs in the Halls of Residence, campus offices, libraries, Bookstore, Indiana Memorial Union, and fraternity and sorority houses. Students seeking suitable employment should contact the Office of Scholarships and Financial Aids, Indiana University, Bloomington, Indiana 47401.

Libraries. Ranked eleventh in size among university libraries in America, the Indiana University Libraries system contains more than 5,000,000 items. Most of the books and periodicals have been selected by the faculties of the various departments to facilitate both instruction and research. Comprising the University Libraries system are a main library, for graduate and faculty use; an undergraduate library; the Lilly Library, for special collections and rare books; the several libraries at the regional campuses; school libraries, such as Music, Medicine, Law, etc.; and collections at housing units in the Halls of Residence system. In addition, many departments have collections centered around their specific areas of interest.

The Student Health Service. Available to all regularly enrolled students on the Bloomington Campus, the health service provides: an evaluation of the physical examination required of all students coming to the Bloomington Campus for the first time; outpatient medical care similar to that expected from the student's family physician; admission to the 108-bed infirmary for treatment of minor and many major medical problems; a Psychiatric Clinic for evaluation and short-term therapy; a program in Environmental Health and Preventive Medicine; and assistance in the administration of the Student Group Hospital Insurance Plan. The Health Center is located at the corner of Tenth Street and Jordan Avenue.

Clinical Services. Students have access to several clinics at the University. The Reading and Study Skills Center helps students to improve reading speed and comprehension. The Remedial Speech and Hearing Clinic provides therapy for students who have speech and hearing defects, while the Psychological Clinic of the Department of Psychology, the Student Health Psychiatric Service, and the Counseling Office of the Division of Student Personnel help students with personal problems or with special problems in choosing careers. Placement Services. The University maintains three job placement bureaus which serve students free of charge. The Bureau of Educational Placement registers qualified students for teaching and associated positions. The Business Placement Office of the School of Business arranges interviews with recruiters from business and industry for students of all schools and divisions and for University alumni. It also publishes a list of positions open in business and industry. The Government Placement Office in Ballantine Hall helps students to find employment with local, state, and federal agencies, including civil and foreign service agencies.

Indiana Memorial Union. Centrally located on campus, the Union provides numerous services. The Commons and Kiva are popular for snacks, the Cafeteria for self-service meals, and the Tudor Room for leisurely dining. Also in the Union are barber and beauty shops; a newsstand and post office; meeting rooms; three large lounges; a browsing room; a bowling alley; and a billiards room. Guest rooms for visitors are available in the Union's Biddle Continuation Center.

The Bookstore, also located in the Union, carries required and supplementary texts, used books, and supplies, as well as University insignia apparel and souvenirs. It also maintains a check-cashing service for the convenience of students and faculty. This self-supporting department of the University has two branch stores, one in Gresham Hall of Foster Quadrangle, and one in Clark House of Daniel Read Center.

## STUDENT ACTIVITIES AT BLOOMINGTON

Students are encouraged not only to attend but to take part in extracurricular programs and activities, including athletics, theatre presentations, the more than forty musical organizations on campus, debate and public speaking activities, and programs of the Department of Radio and Television. Others become interested in working with student publications, such as *The Indiana Daily Student*, campus newspaper; the yearbook, *Arbutus*; and creative writing magazines.

Recreation. In addition to recreational programs of the Halls of Residence, social events of fraternities and sororities, and activities of independent groups, a program of indoor sports and recreation including bowling, table tennis, billiards, television, cards, and chess is maintained by the Indiana Memorial Union. A well-equipped Craft Shop is available to students without charge. The Union Board sponsors such events as Campus Quiz Bowl, formal dances and dinners, and pop concerts with nationally known dance bands and top entertainers. Special interest groups including the Spelunking, Sailing, and Rifle Clubs offer a variety of activity. Beechwood Heights, the University's 33-acre recreational area on Lake Lemon, provides facilities for swimming, sailing, picnicking, and outdoor games. Large state forest preserves and state parks are also within easy driving distance of the campus.

Cultural Events. The world's leading concert artists, professional Broadway plays, musicals, and ballets come to the campus for performances on the Auditorium, Auditorium Theatre, and Extra Concert Series. Free convocations feature outstanding lectures and distinguished presentations in politics, public affairs, sciences, and the arts. Reading and discussion series and forums and art exhibits also are among the cultural opportunities available for students. The School of Music presents professionally acclaimed student productions in the fields of opera, recital, and ballet. The University Theatre and the Indiana Theatre Company offer a full season of the best in drama on campus and, in summer seasons, at the Brown County Playhouse in Nashville, Indiana.

Social and Traditional Events. Homecoming, President's Ball, Little 500 Weekend, Military Ball, and Christmas Eve on Campus are among the traditional events on campus. Athletic Events. Indiana University is a member of the Big Ten Conference and participates in all Big Ten sports: football, baseball, basketball, golf, tennis, track, swimming, wrestling, and gymnastics. A large new stadium and field house are supplemented by other facilities including several sports fields, swimming pools, golf courses, and tennis courts.

An extensive intramural sports program provides recreational opportunity for every student. The finest facilities for swimming, golf, tennis, volleyball, archery, and bowling are available.

Student Government. All students are urged to take part in the activities of student government, ranging from those of their living unit to the all-campus student government represented by the Executive (student body president and his cabinet), Legislative (Student Senate), and Judicial (Student Supreme Court) branches.

Student Organizations. There are approximately 150 student organizations on campus other than fraternities, sororities, and Halls of Residence groups, as well as representative groups of many local, state, national and international organizations.

Scholastic Honoraries. Indiana University has chapters of the freshman scholastic organizations Alpha Lambda Delta, for women, and Phi Eta Sigma, for men. Other selective honoraries, such as Phi Beta Kappa of the College of Arts and Sciences, Order of the Coif of the School of Law, and Phi Delta Kappa of the School of Education, are described in the specific school bulletins.

Recognition Honoraries. Mortar Board for senior women and Blue Key for junior and senior men are national activity honoraries on campus which recognize their members for scholarship, leadership, and service. Other campus recognition groups for men include Tomahawk, independent sophomores; Flame Club, independent sophomores or above; Skull and Crescent, organized sophomores; Falcon, organized juniors; and Sphinx, organized seniors. For women, groups are Enomene for sophomores, and Pleiades for organized juniors and seniors.

Religious Organizations. All church denominations welcome students into their worshipping congregations, and many churches sponsor specialized programs for students. General religious groups on campus conduct extensive religious, social, and service activities. The Beck Chapel, near the center of the campus, serves all faiths and beliefs.

## Medical Center Campus

The Indiana University Medical Center consists of 80 acres and includes the Schools of Medicine, Dentistry, and Nursing, and the Division of Allied Health Sciences, the Robert W. Long Hospital, the James Whitcomb Riley Hospital for Children (including the Kiwanis Wing), the Rotary Building, the Clinical Building, the William H. Coleman Hospital for Women, the Union Building, the Medical Science Building, and the new Adult Hospital, which is now under construction. Located adjacent to the Medical Center are Marion County General Hospital, Veterans Hospital, and the LaRue D. Carter Memorial Hospital. Such a situation is ideal for study in all programs of the health sciences. Students are admitted to all of the University hospitals and clinics for training and observation.

Also located in Indianapolis are the Indianapolis Downtown Campus, the University's Graduate School of Social Service, the Indianapolis School of Law, the Normal College of the American Gymnastic Union, and the Herron School of Art.

## HOUSING AT INDIANAPOLIS

Official housing applications for Indianapolis Medical Center Campus housing may be obtained from Philip McQuillen, Director of Housing, Indiana University Medical Center, 440 North Winona Street, Indianapolis, Indiana 46202. A small photograph and a \$25 loss and breakage deposit must accompany the application. Space assignments are made on the basis of the date the deposit is received. The Housing Office also maintains a file of approved off-campus facilities which may be checked in person in this office.

Dormitories for unmarried students are located adjacent to, and directly connected with the Union Building. Rates are: double, \$48 per month; single, \$70 per month (single-rate facilities are limited and rarely available). Each floor includes a lounge, and at the top of the building is a roof lounge for parties and informal social meetings. Each room includes storage space, campus telephone, and air conditioning. Central bathrooms are available on each floor. The dormitory wing is accessible to the main cafeteria and lounge of the Union Building.

Winona Village (for men only) consists of temporary barrack-type units with 35 double rooms accommodating 70 men, located west of the Union Building. Rates are: double, \$35 per month; single, \$47.50 per month (if available).

Unfurnished apartments for married students include efficiency, one-bedroom, and two-bedroom accommodations. The rentals range from \$57 to \$109 per month. Furnished apartments include efficiencies at \$96.50 per month and one-bedroom apartments at \$120 per month.

## STUDENT ACTIVITIES AT INDIANAPOLIS

The city of Indianapolis has much to offer the student. The nationally famous Indianapolis Symphony presents concerts throughout the winter season. Several civic theatre groups as well as frequent visits of touring troupes provide a widely varied program of plays. Both Indiana and Purdue Universities maintain regional campuses in Indianapolis. Butler University, Indiana Central College, and Marian College are all located in Indianapolis. Art galleries, libraries, and museums enrich the city. There are seven radio stations, three television studios, and many movie houses to entertain the Indianapolis resident. The proximity of Bloomington also allows an evening's entertainment on the campus. A series of inviting programs of theatre, music, and lectures which the Medical Center student may attend are scheduled on the Bloomington Campus. Indiana University basketball and football tickets are available at student prices and many Medical Center students plan weekends on the Bloomington Campus as part of their social calendar.

A variety of recreational activities is offered to students. Facilities are available for dances, teas, parties, movies, tennis, archery, ping pong, baseball, badminton, basketball, swimming, and bicycling.

Student Union Board. The Student Union Board is the central student organization whose objective is to provide cultural, social, and recreational activities for the student body. The organization is composed of two representatives from the eight school divisions of Indiana University in Indianapolis. These include the Schools of Medicine, Nursing, and Dentistry, the Indianapolis School of Law, the Graduate School of Social Service, the Division of Allied Health Sciences, the Normal College of the American Gymnastic Union, and the Indianapolis Downtown Campus. This council, representative of all the schools on the campus and the downtown regional campus, sponsors dances, movies, and mixers. Eight medical and dental fraternities add to the social scene, as do the activities of the various schools and classes.

Music. The campus chorus, Medical Center Choraliers, is open to all students on the Medical Center Campus. It provides music for school and civic occasions.

**Religious Activity.** The Medical Center chaplain's office is open for personal appointments at any time. A chaplain is available for students of each faith to provide spiritual leadership to individuals and to their religious groups.

Campus religion groups include: the Inter-Varsity Christian Fellowship, and the Newman Club, primarily for Catholic students.

## STUDENT SERVICES AT INDIANAPOLIS

Union Building. This campus is one of the few medical centers in the country that has its own Union Building. The Union Building provides a variety of activities and services to students, faculty, and staff, and to visitors and guests of the University.

Eating facilities include a snack bar and cafeteria. A barber and beauty shop also are located in the Union.

The bookstore carries all necessary textbooks and supplies for the Schools of Medicine, Dentistry, and Nursing, and for the Allied Health Sciences courses. Magazines, supplies, novelties, and toilet articles may also be purchased.

Library. The combined libraries of the Schools of Medicine and Nursing are located in the Medical Science Building. The library contains 80,000 volumes and subscribes to 1,950 foreign and domestic periodicals. Many of the journal files are complete and gaps are being filled through exchange of duplicate volumes with other medical libraries, by gifts and through direct purchase. Current issues of some 400 periodical titles received are always available in the periodical reading room. The library seats 170 persons, and ready access to reference materials is provided by 2,500 volumes of selected indices, encyclopedias, and dictionaries placed on open shelves in the main reading room. The library of the School of Dentistry is also available to Allied Health Sciences students.

Student Health Service. This service is available to students of the Schools of Medicine, Nursing, and Dentistry, the Division of Allied Health Sciences, the Normal College of the American Gymnastic Union, and the Graduate School of Social Service, as well as to the staff and faculty of the University. It offers complete clinical and laboratory examinations, immunizations, dispensary or infirmary care for minor illnesses, and limited hospital care for major illnesses or surgical operations. Optional health insurance, which provides coverage for dependents and which extends coverage to the student when away from the Medical Center Campus, is also available.

## FINANCIAL AID

General University scholarships and financial aids are available to students in Allied Health, as well as scholarships and loans available only to Allied Health students.

Scholarships and Educational Opportunity Grants. General University scholarships are available to students of high academic achievement. Students whose parents are able to provide limited financial assistance are eligible to be considered for the Educational Opportunity Grant Program established under the Higher Education Act of 1965.

Loans. The Student Loan Program was established under the National Defense Act of 1958, and loans are available to full-time or half-time students who need financial assistance. The loan and interest thereon of any borrower who is employed full-time in the teaching profession in a public or private institution at any level, elementary, secondary, or higher education may be canceled up to a maximum of 50 percent at the rate of 10 percent a year.

The guaranteed loan program was established under the Higher Education Act of 1965. Loans made by commercial banks or other lending institutions are guaranteed by federal funds provided under the Act. Interest is paid by federal funds for students whose family income is under \$15,000 during the time the student is in school, and 3% of the interest is paid by federal funds during the repayment period which begins nine months after graduating or leaving school.

Applications. Application for financial aid should be made to the Office of Scholarships and Financial Aids, Indiana University, Bloomington, Indiana 47401. Incoming freshman students should apply before February 15. Upperclass students should apply by April 1 for renewal of previous awards and for consideration for new awards.

**Employment.** Any student wishing employment in the various departments of the University may apply to the Office of Scholarships and Financial Aids on the Bloomington Campus or to the Personnel Department at the Medical Center.

The federal Work-Study Program for which students in Allied Health also are eligible expands employment opportunities for students who must finance the major portion of their education. Application for the Work-Study Program is made through the general financial aid application mentioned above.

Aid To Veterans. The University is approved under the G.I. Bill and the War Orphans Education Program. Information on financial aid available to veterans under government benefits of public laws may be secured through the Veterans Administration Regional Office, 36 South Pennsylvania Avenue, Indianapolis, Indiana 46204.

Any student who has been a resident of Indiana for the last five years, and whose parent has a service-connected disability or whose parent's death was the result of service in the armed forces, is eligible for the Child-of-Disabled Veteran Award. This award pays all fees except building and health fees, which are nonremittable. Application for this award is made through the Office of Scholarships and Financial Aids.

## Division of Allied Health Sciences

As a part of the School of Medicine, the Division is concerned with the preparation of personnel in the health-related areas on the undergraduate level. The Division was established in September, 1959, by action of the Trustees of Indiana University. In 1960, the Board of 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 the following areas of study: Medical Records, Medical Technology, Occupational Therapy, Physical Therapy, Public Health Dental Hygiene, Public Health Education, and Public Health-Environmental Health. In 1964 the Public Health Administration Program was approved and in 1965 the Cytotechnology degree program. The first two-year associate degree program in Inhalation Therapy was approved in 1965.

Accreditation. The Division 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 Secondary Schools.

The programs in Cytotechnology, Medical Records, Medical Technology, Occupational Therapy, Physical Therapy, and Radiologic Technology are, in addition, fully approved by the Council on Medical Education of the American Medical Association.

As soon as a student wishes to select and enter an Allied Health Sciences program he should write the Division Director. This letter should explain how he became interested in and what his purpose is in entering the program. His/her special skills, interests, hobbies, and purposes should be included. Full explanation of any handicaps should also be included. This can be done at matriculation from one of the regional campuses or on certification out of the Junior Division. The minimum requirements for admission by certification include 26 credit hours with a minimum cumulative average of C. At least one personal interview is required. Ordinarily the program director and faculty serve as counselors and there are semester consultations. Special arrangements concerning personal interviews are possible for out-of-state applicants. Applications for entry into one of the programs are usually filled out at the personal interview, but may be obtained from Mrs. Miriam Rollins at the Bloomington Office, Room 202, Myers Hall, telephone 337-5912; the Indianapolis Office, Room 162, Medical Science Building, telephone 639-7349; or from the program directors.

Regional Campuses. Many of the degree courses required for programs in the Division of Allied Health Sciences are available at all regional campuses. In some programs the entire degree program may be completed on a regional campus (Fort Wayne, Northwest). Some nondegree programs may be offered only on a regional campus (dental assistant, Fort Wayne). Certificate and associate degree programs in the Division of General and Technical studies are being developed as regional need is demonstrated and funds become available. The Indianapolis Office through the various regional counselors keeps in contact with regional campus students, especially in connection with the courses offered at the various campuses. The rapid development of medicine and the great need for associated assistants results in the need for many additional workers in a variety of areas. As the need becomes manifest and funds become available, a number of offerings will be made through the Division of Allied Health Sciences under the administration of General and Technical Studies Associate in Science for two-year programs and the administration of the undergraduate School of Medicine for B.S. degree four-year programs.

In the Division of Allied Health Sciences the program directors comprise the Probation Committee (see page 9), the Admissions Committee (see pages 5, 18), and recommend the awarding of degrees, certificates, and honors. The Director of the Division acts as Dean of the Division.

Graduate Programs. Both the Graduate School and the Graduate Division of the School of Education offer opportunities for M.S. and Ph.D. degrees for the programs in the Division of Allied Health Sciences. Since most workers in health sciences are involved in teaching adults, the School of Education offers courses designed to prepare its students for adult education, while the Division provides the professional opportunity. The Graduate School both in Bloomington and at Indianapolis offer options in biochemistry and microbiology for medical technologists. Because admission and degree requirements vary, a candidate should communicate both with the Division of Allied Health Sciences and a particular graduate school or division. Each candidate is now counseled individually by both the Division of Allied Health Sciences and the cooperating school or division he chooses.

## CURRICULUM

The curriculum pattern of the Division of Allied Health Sciences calls for a year in the Junior Division, and, in some programs, one or two additional years of work. The last one or two years, depending on the program, consists of preprofessional courses and/or clinical field training supervised by the program directors at the Medical Center, the Fort Wayne Regional Campus, and/or affiliated areas outside Indianapolis.

Those programs requiring field training are: Medical Records, Occupational Therapy, Physical Therapy, Public Health Education, Public Health-Environmental Health, and Public Health Administration.

Core Curriculum. The core curriculum, established for students entering a program in the Division of Allied Health Sciences includes: Elementary Composition and speech courses, four credit hours; Social Sciences, six-credit-hours sequence; Literature, Philosophy, and the Arts, six-credit-hours sequence; Chemistry, five credit hours; and Zoology (not required for Dental Hygiene or Inhalation Therapy), five credit hours. The five- and six-credit-hours sequence may be selected from:

SOCIAL SCIENCES: Anthropology: A103, A104; A307, A308. Economics: E201-E202; E300 (5 hours, one semester). Geography: G210; G313; G107 (5 hours). Government: G103-G104; G213. History: H103-H104; H105-H106; C383; C386-C387; C388-C389; H209-H210; H471, H472. Sociology: S161, S163, or S232.

LITERATURE, PHILOSOPHY, AND THE ARTS: The Arts: Fine Arts H100; Music M174. Classics: C250, C260. Study of Religion: C152-C153. English: L101-L102. Fine Arts: H223-H224. Philosophy: Six hours from the total departmental offering including at least one of P100, P240, P250, P301-P302 or P350. Music: M201, M202. Speech and Theatre: S247, S248; or, third- or fourth-year language courses of a literary character.

For complete course listings for the Social Sciences and Literature, Philosophy, and Arts sequences, see courses on pages 41-44.

Preprofessional Requirements. In addition to the core curriculum, certain courses are required to complete the preprofessional requirements (see specific area of study in the program section). Credit will not be given for courses which duplicate work already taken by the student.

## ADMISSION AND GRADUATION

Application to the Medical Center Campus. Selection of those to be admitted to the Medical Center in Indianapolis will begin on or before May 1 of each year from the applicants who have filed or re-filed for admission prior to this date. Applications filed after May 1 will be processed as received, and selections will be made as long as vacancies exist or occur in the class to be admitted for the following academic year. Applications may be received and acted upon prior to the completion of all preprofessional requirements if the transcript of work completed at the time shows the reasonable probability that all requirements can be satisfactorily completed prior to the date of the opening classes.

All completed applications are to be submitted by the applicant to the Office of the Division of Allied Health Sciences, Indiana University Medical Center, Indianapolis, Indiana 46207. The Division Office will forward the application to the appropriate program director for his/her recommendation.

Admission. Before a student may request admission to the Medical Center Campus to continue his studies within the Division of Allied Health Sciences, he must present a minimum cumulative average of C, and credit hours, including the necessary prerequisite courses, as follows: Cytotechnology, 105; Inhalation Therapy, 29; Medical Records, Medical Technology, Public Health Dental Hygiene, Public Health Administration, Public Health Education, and Public Health-Environmental Health, 90; Occupational Therapy and Physical Therapy, 60. There is no collegiate prerequisite for the Radiologic Technology Program.

Credit is not given toward the 120 academic hours required for graduation for physical education or military; however, physical education courses are counted in figuring accumulated grade averages. Physical Therapy will not give credit for anatomy and physiology taken elsewhere than in the School of Medicine.

Physical Examination. A physical examination and record of immunizations shall be furnished by the applicant's own physician. An immunization blank will be sent automatically upon admission to the Medical Center Campus. The physical examination may follow the physician's own desire but should particularly list visual, auditory, or orthopedic handicaps. A statement relative to emotional stability is important.

## ACADEMIC INFORMATION

Grade Code. The letter grades used by the Medical Center Campus are the same as for the Bloomington Campus. All rulings concerning I, incomplete; W, withdrawn; and WF, failing or unauthorized withdrawal, can be found in an earlier section under Bloomington Campus Scholarship Information.

Grade Reports. Grade reports are mailed to students as soon as possible after the end of a semester.

Probation. Students are placed on probation for the semester succeeding the one in which they fail to earn a C average. Students are removed from probation at the end of the semester in which their cumulative average is C (2.0).

Probation may also be assigned to students who fail to meet satisfactory standards of professional behavior. Unsatisfactory standards are represented by such behavior as: absence without leave, undue carelessness or negligence in studies or practice, inattention to the needs of patients, and falsification of records or reports. Students and parents are notified of probationary status.

Separation. A student is automatically separated from the Division when he fails to earn a C average in any two semesters or when his cumulative average is below C.

**Readmission.** The program directors act as a committee to consider petitions for readmission from students who have been separated. A student separated for the first time may petition the Committee immediately for readmission. Readmission may be granted if warranted by exceptional circumstances. A student separated for the second time may not be admitted for the next semester and may not petition for readmission until eight weeks after the beginning of the next regular semester. Once readmitted, a student remains on probation as long as his cumulative average is below C.

Requirements for Graduation. The Bachelor of Science degree will be conferred by the Indiana University School of Medicine upon persons who have been regularly admitted by the Office of Admissions and met the following requirements: 1) the satisfactory completion of the Core Curriculum of the Division of Allied Health Sciences of the School of Medicine, 2) the completion of a minimum of 120 semester hours of academic work including the specific professional requirements for the program pursued, 3) a minimum cumulative average of C in academic work, and 4) completion of the last 30 semester hours of University work in residence at a University campus. The Associate in Science degree will be conferred on 2-year graduates in Inhalation Therapy and Radiologic Technology.

Degrees are granted in June and September. Commencement is held only in June. Candidates for degrees in September may participate in the June Commencement.

# Programs and Courses, Division of Allied Health Sciences

The letters preceding the number of each of the courses in the Division of Allied Health Sciences indicate the program. The letters used and their meanings are as follows:

AH A-Cytotechnology

AH B-Public Health Administration

AH C-Medical Technology

AH D-Public Health Dental Hygiene

AH E-Public Health Education

AH F-Inhalation Therapy

AH H-Public Health General Course

AH M-Medical Records

AH P-Physical Therapy

AH S-Public Health-Environmental Health

AH T-Occupational Therapy

AH W-Coordinated courses primarily for Occupational Therapy and Physical Therapy students

T-Radiologic Technology

Required courses are listed for each program (see course listings pages 20-40). The abbreviation "P" in the course description refers to course prerequisites.

For additional information on these programs, write to: Program Director, (name of field or area of your interest), Division of Allied Health Sciences, Indiana University Medical Center, Indianapolis, Indiana 46207.

## CYTOTECHNOLOGY PROGRAM

## Professor Vellios (Director); Instructor Smith

Courses are chosen so that a minimum of 105 academic credit hours (exclusive of physical education and military science) is met before students may enter the final semester at the Indianapolis Medical Center. Near the end of the third year the student's accomplishments are reviewed and an evaluation is made of his probable success as a cytotechnologist. Only students employed and recommended by a pathologist may be accepted for the six month's training. Upon successful completion of the program a B.S. degree is conferred by the Indiana University School of Medicine. There is no guarantee of acceptance and students should be prepared to elect an alternate program in the College of Arts and Sciences.

## First Year

First Semester		Second Semester	
Elementary Composition W131 or W140	2	Elementary Composition W132 or Speech S121	2
Chemistry C101	5	Chemistry C102	5
Foreign Language	5	Foreign Language	5
Social Science Sequence	3	Social Science Sequence	3
Physical Education W100	1	Physical Education W100	1
Orientation to Allied Health Sciences		•	
AH G100	0		16
-	-		
1	6		
Se	cond	Year	
Zoology Z103	5	Zoology Z215*	5
Foreign Language	3	Foreign Language	3
Literature, Philosophy, Arts Sequence	3	Literature, Philosophy, Arts Sequence	3
Classics C209	2	Anatomy	5
Electives	2		-
			16
	15		

\* Recommended elective. Substitution may be made only with permission of director.

# Foreign Language 2 Physiology P204 5 Microbiology M250, M255\* 5 Electives 11 Microbiology M350, M355\* 5 11 Electives 3 16 15 15

## Third Year

## Fourth Year

## (Bloomington and Medical Center Campus)

First	t Seme	ster (Bloomington Campus)		Second Semester (Medical Center Campus)	
Anatomy	A464	(Histology)	5	General Medical Cytology AH A402	3
Electives			10	Gynecologic Cytology, Non-Malignant	
			-	Conditions AH A412	3
			15	Gynecologic Cytology, Malignant	
				Conditions AH A422	3
				Cytology of Sputum and Bronchial	
				Secretions AH A432	3
				Cytology of Body Fluids AH A442	2
				Cytology of Gastric Secretions, Urine, Spinal	
				Fluid and Other Secretions AH A452	2
				Testales in Medical Catalant AU A462	5
				rechnics in Medical Cytology AH A402	2
					18

The final six months of academic training in the Cytotechnology fourth-year program begins in the second semester on the Indiana University Medical Center Campus within the Department of Surgical Pathology. This includes lectures, demonstrations, laboratory periods, and conferences. A total of 18 credit hours is earned in this period (see list of courses below). Students may enter this program by selection only.

- AH A402 General Medical Cytology (3 cr.) Vellios, Staff Basic features of cellular morphology, cellular physiology and cytogenetics related to medical cytology; cancer cells presented through lecture, laboratory study, demonstrations.
- AH A412 Gynecologic Cytology, Non-Malignant Conditions (3 cr.) Vellios, Staff Cell types encountered in normal individuals; cyclic variations; changes in hormonal dysfunction, inflammatory changes.

AH A422 Gynecologic Cytology, Malignant Conditions (3 cr.) Vellios, Staff Study of cancer cells of different types and arising in several sites. Course enables student to recognize source and type of lesion from appearance of exfoliated cells.

AH A432 Cytology of Sputum and Bronchial Secretions (3 cr.) Vellios, Staff Systematic study of normal, nonmalignant and malignant cells in lower respiratory system.

AH A442 Cytology of Body Fluids (2 cr.) Vellios, Staff Study of cells found in effusions associated with nonmalignant and malignant diseases.

AH A452 Cytology of Gastric Secretions, Urine, Spinal Fluid, and Other Secretions (2 cr.) Vellios

Review of cells, malignant and nonmalignant, encountered in exfoliates from these sites. AH A462 Technics in Medical Cytology (2 cr.) Smith

Fixation and staining procedures, preparation of smears, and cell blocks from fluids and other exfoliates; use of millipore filter technic and fluorescence microscopy.

A second six months of informal training in a cytology laboratory under the supervision of a pathologist is necessary to meet the requirement of the Registry of Medical Technologists for certification in Exfoliative Cytology. This portion of the training does not usually offer University credit. For University credit, if required, see course listed below.

## AH A465 Certification Internships (1-6 cr.)

Following supervised internship and successfully passing the national certifying examination, a final 1-6 credit hours may be earned if desired through travel and periodic conferences at the Medical Center.

<sup>\*</sup> Recommended elective. Substitution may be made only with permission of Director.

## INDIANA UNIVERSITY

## INHALATION THERAPY

## Assistant Professor LoSasso (Director); Professor Ross; Assistant Professor Ridley; Instructor Hemmel (Co-director), and guest lecturers\*

The graduate of this program will be qualified to administer all phases of inhalation therapy using various techniques and procedures. This includes oxygen and mixed gas therapy, aerosol therapy, positive pressure and continuous ventilation therapy, resuscitation, and pulmonary rehabilitation. The graduate will also be instructed in various monitoring techniques which includes blood-gas studies and pulmonary function studies; and maintenance and cleaning of Inhalation Therapy equipment. He will have the knowledge pertaining to the administration and organization of such a department and its function as a part of the patient-care team, and an understanding of the physiology and pathology involved in various disease processes, therefore enabling him to know what he should observe during the period the patient is receiving any type of inhalation therapy.

Graduates of this program are qualified to take the examination given by the American Registry of Inhalation Therapists and upon passing to become a Registered Inhalation Therapist (A.R.I.T.).

## First Year

First Semester		Second Semester	
Elementary Composition W131 or W140	2	English Composition W132 or Speech S121	2
Anatomy A210	5	Physiology P204	. 0
Literature L101	3	Classics C209	2
Physical Education W100	1	Physical Education W100	. 1
Orientation to Allied Health Sciences			-
AH G100	0		15
	-		
	16		

## Summer Session

(Medical Center Campus-12 weeks)

## AH F201 Inhalation Therapy I (8 cr.)

NOTE: Uniforms are required for the Summer Sessions and must be furnished by the student.

## Second Year

First Semester (Indianapolis) Second Semester (Indianapolis)	
Microbiology M250	Literature L102
Clinical Lecture I W374	Social Science Sequence
Social Sciences Sequence	Psychology P101 3
Inhalation Therapy II AH F202 cr. arr.	Inhalation Therapy II AH F202 cr. arr.

Inhalation Therapy courses in the 200 series in Indianapolis are open only to students enrolled in the Inhalation Therapy Program.

AH F201 Inhalation Therapy I (8 cr.) (460 clock hrs.)
 Hemmel Lecture and demonstrations in various procedures and techniques; objectives of Inhalation Therapy. Organization and function of an Inhalation Therapy Department, care of equipment, ethics, and experience in patient treatment in which Inhalation Therapy techniques are applied.
 AH F202 Inhalation Therapy II (8 cr.) (454 clock hrs.)

P: F201. Advanced experience in patient treatment supervised by Registered Inhalation Therapist in facilities affiliated with educational program.

<sup>\*</sup> Guest Lecturers-Professors Battersby, Behnke, King, Shumacker; Associate Professors Defalque, Mandelbaum, Manfredi, Matthews, Miller, Roesch.

## MEDICAL RECORDS

Assistant Professors Lacy (Director), Ridley; Instructors Haymond, Miller; Lecturers Nolan, Sutherlin

The medical record administrator, as Director of the Medical Records Department, is responsible for developing and maintaining a system of medical records which will promote the best medical care of the patient, provide training material for interns and residents, and serve as a source of information for medical research and clinical evaluation. As Director he/she is also called upon to assist the hospital staff with many medical administrative and medicolegal problems.

Acceptance of an applicant over 35 years of age is subject to review by the Program Director.

The student learns to analyze medical records, compile monthly and yearly statistical data, process correspondence and insurance hospital forms, and keep an up-todate index of diseases and operations for use by physicians and research specialists.

After graduation the student is eligible to take the registration examination of the American Association of Medical Record Librarians which certifies him or her as a Registered Record Librarian (R.R.L.).

The curriculum in the Medical Records Program is approved by the Council on Medical Education and the American Medical Association in collaboration with the Committee on Education and Registration of the American Association of Medical Record Librarians.

## First Year

First Semester		Second Semester
Elementary Composition W131 or W140	2	Elementary Composition W132 or
Chemistry C100	5	Speech S223 2-3
Social Sciences Sequence	3	Zoology Z103 5
Literature, Philosophy, and Arts Sequence	3	Social Sciences Sequence
Physical Education W100	1	Literature, Philosophy, Arts Sequence
Speech S121 or S130	2	Physical Education W100 1
Orientation to Allied Health Sciences		Classics C209 2
AH G100	0	
	-	16-17
	16	

Students with less than three years high school mathematics should check with their counselor to determine if they may need to substitute a mathematics course.

Proficiency in typing will be expected by the beginning of the senior year.

## Second Year

Psychology P101	Psychology P102
Electives*	Electives*10-11
15-16	16-17

## Third Year

Office Systems and Control C404	3	Physiology P204
Anatomy A210	5	Personnel Management J340
Principles of Management and Adm. W300	3	Electives*
Psychology of Motivation P327	3	
Electives*	2	14-15
	-	
	16	

<sup>\*</sup> Recommended electives include: Philosophy P100 (3), P240 (3), P250 (3); Speech S221 (3), S229 (3), S323 (3); Business F260 (3), B413 (3); Comparative Religion C152-C153 (3-3); and courses in language of choice.

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# Fourth Year

## (Medical Center Campus)

First Semester		Second Semester	
Statistics AH H304	2	Hospital Organization and Management	
Medical Record Science I AH M411	5	AH M322	2
Directed Practice Experience I AH M441	4	Clinical Lectures III AH W472	2
Medical Terminology AH M330	3	Pathology C477	2
Clinical Lectures I AH W304	3	Medical Record Science II AH M412	5
		Directed Practice Experience II AH M442	6
	17		
			17

AH M322 Hospital Organization and Management (2 cr.) Ridley Orientation to hospital departments; hospital organization; inter- and intra-relationships of hospital and community agencies.

- AH M330 Medical Terminology (3 cr.) (2 lectures—2 lab. hrs.) Miller Understanding and use of medical-profession vocabulary; emphasis on speaking, reading, and writing skills.
- AH M411-M412 Medical Record Science I-II (5-5 cr.) Lacy, Haymond History of medical records, report preparation, quantitative analysis, coding and indexing procedures, research techniques, medical statistics, ethics, methods of securing and preserving medical records, principles and practices for administration of medical record departments, legal aspects and human relations. Second semester includes seminar on problems in medical record departments.
- AH M441 Directed Practice Experience I (4 cr.) Lacy, Haymond Supervised learning experience to develop insight, understanding and skill in medical records procedures; work with other professional and non-professional personnel.
- AH M442 Directed Practice Experience II (6 cr.) Lacy, Haymond Problem assignments of medical records departments and personnel. Final month spent in an affiliation in the medical records department of another hospital, in or out of Indianapolis.

## MEDICAL TECHNOLOGY

Graduates of this program are employed chiefly in larger hospitals, although some work in smaller hospitals, clinics, physicians' offices, or on research teams. Opportunity for specialization, advancement, and study for advanced degrees is available. Prospective candidates should be science oriented, conscientious, thoroughly reliable and honest. Patient contact is subservient to laboratory skill. Ability to supervise and teach is desirable.

The curriculum is designed to provide a broadly based knowledge in the biological sciences as well as opportunity to elect courses from the humanities. The fourth calendar year is spent in a combined tutorial-didactic experience in a clinical laboratory. After graduation, students are eligible to apply for examination for certification by the Board of Registry of the American Society of Clinical Pathologists.

Each student is held responsible for understanding all requirements in the Medical Technology Program. These must be completed by the end of the spring semester prior to admission to the campus where he enters the fourth year.

## First Year

Elementary Composition W131 or W140	
Physical Education W100	
Zoology Z103	
Social Sciences Sequence	
French, German, or Russian 101*	
Orientation to Allied Health Sciences	
AH G100	

Elementary Composition W132 or	
Speech S121	2
Physical Education W100	1
Chemistry C105†	5
Social Sciences Sequence	3
French, German, or Russian 1027	5
	16

16

<sup>\*</sup> Recommended elective.

 $<sup>\</sup>dagger$  P: two years of high school algebra; or  $1\frac{1}{2}$  years high school algebra and M117; or 1 year of high school algebra and M115; C101 not accepted.

## Second Year

Chemistry C106	5	Chemistry C341	5
Literature, Philosophy, Arts Sequence	3	Literature, Philosophy, Arts Sequence	. 3
Microbiology M250	3	Physiology P204*	. 5
Microbiology M255	2	Electivest	. 2
Classics C209	2		_
			15
	15		

## Third Year

Microbiology M350	3	Chemistry C313	3
Microbiology M355	2	Electives†	12
Zoology Z364*	4		_
Electives†	6		15
	15		

## Fourth Year (Indianapolis Medical Center)

Professors Alexander, Vellios, Summers; Associate Professors Tammes (Director), Minton; Assistant Professors Parekh; Instructors Dritsas, Hocker, Lehman, Lee; Lecturers Batchelor, Bolinger, Brose, Feeley, Findley, Swinehart, Thompson, Young.

Most courses given in the fourth year consist of a rotating internship in the clinical laboratories of the hospitals. The student gains practical experience which is supplemented by lectures, demonstrations, library assignments and special project work. This clinical year comprises a full 52 weeks of which two are reserved for vacation. This total time in classroom and laboratory work is 2000 clock hours for which 34 academic semester hours are earned. After completion of this year, students are eligible to take the Registry examination of the American Society of Clinical Pathologists.

AH C406 Clinical Chemistry (Cr. arr.)

Training and experience in Clinical Chemistry including micro and macro procedures, radioisotopes, instrumentation, and steroid and hormone analysis.

AH C407 Hematology (Cr. arr.)

Experience in the collection, staining and counting of blood cells, platelet and reticulocytes. Experience gained in the study of cellular content of other body fluids. Techniques of sedimentation rates, hematocrits, corpuscular indices and hemoglobin determination. Instruction in use and maintenance of special instrumentation such as electronic cellcounters. Coagulation studies and bonemarrow preparations.

AH C408 Blood Banking (Cr. arr.)

Review of serologic principles and technical fundamentals of transfusion practice; comprehensive consideration of blood groups and Rh factors; extensive practice with pre-transfusion techniques and safety practices. Other blood types, antigen-antibody relationships and techniques for demonstrating them. Also includes practice in blood donor room procedures. Elementary knowledge of genetics is helpful.

AH C409 Serology (Cr. arr.)

Flocculation and complement fixation tests for syphilis, both qualitative and quantitative. Preparation of antigens, colloidal gold tests, heterophile antibody tests and C-reactive protein. Lectures and work in the laboratory, and informal discussions. Experimental procedures are also used.

- AH C410 Urine Analysis (Cr. arr.) Lehman Routine urine examination and special tests are performed. Laboratory and special lectures are given.
- AH C411 Bacteriology (Cr. arr.)

Diagnostic procedures as aids to diagnosis of human diseases and methods for isolation and identification of microorganisms. Also a study of the fungi which infect humans, with emphasis on isolation and identification.

AH C412 Topics in Medical Technology (Cr. arr.) Staff Surgical pathology, basal metabolism rates, electrocardiograms will be covered both by lecture and clinical experience. Also included will be observations in related areas such as pharmaceutical chemistry and heart research.

## Dritsas

Alexander, Hocker

Staff

Young

Alexander, Lee

<sup>\*</sup> Recommended elective.

<sup>&</sup>lt;sup>†</sup> Suggested electives: Anatomy A464; Chemistry C483; Mathematics M266-M267; Physics P201, P202.



AH C413 Clinical Correlation and Theory (Cr. arr.) Staff Lectures in physiological chemistry, immunology, and other related subjects combined with demonstrations and ward rounds to emphasize the relationship between laboratory tests and disease states.

AH C414 Honors Course in Medical Technology (Cr. arr.) Staff Each student is to complete a research paper which will require library and laboratory work. The student will be assigned to a faculty adviser in the area in which she/he does the research.

J420 Parasitology (Cr. arr.) Laboratory procedures of common parasites of man. Course given by lectures and laboratory procedures.

AH C460 Surgical Pathology I (2 cr.) Staff Actual experience with surgical specimens removed from patients in the various hospitals; stresses rapid completion of histologic slides for microscopic examination.

AH C461 Surgical Pathology II (2 cr.) Staff P: C460. Additional practice in preparation of histologic slides for microscopic examination. In addition to the hematoxylin and eosin stain, a limited number of special techniques are required, including experience with frozen sections.

## Fourth Year

Lutheran Hospital: Assistant Professors Aust, Griest (Director); Assistant Professor Aldred; Lecturer Machlan.

Parkview Memorial Hospital: Assistant Professors Frankhouser, Schlademan (Director); Lecturers Whitcomb, Schwartz.

St. Joseph's Hospital: Assistant Professors Pauley, Schneider (Director); Lecturers Fox, Rumschlag.

The Lutheran, Parkview Memorial, and St. Joseph's Hospitals, conduct the fourth calendar year program, registered through the Fort Wayne, Indiana, Regional Campus.

## (Beech Grove)

St. Francis Hospital: Pathologists Haymond, Thornton; Assistant Professor Buehl; Instructors Costin (Director), MacAllister (Teaching Supervisor); Lecturers Carrier, Charnley, Clark, Hibben, Robertson, Utke.

All courses in the 400 series are on a rotating basis, chiefly laboratory internship in character, and earn credits on the basis of one credit hour per 60 clock hours. A minimum of 2,000 clock hours must be met for certification by the Registry of Medical Technologists. The sequence of courses is so arranged that it meets Registry requirements.

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AH C400 Laboratory Practice (Introductory) (1 cr.) Stati
Meetings at intervals, during the early period of training; study of laboratory procedures. Includes technical procedures and orientation. (Continuation see C480.)
AH C401 General Externship I (2 cr.) Staff
Experience in a type hospital with opportunity for independent work. Emphasis on contact with patients.
AH C402 General Externship II (2 cr.) Staff
P: C401. Further experience in a type hospital; opportunity for independent work.
AH C403 General Externship III (2 cr.) Staff
P: C401, C402. Further experience in a type hospital; opportunity for independent work.
AH C405 Medical Laboratory Records (1/2 cr.) Staff
Required by Registry. Proper procedure of reporting laboratory results; method of distribution throughout various phases of work; experience in office, filing, statistical work.
AH C410 Urine Analysis (2 cr.) Staff
Examinations comprising routine type of urine analysis; limited experience with special tests on urine.
AH C431 Hematology I (2 cr.) Staff
Collecting, staining, and counting blood cells; supervised experience with patients. Experience with specimens of spinal fluid, special determinations (platelets, reticulocytes) and pathologic smears.
AH C432 Hematology II (2 cr.) Staff
P: C431. C432 and C434 offer more experience (than C431 allows) in the same techniques and additional techniques such as sedimentation rate, hematocrit, and the figuring of indices.

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AH C434 Hematology III (2 cr.) Staff P: C431, C432. Continuation of practice and experience in hematologic techniques. Individual projects assigned if student is sufficiently advanced. AH C440 Bacteriology I (2 cr.) Staff 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. AH C441 Bacteriology II (2 cr.) Staff 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. AH C442 Bacteriology III (2 cr.) Staff P: C440. C441. Student should be able to handle usual and somewhat unusual hospital bacteriologic and mycologic problems independently. AH C450 Serology I (2 cr.) Staff Flocculation and complement fixation types of serologic tests for syphilis; familiarity with Mazzini, Kline, V.D.R.L., and Kolmer complement fixation tests; emphasis on reading tests; lectures and demonstrations, including the cardiolipin antigen and methods for distinguishing false positives. AH C451 Serology II (2 cr.) Staff P: C450. Additional experience (for students with satisfactory proficiency in C450) in adapting complement fixation, agglutination, hemagglutination, precipitin, and flocculation technique to diagnostic procedures. AH C460 Surgical Pathology I (2 cr.) Staff Actual experience with surgical specimens removed from patients in the various hospitals; stresses rapid completion of histologic slides for microscopic examination. Surgical Pathology II (2 cr.) AH C461 Staff P: C460. Additional practice in preparation of histologic slides for microscopic examination. In addition to the hematoxylin and eosin stain, a limited number of special techniques are required, including experience with frozen sections. AH C471 Clinical Chemistry I (2 cr.) Staff Training and experience with more frequently used chemistry tests, e.g., determinations of sugar and urea nitrogen; automated and manual methods. Clinical Chemistry II (2 cr.) AH C472 Staff P: C471. Limited experience with less frequent special procedures. AH C473 Clinical Chemistry III (2 cr.) Staff P: C471 and C472. Special equipment utilization; preparation and maintenance of stock and solutions. AH C474 Radioisotopes I (1 cr.) Staff Information and techniques applicable to use of radioactive materials in clinical laboratory. AH C475 Radioisotopes II (2 cr.) Staff P: C474. Extended experience and practice with radioactive materials under special supervision. Enrollment must be arranged by conference with faculty. AH C476 Chemistry IV (2 cr.) Staff P: C471, C472. Advanced procedures, method developments, special projects. AH C477 Chemistry V (2 cr.) P: C471, C472. Training and experience in special micro procedures, technical and methodological. AH C478 Instrumentation (variable cr.) Staff Theory and practice with electronics as applied to instrumentation and Clinical Chemistry. Credit variable on basis of 1 credit hour per each 60 clock hours. AH C480 Clinical Laboratory Diagnosis (1 cr.) Staff P: C400. Continuation of material in C400. Ethics, relation with patients, techniques and inter-pretation of results, special equipment, maintenance of various types of equipment and supplies; miscellaneous subjects. AH C483 Specialty Externship I (2 cr.) Staff Special practice in affiliated institutions, for students with proficiency in required subspecialties. Provides individual electives for special interests. AH C484 Specialty Externship II (2 cr.) Staff Special practice in affiliated institutions, for students with proficiency in required subspecialties. Provides individual electives for special interests. AH C485 Specialty Externship III (2 cr.) Staff Special practice in affiliated institutions for students with proficiency in required subspecialties. Provides individualized electives for special interests. Basal Metabolic Techniques (1/2 cr.) Staff AH C489 Special theory and techniques. Actual experience with various machines. Successful tracings required.

### Staff

AH C490 Electrocardiographic Technique (1/2 cr.) Staff Lectures on theory and procedure; actual experience with apparatus; successful electrocardiograms required.

AH 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 pre-transfusion techniques and safety practices. Other blood types, antigen-antibody relationships and techniques for demonstrating them. Elementary knowledge of genetics is helpful.

## AH C492 Blood Bank II (2 cr.)

P: proficiency in C491. Transfusion service bloods provide problem cases in isoimmunization and sensitization, Rh titration, etc. Responsibility for blood bank operation and application to special transfusion problems placed on the student.

## AH 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.

## OCCUPATIONAL THERAPY

Assistant Professors Ericson (Director), Simek; Instructors Gallagher, Griffin, Huss, Nathan, Polliard, Seymour; Lecturers Bates, Camp, Grummon, Linzie, Lurie, Murphy, Nail, Ragla, Riekena, Snider, Weeks, Yoder

Occupational Therapy is treatment through activity. It is a means of returning a patient to health through stimulating his own efforts, interests, and will. Just as work and play contribute to the well-being of a healthy person, they become even more vital when illness or injury exists. Often through the stimulus of mental and physical activity a patient's abilities can be regained or improved.

The occupational therapist is an important member of the health team which is composed of the physician, the nurse, the social worker, the psychologist, the physical therapist, and others. The restorative program, planned and carried out by this team working in close collaboration, is the process of rehabilitation. Occupational therapy, as it is employed in the prevention and treatment of disease and disability, makes use of creative and manual arts, recreation and educational activities, and prevocational and self-help pursuits.

The occupational therapist may work with patients of all ages who have a wide variety of physical and emotional problems. Pediatrics, geriatrics, physical injuries, heart disease, cerebral palsy, poliomyelitis, and mental illness are medical areas long associated with treatment by occupational therapy.

Graduates of the degree program are eligible for the examination leading to admission to the Registry of Occupational Therapists maintained by the American Occupational Therapy Association. This examination is held throughout the country in January and June of each year. Admission to the Registry is the certification of a therapist to practice.

## First Year

First Semester
Elementary Composition W131 or W140 Psychology P101
Electives* Physical Education W100
Literature, Philosophy, Arts Sequence Orientation to Allied Health Sciences
AH GI00

Deconte Demester
Elementary Composition W132 or
Speech S121
Psychology P102
Sociology S163 or S232
Occupational Therapy Theory I AH T203 2
Physical Education W100
lectives*
Literature, Philosophy, and Arts Sequence

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16

Staff

Staff

Staff

28

\* Recommended electives: H215, Weaving (3 cr.); S163, S164, Pottery I-II (1-1 cr.)

### Second Year Psychology P324 3 Chemistry C100 or C101 Zoology Z103 ..... Classics C209 5 Speech S2291 2 Electives\*† 5

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## Third Year (Medical Center Campus)

A	5	Dissister TOOF	6
Anatomy D323	3	Physiology F303	3
Psychopathology N303	2	Human Behavior AH T323	2
Kinesiology AH W376	2	Psychosocial Dysfunction AH T360	5
Therapeutic Techniques AH T351	5	Pathology C477	2
Personality Development of the		Therapeutic Techniques AH T352	2
Child AH T381	2		
Clerkship AH T324	1		16
	17		

## Summer Session

Clinical Education AH T495 (Three months internship in psychiatry)

## Fourth Year (Medical Center Campus)

Physical Dysfunction AH T460	4	Physical Dysfunction Practicum AH T490	4
Prevocational Evaluation AH T452	2	(February)	
A. D. L. AH T454	2	Clinical Education AH T496	6
Clinical Lectures AH W471	3	(March, April, May-3 months	
Clinical Lectures AH W374	3	internship in Physical Disabilities)	
O.T. Organization and			
Administration AH T301	2		10
Neuroanatomy AH W324	2		
	18		

Occupational therapy courses in the 300 and 400 series are open only to students enrolled in the Occupational Therapy Program.

- AH T203 Occupational Therapy Theory I (2 cr.) Ericson Introduction to field of occupational therapy; various functions of occupational therapist. Open to all students (Bloomington Campus).
- AH T300 Occupational Therapy History (1 cr.) Staff History and trends in field of occupational therapy orientation to various specialties; organization of the national and local associations.
- AH T301 Occupational Therapy Organization and Administration (2 cr.) Simek Establishment and operation of an occupational therapy department, planning, equipping, and main-taining the department; methods of record keeping and reporting; ethical implications and hospital relationships.
- AH T323 Human Behavior (2 cr.) Study and discussion of personality theories, behavioral traits, and their application to occupational therapy treatment.
- AH T324 Hospital Clerkship, Psychiatry (1 cr.) Polliard Study and observation of occupational therapy treatment in several psychiatric hospitals.

Therapeutic Techniques I (5 cr.) AH T351 Gallagher, Polliard Woodwork and plastics; care, use, and repair of simple hand and machine tools including safety techniques; various materials and techniques of fabrication, minor craft techniques.

AH T352 Therapeutic Techniques II (2 cr.) Gallagher Needle skills and minor crafts; knitting, crocheting, embroidery, hand sewing; basic leather work and small craft projects.

29

2

15

Nathan

<sup>\*</sup> Recommended electives: H215, Weaving (3 cr.); S163-S164, Pottery I-II (1-1 cr.).

<sup>†</sup> A working knowledge of typing is required. Students who have not had high school typing should take Typing C220 or C221 (School of Business).

**<sup>†</sup>** P: Speech S121 or S130.

Psychosocial Dysfunction (5 cr.) AH T360 Combined clinical and class study of treatment of psychiatric patients in occupational therapy.

- Personality Development of the Child (2-3 cr.) AH T381 Snider Traces the psychological, emotional, intellectual, motor, and linguistic development of the human organism from birth to adolescence. Emphasis on causal relationships. Theoretical framework within which to view child development is presented.
- Therapeutic Techniques III (2 cr.) AH T451 Continuation of Therapeutic Techniques II.
- AH T452 Prevocational Techniques (2 cr.) Riekena Survey of vocational skills and instruction in methods of job and activity analysis. Under supervision, students evaluate clients, administer tests, and make recommendations for placement.
- AH T453 Therapeutic Techniques IV (1, 2, or 3 cr.)
- Supplemental background in technical skills to meet the needs of transfer students. AH T454 Activities of Daily Living (2 cr.)
- Laboratory course on materials, equipment, and techniques to aid the handicapped in attaining maximum self-sufficiency-special equipment such as slings and wheelchairs; experience in making and fitting hand splints.
- AH T460 Physical Dysfunction (4 cr.) Griffin The treatment of physically handicapped patients in occupational therapy. A correlation of clinical and class presentations.
- Physical Dysfunction Practicum (4 cr.) AH T490 Huss, Nathan Neuromuscular facilitation techniques, perceptual testing techniques, cerebral palsy.

A minimum of six months of clinical training is required for registration as an occupational therapist. Three months of this training may be taken during the summer between the junior and senior years; the remainder during the senior year. Students are assigned to various hospitals by the Director of Clinical Education.

AH T495 Clinical Education I (6 cr.)	Polliard
Three month internship in psychiatry. Assigned hospitals.	
AH T496 Clinical Education II (6 cr.)	Polliard
Three month internship in rehabilitation. Assigned hospitals.	

## PHYSICAL THERAPY

Associate Professor Ekstam (Director); Assistant Professors Ramden, Young; Instructors Baum, Ladue, Randolph; Lecturers Arnold, Babiak, Bailey, Boger, Fredrickson, Gehris, Goldblatt, Hagar, Hayes, Kennedy, Kinsman, Koehneke, Lewis, Miles, Pitt, Strunk, Whitfield

Physical therapy is the treatment of disease and injury utilizing exercise, massage, heat, cold, water, electricity, and ultrasound. Restoration of bodily function, prevention of disability, and maximum performance within the limits of physical capabilities are the ultimate goals of treatment.

A physical therapist administers treatment upon referral by a physician, participates in education, teaching, and research activities, and provides consultative service. Physical therapy service is utilized in hospitals, outpatient treatment facilities, industrial clinics, governmental and voluntary health agencies, public school systems, and nursing homes.

The legal practice of physical therapy in Indiana is regulated by the Indiana State Board of Medical Registration and Examination. Success in the state examination entitles the candidate to a physical therapist license, enabling him to practice in Indiana or in those states endorsing the Indiana license.

The curriculum in the Physical Therapy Program is approved by the American Physical Therapy Association in collaboration with the Council on Medical Education of the American Medical Association.

Gallagher

Polliard

Staff Griffin

## DIVISION OF ALLIED HEALTH SCIENCES

	First	Year	
First Semester		Second Semester	
Elementary Composition W131 or W140 Chemistry C101	2 5 3 1 3 2 0	Elementary Composition W132 Chemistry C102 Psychology P102 Physical Education W100 Literature, Philosophy, and Arts Sequence Electives	2 5 3 1 3 2 16

## Second Year

Zoology Z103	5	Physics P100
Sociology S161	3	Zoology Z215
Classics C209	2	Sociology \$163 or \$232
Electives	5	Introduction to Physical Therapy AH P204 2
		Electives
	15	
		17

## Third Year

## (Medical Center Campus)

Anatomy D323	5	Physiology F305	5
Kinesiology AH W376	3	Applied Neuroanatomy AH W324	3
Child Development AH W373	3	Therapeutic Exercise II AH P481	. 3
Therapeutic Exercise I AH P384	2	Physical Tests and Measurements AH P382	3
Physical Agents I AH P461	2	Pathology C477	2
History, Administration and Professional		Clinical Lectures III AH W472	2
Relationships AH P478	2		
			18
	17		

## Summer Session (8 weeks)

## Fourth Year

(Medical Center Campus)

Applied Neurophysiology AH P483	3	Clinical	Education	п	AH P492	and the second	8
Clinical Lectures I AH W374	3						
Clinical Lectures II AH W471	3						8
Physical Agents II AH P462	3						
Psychological Aspects of Physical Disability							
AH W312	2						
Psychopathology N303	2						
Applied Physical Therapy AH P485	2						
	-						
	18						

Physical Therapy courses in the 300 and 400 series in Indianapolis are open only to students enrolled in the Physical Therapy Program.

- AH P204 Introduction to Physical Therapy (2 cr.) Ekstam Introduction to physical therapy profession; educational requirements, treatment techniques, and professional opportunities. Open to all students. (Bloomington Campus). AH P382 Tests and Measurements (Physical) (3 cr.) Ladue Methods and devices used in measuring and testing in physical therapy. Lecture and laboratory. AH P384 Therapeutic Exercise I (2 cr.) Young Application of treatment techniques for specific disabilities, including practical application of various types of apparatus. Lecture and laboratory. AH P461 Physical Agents I (2 cr.) Baum Instruction and practice in application of massage, heat, cold, water, and light. Lecture and laboratory.
- AH P462 Physical Agents II (3 cr.) Baum, Young Instruction and practice in electrical testing and application of electrotherapy procedures. Lecture and laboratory.

- AH P478 History, Administration, and Professional Relationships (2 cr.) Ekstam Historical background of physical therapy, organization and administration of agencies related to physical therapy, and professional relationships with allied medical services.
- Therapeutic Exercise II (3 cr.) Ladue AH P481 Instruction and practice in ambulation, activities of daily living, and use of prosthetic and orthotic devices. Lecture and laboratory.
- Applied Neurophysiology (3 cr.) Randolph AH P483 P: Physiology F305. Emphasis on neurophysical concepts for developing treatment procedures in physical therapy; introduction to neuromuscular facilitation techniques. Lecture and laboratory.
- Applied Physical Therapy (2 cr.) AH P485 Ekstam Administration, ethical conduct, legislation, medicolegal considerations, and clinical problems related to physical therapy.
- AH P491 Clinical Education I (2 cr.) Ekstam Introductory experience in patient treatment supervised by registered physical therapists in facilities affiliated with the education program.
- Clinical Education II (8 cr.) AH P492 Ekstam Advanced experience in patient treatment supervised by registered physical therapists in facilities affiliated with the educational program.

## COORDINATED COURSES PRIMARILY FOR OCCUPATIONAL THERAPY AND PHYSICAL THERAPY STUDENTS

- AH W312 Psychological Aspects of Physical Disability (2 cr.) Ramsden Lectures and discussion on psychological problems resulting from physical disability and their implications on patient treatment.
- AH W324 Applied Neuroanatomy (Section I, 2 cr.; Section II, 3 cr.) Huss, Randolph P: Anatomy D323. Emphasis on structure and gross function of nervous system as basis for clinical neurology.
- AH W373 Child Development (3 cr.) Randolph Physical, mental, social, and emotional development of children from birth through adolescence; emphasis on development of normal children, although problems of handicapped children will be considered.
- AH W376 Kinesiology (Section I, 2 cr.; Section II, 3 cr.) Simek, Ramsden Principles of joint and muscle functions; muscle action in various physical activities.
- AH W374 Clinical Lectures I (3 cr.) Cress, Glover, Noble, Stevko Lectures in medicine, surgery, and pediatrics.
- AH W471 Clinical Lectures II (3 cr.)
- Bonsett, Garceau P: AH D323, AH W324, C477. Lectures and clinical presentations in orthopedics and neurology.
- AH W472 Clinical Lectures III (2 cr.) Staff Lectures and clinical presentations in dietetics, geriatrics, obstetrics, gynecology, urology, otolaryn-gology, dermatology, ophthalmology, public health problems, and other pertinent specialties.

## PUBLIC HEALTH GENERAL COURSES

AH H301 Public Health Organization and Administration (3 cr.) Staff Historical background, early development, objectives of public health; its structure at federal, state, and local level; legal and financial aspects, organization, administration, program content; function of each professional category of personnel with emphasis on community understanding and cooperation.

AH H304 Statistics (2 cr.)

Collection, tabulation, and elementary analysis of data; measures of central tendency, of variability, tests of significance, sampling procedures; prepares student to draw justified conclusion from numerical data.

AH H490 Research (cr. arr.)

For advanced students only. Supervised research problems in field of public health.

## PUBLIC HEALTH DENTAL HYGIENE (Department of Preventive Medicine)

Dean and Professor Hine; Professors Hopper, Johnston, Phillips, Raidt, Shafer, Shanks, Starkey, Van Huysen; Associate Professors Adams, Ping, Standish, Swartz; Assistant Professors Ackerman, Carr, Fisk (Director Dental Hygiene Program), Matlock,

Brittain

Hopper, Adams

Norman, Whitten; Instructors Hamilton, Kline, Smith, Totten; Lecturers Bland, Brittain, Gish, Jones, McClelland.

The dental hygienist is the member of the health team concerned with the prevention of diseases of the mouth. The dental hygienist studies a professional college program which entitles a graduate, upon successful passage of a state board examination, to perform specific treatments for children and adults, to take and process dental X-rays, to assume duties in the dental office, and/or to participate as a health worker in federal, state, or local public health and educational programs.

Indiana University offers a program which leads to a certificate in Dental Hygiene and a program which leads to a Bachelor of Science degree in Public Health Dental Hygiene. While the certificate program is adequate to prepare the dental hygienist to perform the tasks which may be assigned in a private dental office, additional knowledge and skills are necessary for positions involving the responsibilities of education and administration. Because of increasing interest among dental hygienists for these opportunities, a degree program is offered by the Division of Allied Health Sciences of the School of Medicine.

The first or freshman year may be taken at any college or university but courses must be comparable to those offered by Indiana University in order to transfer for credit. The second and third or the sophomore and junior years must be taken in the School of Dentistry, Indiana University in Indianapolis or the Indiana-Purdue Regional Campus in Fort Wayne. The fourth or senior year must be taken in the Division of Allied Health Sciences of the School of Medicine in Indianapolis.

	First	Year	
First Semester		Second Semester	
Elementary Composition W131 or W140	2	Elementary Composition W132	2
Government G103*	. 3	Government G104*	3
Literature, Philosophy, and Arts Sequence	3	Literature, Philosophy, and Arts Sequence	3
Speech and Theatre S121	2	Sociology S161	3
Physical Education W100	. 1	Physical Education W100	1
Chemistry C100 or C101	. 5	Electives	4
Orientation to Allied Health Sciences			-
AH G100	0		16
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## Second Year (Medical Center Campus or Fort Wayne Campus)

Human Biology I D HVC H919	4	Human Biology II D HVG H918	4
munan blorogy i b mig man	7	Human Diology II D III O III O III O	
Dental Anatomy D HYG H214	3	Pharmacology and Therapeutics D HYG	
Chemistry and Nutrition D HYG H216	3	H215	2
Dental Prophylaxis Techniques D HYG H218	3	Psychology P101	3
Sociology \$309	3	Microbiology for Dental Hygienists J207	3
		Clinical Practice D HYG H219	4
	16		
			16

# (Medical Center Campus or Fort Wayne Campus)

2	Radiology Laboratory D HYG H303	1
2	Technical Writing D HYG H310	2
2	Public Health Education Methods AH E443	3
	Practice of Community Dental Hygiene D	
3	HYG H309	2
3	First Aid HPER H160	1
5	Clinical Practice II D HYG H302	5
	Principles of Environmental Health AH S321	3
17	Preventive Dentistry D HYG H217	1
	2 2 2 3 5 17	<ul> <li>Radiology Laboratory D HYG H303</li> <li>Technical Writing D HYG H310</li> <li>Public Health Education Methods AH E443</li> <li>Practice of Community Dental Hygiene D</li> <li>HYG H309</li> <li>First Aid HPER H160</li> <li>Clinical Practice II D HYG H302</li> <li>Principles of Environmental Health AH S321</li> <li>Preventive Dentistry D HYG H217</li> </ul>

<sup>18</sup> 

<sup>\*</sup> Should be selected for social science requirement to provide background for later public health courses. Substitution can be made only with the specific approval of the counselor.

## Fourth Year (Medical Center Campus)

Statistics AH H304	2
School Health Education AH E440	3
Community Health Education AH E442	3
Clinical Supervision AH D401*	2
Psychology P324	3
Speech and Theatre S223	3
Electives	3
18 or	19

AH D401 Clinical Supervision (2 cr.)

Ackerman Supervisory experience in clinics and laboratories involved in teaching students enrolled in Dental Hygiene curriculum; problems incident to patient-student and instructor-student relationships. AH D403 Speech Pathology (2 cr.)

Orientation to speech pathology; emphasis on dental-related problems.

AH D405 Community Dental Hygiene (3 cr.) Gish, Staff Describes organization and administration of various types of programs of the Dental Health Division of Indiana State Board of Health.

Public Health Field Practice (5 cr.) AH D465 McLelland Supervised field training consisting of five-week assignment with an official health agency, permitting the student to observe and participate in all phases of dental health.

D HYG G999† Public Health Practice (1-6 cr.) Gish Functions, scope, and historical background of public health; organization of official and voluntary public health agencies with emphasis on their dental health programs.

## PUBLIC HEALTH EDUCATION

(Department of Preventive Medicine)

## Professor Hopper (Director); Associate Professor Adams; Instructor Yoho; Lecturers Bland, Brittain, Jones, McLelland

The health educator's major aim is to help people understand their health needs and how to meet these needs as individuals and as members of a group, family, community, or nation. The health educator helps people to think critically and to make intelligent choices in their health behavior. He must be well grounded in the biological and social sciences since he will be explaining and interpreting the latest developments in the health sciences and will be motivating people to use them.

In recent years, there has been an expansion of health education activities in schools, in public health departments, in voluntary health agencies, and in industrial and commercial companies. The emphasis upon health education is expected to continue and the number of personnel needed will greatly increase.

For the health education teacher in a secondary school, it is advisable to become certified in health education and in a second subject such as physical education, science, or social science.

There are opportunities to become a health education consultant or specialist in a state or city department of health, in the U.S. Department of Health, Education and Welfare, or in some professional organization such as the American Medical Association or American Dental Association.

Voluntary health organizations at the local, state, and national levels, such as tuberculosis, cancer, polio, heart and crippled children's societies need trained health educators in their programs.

Actual field practice is a requirement for completion of the program. Ten semester hours of credit are required in the latter part of the second semester of the senior year and consist of supervised practical experience with state and local departments of public health.

Public Health Field Practice AH D465 ......

Community Dental Hygiene AH D405 .....

Public Health Practice G999† ...

Speech Pathology AH D403 ..

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<sup>\*</sup> Admission by permission of the Director of Dental Hygiene, School of Dentistry.

<sup>+</sup> Offered in the School of Dentistry.

F	irst	Year
First Semester		Second Semester
Elementary Composition W131 or W140 Chemistry C100 Literature, Philosophy, Arts Sequence Physical Education W100 Electives	2 5 3 1 4	Elementary Composition W132 or Speech S143
AH G100	0	15

## Second Year

Psychology P101	3	Psychology P102	3
Sociology S161	3	Sociology S163	3
Anthropology A103	3	Speech S223	3
Speech S121	2	Journalism J327*	3
Electives	4	Electives	3
			-
	15		15
1	Third	Year	
M:	9	Districtory DO04	5

MICIODIOIOgy W1200	
Microbiology M255	2
Government G103	3
Psychology P234	3
Anthropology A104	3

### Physiology P204 Government G104 ..... 3 Sociology S309 3 Radio and Television R204\* 3 Electives ..... 3 17

## Fourth Year (Medical Center Campus)

14

Public Health Organization and		Public Health Education Methods AH E443	3
Administration AH H301	3	Speech Pathology AH D403	2
Statistics AH H304	2	Public Health Field Practice AH E465	10
Environmental Health AH S321	3		
Epidemiology and Occupational Health			15
AH \$408	2		
School Health Education AH E440	3		
Community Health Education AH E442	3		
	16		

AH E440 School Health Education (3 cr.) Bland The school health movement, including the development, present day policies, programs and problems; health services, environmental factors, communicable disease control, health instruction, and hygiene of the school day.

- AH E442 Community Health Education (3 cr.) Iones Intensive study of social, psychological, economic, and cultural factors influencing successful applica-tion of the health sciences; relationship between different public health disciplines and agencies and techniques employed.
- AH E443 Public Health Education Methods (3 cr.) McLelland Usual techniques of group work with investigations of social and psychological factors which determine effectiveness in promoting public health. Laboratory time provides opportunity for competence in group work and in design and use of promotional materials.

AH E465 Public Health Field Practice (10 cr.) McLelland Supervised field training is done on full-time basis for 9 weeks in selected official and voluntary health agencies. Students assist in planning and conducting health education activities.

## PUBLIC HEALTH-ENVIRONMENTAL HEALTH (Department of Preventive Medicine)

Professor Hopper; Associate Professors Adams (Director), Summers; Assistant Professor Spolyar; Lecturers Brittain, Fassnacht, Fisher, Hert, Jump, Keppler, Marshall, McCowen

Environmental health is a branch of the biological sciences dealing directly with the health aspects of man's physical surroundings. Its purpose is two-fold: (1) the

<sup>\*</sup> Recommended elective. Substitution may be made only with permission of Director.

control of conditions under which man lives so that hazards leading to disease and injury can be eliminated; (2) the teaching of hygiene and the principles of sanitation to the general public and to others whose activities deal with water, food, air, radiological health, community wastes, and shelter. Laws and regulations also are involved as they pertain to improvement of community health protection.

Within the past decade great new areas have opened up for the student and professional in environmental health-air pollution control, radiological health, water pollution control, housing, and food technology. Funds for research and study in these fields now exceed the supply of trained personnel to carry on this work.

Upon graduation students become eligible to take examinations as registered professional sanitarians under laws now in effect in Indiana and 29 other states. Graduates are also eligible to take federal, state, and local examinations for positions in governmental public health agencies. In addition, industry and commerce offer employment. Graduate training under federal scholarships is available. Employment opportunities are now good.

First	Year

First Semester	Second Semester
Elementary Composition W131 or W140 2	Elementary Composition W132 or
Chemistry C101	Speech S143
Mathematics M115 or M117 5 or 3	Chemistry C102
Physical Education W100 1	Speech S121 2
Electives	Fine Arts H100*
Orientation to Allied Health Sciences	Government G103†
AH G100 0	Physical Education W100 1
16 or 14	16

## Second Year

Government G104	3	Physics P100	5
Psychology P101	3	Anthropology A103†	3
Sociology S161†	3	Sociology S163†	3
Zoology Z103	5	Electives	2
Comparative Literature C225*	2		-
			13
	16		

## Third Year

Physiology P204 ...

Government G321

Sociology S309

Microbiology	M250	 3
Microbiology	M255	 2
Speech S223		 3
Electives		 8

## Fourth Year (Medical Center Campus)

16

Public Health Organization and		Parasitology and Entomology AH S423	3
Administration AH H301	3	Public Health Education Methods AH E443	3
Statistics AH H304	2	Public Health Field Practice AH S465 1	0
Environmental Health AH S321	3		-
Epidemiology and Occupational Health		1	6
AH S408	2		
Food and Dairy Technology AH S428	4		
Elements of Water and Sewage AH S432	2		
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1	6		

AH S321 Principles of Environmental Health (3 cr.) Hopper, Adams Objectives of environmental health control; water supplies, sewage systems, solid waste handling, air hygiene, food and milk sanitation, housing, radiological health, and legal and administrative phases; laboratory periods in sanitary chemistry and bacteriology.

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<sup>\*</sup> Fulfills the Literature, Philosophy, and Arts sequence for this program.

<sup>+</sup> Fulfills the Social Science sequence for this program.

- AH S408 Epidemiology and Occupational Health (2 cr.) Marshall, Spolyar, Keppler Cause, mode of transmission, and methods of prevention in control of common communicable diseases; methods of modern preventive medicine; industrial and occupational health hazards involving protective devices and measures for employee protection.
- AH S423 Parasitology and Entomology (3 cr.) Survey of parasites and insects of public health importance affecting man; laboratory exercises in identification of insects; study of control measures and use of modern insecticides; rodents as disease vectors.
- AH S428 Food and Dairy Technology (4 cr.) Adams, Fisher Food and dairy technology, food and dairy processing methods; field trips to processing plants for observation; legal definitions of various products; control techniques.
- AH S432 Elements of Water and Sewage (2 cr.) Fassnacht, Hert Basic principles of water supply; epidemiology of water, including interpretation of laboratory examinations; sewage disposal studies include private installations; use of larger facilities for sewage treatment at schools, institutions and housing developments; solid waste disposal systems.
- AH S465 Public Health Field Practice (10 cr.) Adams Supervised field training of 9 weeks with local health department or Indiana State Board of Health; variety of health problems studied.

## PUBLIC HEALTH ADMINISTRATION (Department of Preventive Medicine)

Professor Hopper (Director); Associate Professor Adams; Assistant Professors Spolyar, Offutt, Ridley; Instructor Yoho; Lecturers Bland, Fisher, Smith; Staff from Indiana University School of Business; Advisory Council from Governmental and Voluntary Health, Hospital, Insurance, and Management Agencies

There is a challenging future for business-oriented personnel in medical administrative procedures. Health, in its many and varied aspects, has expanded so rapidly that major policy issues involving budgets, insurance, law, and general management require trained people to assist the physician in these areas. Health departments at state, county, and city levels offer opportunities for administrative practice in the development of standards and in professional staff training and evaluation. In addition, voluntary health agencies have awakened the public to the tremendous demands for knowledge and action in health matters and offer attractive positions to those trained in management skills. Other fields include health and hospital insurance plans, county medical societies, nursing homes, and hospitals. Health is personal as well as public; it is dynamic and ranks high on the list of what might be called big business. For students who like to work with others, who want variety and challenge in their work, and who can make decisions, Health Administration is a field with a wide horizon and a bright future.

The Division of Allied Health Sciences in cooperation with the School of Business offers a course of study leading to the B.S. degree in Public Health with a major in Health Administration. Candidates for this degree must complete three years of preprofessional business courses on the Bloomington Campus as outlined in the Core Curriculum of the School of Business, including the Comprehensive Business Examination.

- Introduction to Hospital Administration I (3 cr.) Ridley AH B401 General orientation to hospital departments, hospital organization, board of trustees, medical staff, administration, concept of management in a public service enterprise.
- Introduction to Hospital Administration II (3 cr.) AH B402 Ridlev Role of hospital in community, hospital goals and programs, coordination of hospital departments, managerial evaluation and improvement, relationships to official and voluntary health agencies.
- Management in Health Organizations I (3 cr.) Staff AH B421 Analysis of major policy issues in management of health organizations; establishment of need as basis for proposal and budget; setting of standards; development of programs.
- AH B422 Management in Health Organizations II (3 cr.) Staff Executive and professional staff responsibilities and development; evaluation and utilization of quantitative data collected for management; internal communication and control; emphasis on decisionmaking process in evaluation and reappraisal.

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Staff

AH B411-B412 Nursing Home Administration I and II (3-3 cr.) Hopper Nursing home regulations, legal aspects, and insurance; personnel management; medical records; diet and food service; rehabilitation; nursing services; psychiatric aspects in handling of geriatric patients; professional standards; use of volunteer groups.

AH B465 Field Practice (10 cr.) Hopper Supervised field training of 9 weeks in administrative practice in voluntary or official health-related agency; student participates in various phases of health administration at the management level.

## RADIOLOGIC TECHNOLOGY

Professors Campbell, Loehr, Miller; Associate Professor Helmen (Director); Assistant Professors Franken, Hornback, Mishkin, Reese, Tosick; Teaching Associate Kehrein (Assistant Director); Lecturers Chandler, Chua, Grimwood, Harlow, McDonnell, Moser, Thayer, Wideman

College students or graduates of approved high schools are eligible for admission to this two-year course. Students are selected for the course on the basis of their previous educational qualifications and their basic aptitude as determined at the time of personal interview in the Department of Radiology.

Applications for this training program should be filed with the Department of Radiology of Indiana University School of Medicine before June 1, as they are processed in the order in which they are received. New courses begin each September. Each new class is limited in number. Certain core courses of a general nature are being entered into the curriculum. At the end of the course, students receive the Associate in Science degree from the Division of General and Technical Studies of Indiana University and take the examination of the American Registry of X-Ray Technologists.

The curriculum follows a definite pattern designed to train the technician to become adept in the performance of any technical medical radiological procedure within the admitted limitations of the ethical and medicolegal aspects of his training. The training begins with those principles which are fundamental to the medical profession. Integrated with this are the varied courses in radiological principles and technological procedures.

Similar courses in radiologic technology are offered at Fort Wayne through the Division of General and Technical Studies. Inquiries relative to these programs should be addressed to Dr. Carl Bickley, 1120 South Barr Street, Fort Wayne, or Dr. Charles Helmen, Indiana University Medical Center, Department of Radiology, 1100 W. Michigan, Indianapolis, Indiana 46202.

## (Medical Center Campus) First Year

First Semester		Second Semester	
Anatomy and Physiology TAP A100	3	Clinical Practice I TAHS X100	12
Medical Terminology TAHS T100	1	Psychology P101	3
Surgery and Portables TAHS E200	1	Elementary Composition W131 or W140	2
Darkroom Chemistry TCHM C100	1		-
Office Procedure TAHS N100	1		17
Radiation Physics TPHY P200	2		
Nursing Procedures TAHS N101	1		
Basic Roentgenographic Technique			
TAHS R101	3		
Principles of Radiology TAHS R102	2		
Principles of Radiology (Lab) TAHS R103	1		
Principles of Fluoroscopy TAHS R104	1		
	17		

### Summer Session

Comprehensive Experience ......no credit

## Second Year

First Semester	Second Semester
Clinical Practice II TAHS X200	History and Ethics THIS H100       1         Formulating Technique TAHS F200       3         Radiation Therapy TAHS E200       2         Principles of Radiology II TAHS R202       3         Advanced Radiographic Technique       3         TAHS R201       3         Radioactive Isotope Procedure TPHY P201       2         Pathology TAHS M200       2         16       16
Summer	Session
Comprehensive Experience	eno credit
TPHY P200 Radiation Physics (2 cr.) Fundamentals of physics of electricity and radia	Reese nt energy; physics and radiology.

Normal structure and function of human body; emphasis on topographic and radiographic anatomy. TAHS T100 Medical Terminology (1 cr.) Chua

Meaning and derivation of medical and related words.

THIS H100 History and Ethics (1 cr.) Loehr Important historical events in physics leading to discovery of X-rays; duties and responsibilities of the technician to patients, doctors, and general hospital personnel in matters of medical ethics.

TAHS E200 Surgery and Portables (1 cr.) McDonnell Students assume responsibility in taking of emergency examinations of critically ill patients; use of bedside equipment and operating room facilities.

- **McDonnell** TCHM C100 Darkroom Chemistry (1 cr.) Composition and preparation of chemicals used in developing process and safe handling of radiographic film.
- TAHS N100 Office Procedure (1 cr.) Moser Systematic filing of films, charts, and reports; public relations and legal considerations.
- Nursing Procedures (1 cr.) TAHS N101 Nursing Staff Duties in personal care of patient; some emergency and aseptic technique, contagious diseases.

TAHS R101 Basic Roentgenographic Technique (3 cr.)

- Kehrein, Wideman, Thayer, Harlow Basic fundamentals concerned with production, analysis, and recording of X-ray image; basic factors and properties in medical radiography in relation to diagnostic radiographic exposure and in therapeutic application of such energy.
- Principles of Radiology I (2 cr.) **TAHS R102** Helmen Study of factors involved in film quality including protection, application of accessory devices, and capabilities and limitations of X-ray equipment.
- TAHS R103 Principles of Radiology (Lab) (1 cr.) Loehr Laboratory experience in applying principles of radiation exposures.

TPHY P202 Radiation Therapy (2 cr.) Grimwood, Hornback Various types of radiation therapy devices, their application to disease, types of treatments given, positioning of patients, and recording of treatments.

- TAHS F200 Formulating Technique (3 cr.) Kehrein Technical factors used to produce good radiographs, and principles in making exposure charts. TAHS R104 Principles of Fluoroscopy (1 cr.) Miller Modern use of fluoroscopy in radiology.
- TAHS R202 Principles of Radiography II (3 cr.) Campbell Radiation protection factors involved in film quality including application of accessory devices and capabilities and limitations of X-ray equipment.
- **TAHS R201** Advanced Radiographic Positioning (3 cr.) Staff Lecture and laboratory exercises explaining advanced positioning techniques with emphasis on pediatric techniques, cineradiography, angiography, and less common procedures.
- **TPHY P201** Radioactive Isotope Procedures (2 cr.) Reese Basic nuclear physics with an introduction to basic instrumentation and clinical application of medical isotopes.
- TAHS M200 Pathology (2 cr.) Orientation to study of abnormal structure and function of human body.

Chua

## HOSPITAL DIETARY TECHNOLOGY

## Associate Professors Irwin, Wilson; Assistant Professors Boucher, McLees, Van Ness; Instructors Abel, Stoddard.

Graduates of approved high schools are eligible for admission to this two-year course. A dietary technician assists a professional dietitian in caring for the nutritional needs of individuals and groups. The program is planned with special emphasis on hospital food service, and graduates of the program are eligible for membership in the Hospital, Institution, and Educational Food Service Society.

Applications for this training program should be filed with the Department of Dietetics at Indiana University Medical Center, Indianapolis. Classes begin each semester with a limited number of students. Students satisfactorily completing the course receive the Associate in Science degree from the Division of General and Technical Studies of Indiana University.

Inquiries relating to this program should be addressed to Miss Arlene Wilson, Department of Dietetics, Indiana University Medical Center, 1100 West Michigan Street, Indianapolis, Indiana 46207.

## Two-Year Semester Sequence

## First Year

First Semester		Second Semester	
Grammar and Vocabulary I	2	Grammar and Vocabulary II	2
Elementary Mathematics	3	Food Purchasing	3
Chemistry for Dietetics	5	Cost Control-Accounting for Dietetics	3
Meal Management	3	Sanitation and Safety	2
Social Systems in Society	3	Development of Oral Communications	2
	-	Foods I	3
	16		-
			15

## Second Year

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# Third Semester Quantity Food Production I 3 Foods II 9 Bacteriology for Dietetics 3 Personnel Management 3 Nutrition 3

Fourth Semester	
Quantity Food Production II	3
Methods of Adult Education	3
Diet Therapy	3
Institution Equipment	2
Supervisory Techniques	3
Psychology in an Acquisitive Society	3
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# Courses Offered, 1968-69

COURSES: THE SCHOOL OF MEDICINE

Anatomy D323 Anatomy (5 cr.) Webster Gross human anatomy for physical and occupational therapy students. Predisected material utilized. Microbiology J207 Microbiology for Dental Hygienists (2 cr.) Principles and applications of microbiology for dental hygienists.

Microbiology J420 Parasitology for Medical Technologists (2 cr.) Summers, Minton Required for medical technologists; laboratory procedures and identification of the larger parasites of man.

Pathology C477 Pathology (2 cr.)

Lectures on principles of pathology; study of various diseased body tissues.

Physiology F305 Human Physiology (5 cr.) Staff For physical and occupational therapy students. Animal and human physiology; neuromuscular system, respiratory, circulation, digestion, metabolism, excretion, and endocrines. Laboratory work concerned with exercises and demonstrations on neurophysiology and the physiology of muscular activity.

Psychiatry N303 Psychopathology (2 cr.) Staff Emotional stress and the resultant defense mechanisms; organic brain syndromes, schizophrenic re-actions, and psychoneurotic disorders through lecture and case presentations.

Psychiatry N306 Clinical Psychopathology (1 cr.) Ericson Clinical aspects of deviant behavior through discussion, films, case studies, and hospital visits.

## COURSES: INDIANAPOLIS DOWNTOWN CAMPUS

Students wishing to enroll in courses offered at the Downtown Campus must give four weeks' advance notice to the Allied Health Sciences Division Office.

Business C300 Office Management and Administration I (2 cr.) Business W300 Principles of Management and Administration (3 cr.) Business J340 Personnel Management (3 cr.) Classics C209 Greek and Latin Elements in Medical Terminology (2 cr.) Government G103 Introduction to American Government I (3 cr.) Government G104 Introduction to American Government II (3 cr.) Government G321 The Government and Administration of Urban Communities (3 cr.) Psychology P101 Introductory Psychology I (3 cr.) Psychology P102 Introductory Psychology II (3 cr.) Psychology P234 Mental Hygiene (3 cr.) Psychology P324 Abnormal Psychology (3 cr.) Sociology S309 The Community (3 cr.) Sociology S335 Race and Ethnic Relations (3 cr.) Speech and Theatre S121 Public Speaking (2 cr.)

Speech and Theatre S223 Business and Professional Speaking (3 cr.)

## CORE AND ELECTIVE COURSES: BLOOMINGTON CAMPUS

## Anatomy

A210 Elementary Human Anatomy (5 cr.)

## Anthropology

A103-A104 General Anthropology, I, II (3-3 cr.)

## Biology

B100 Man and the Biological World (5 cr.)

Raidt

Hubbard

Botany **B**101 Plant Biology (5 cr.) B320 Microtechnique (4 cr.) Business W100 Business Administration: Introduction (3-4 cr.) Chemistry C100 Chemistry (5 cr.) Elementary Chemistry I (5 cr.; 3 cr. without lab.) C101 C102 Elementary Chemistry II (5 cr.) C105 Principles of Chemistry (5 cr.) C106 Quantitative Chemistry (5 cr.) C313 Clinical Chemistry (3 cr.) Organic Chemistry I Lectures (3 cr.) C341 C343 Organic Chemistry I Laboratory (2 cr.) Classical Languages and Literatures C209 Greek and Latin Elements in Medical Terminology (2 cr.) Economics E111-E112 Economic Development of Western Civilization I, II (3-3 ci ) E201-E202 Principles of Economics I, II (3-3 cr.) English W131-W132 Elementary Composition I, II (2-2 cr.) W140 Elementary Composition, Special Program (2 cr.) L101-L102 Freshman Literature I, II (3-3 cr.) Fine Arts H100 Art Appreciation (3 cr.) H223-H224 Introduction to History of Art I, II (3-3 cr.) S101 Introduction to Design (2 cr.) S102 Color and Calligraphy (2 cr.) S135 Introduction to Drawing (3 cr.) S136 Pictorial Composition (2 cr.) French F101-F102 Elementary French I, II (5-5 cr.) F201-F202 Second-Year Composition and Oral Practice I, II (2-2 cr.) F210 Second-Year Composition, Oral Practice, and Reading (5 cr.) F211-F212 Modern French Prose I, II (3-3 cr.) Geography G107 Introduction to Physical Geography (5 cr.; 3 cr. without lab.) Geology G100 Earth Science: Geologic Aspects (5 cr.) G105 Elements of Geology (5 cr.) G106 Minerals and Rocks (5 cr.) German G101-G102 Elementary German I, II (5-5 cr.) G210 Second-Year Composition, Conversation, and Reading I (5 cr.) G211-G212 Second-Year Reading I, II (3-3 cr.) G232 Scientific German II (3 cr.) Government G103-G104 Introduction to American Government I, II (3-3 cr.)

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History H101-H102 European-American World Since 1500 I, II (3-3 cr.) H103-H104 History of Western European Civilization I, II (3-3 cr.) H105-H106 American History: General Course I, II (3-3 cr.)									
Home Economics H107 Clothing Construction (2 cr.) H114 Home Nursing (2 cr.) H116 Food Preparation and Meal Service (3 cr.) H118 Art in Everyday Life (3 cr.)									
Italian M101-M102 Elementary Italian I, II (5-5 cr.)									
Linguistics L103 Introduction to the Study of Language (3 cr.)									
MathematicsM115Review of Algebra and Trigonometry (5 cr.)M117Partial Review of Algebra and Trigonometry (3 cr.)M119Brief Survey of Calculus (3 cr.)M131Plane Analytic Geometry (2 cr.)M211Calculus (3 cr.)									
<ul> <li>Microbiology</li> <li>M250 Introductory Bacteriology: Lectures (3 cr.)</li> <li>M255 Introductory Bacteriology: Laboratory (2 cr.)</li> <li>M350 Pathogenic Microbiology and Immunology: Lectures (3 cr.)</li> <li>M355 Pathogenic Microbiology and Immunology: Laboratory (2 cr.)</li> </ul>									
MusicX050University Orchestras (2 cr.)X060University Bands (2 cr.)X070A Capella Singers or Women's Chorus (2 cr.)X070The Singing Hoosiers (2 cr.)X070The Belles of Indiana (2 cr.)X070University Singers (2 cr.)X070Chamber Vocal Ensemble (2 cr.)X070Oratorio Chorus (2 cr.)X070Introduction to Musical Theater (2 cr.)AppliedMusic (2 or 6 cr.)									
Philosophy P100 Introduction to Philosophy (3 cr.)									
<ul> <li>Physical Education For Men (HPER)</li> <li>M130 Basic Instruction in Physical Education for Men (1 cr.)</li> <li>A181-A182 Orientation to Athletic Training I, II (3-3 cr.)</li> <li>H160 First Aid (2 cr.)</li> <li>R180 Recreation Leadership (2 cr.)</li> <li>R273 Arts and Crafts (2 cr.)</li> </ul>									
Physical Education for Women (HPER) W100 Basic Instruction in Physical Education for Women (1 cr.)									
<ul> <li>Physics</li> <li>P100 Physics in the Modern World (5 cr.)</li> <li>P201 General Physics: Mechanics, Heat, and Sound (5 cr.)</li> <li>P202 General Physics: Light, Electricity, and Magnetism (5 cr.)</li> </ul>									

Physiology P204 Elementary Human Physiology (5 cr.) Psychology P101-P102 Introductory Psychology I, II (3-3 cr.) P111-P112 Introductory Laboratory Psychology I, II (2-2 cr.) P324 Abnormal Psychology (3 cr.) Slavic Languages and Literatures R101-R102 Elementary Russian I, II (5-5 cr.) Sociology S161 Principles of Sociology (3 cr.) S163 Social Problems (3 cr.) S232 Society and the Individual (3 cr.) S309 The Community (3 cr.) Spanish S101-S102 Elementary Spanish I, II (5-5 cr.) S203-S204 Second-Year Spanish I-II (4-4 cr.) Speech and Theatre S121 Public Speaking I (2 cr.) S131 Fundamentals of Theatre Practice I (3 cr.) S160 Speech Correction for Classroom Teaching (3 cr.) S200 Training the Speaking Voice (1 cr.) S221 Social Influence of Speech I (3 cr.) S224 Parliamentary Procedure (1 cr.) S240 Appreciation of the Theatre (2 cr.) Study of Religion R152 Introduction to Religions of the West (3 cr.) R153 Introduction to Religions: Far East and India (3 cr.) Zoology Z103 Animal Biology (5 cr.) Z215 Developmental Anatomy (5 cr.)

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# Faculty and Staff

## **Certification Abbreviations**

- A.R.I.T.—American Registry of Inhalation Therapists; approved by the American Society of Anesthesiology and the American College of Chest Physicians
- C.R.L.—Certified Record Librarian; approved by the American Association of Medical Record Librarians
- C.T. (ASCP)—Cytotechnologist; approved by the American Medical Association and the American Society of Clinical Pathologists
- H.T. (ASCP)—Histological Technician; approved by the American Medical Association and the American Society of Clinical Pathologists
- M.T. (ASCP)—Medical Technologist; approved by the American Medical Association and the American Society of Clinical Pathologists
- M.T. (ASCP) BB-Blood Banking Technologist; approved by the American Medical Association and the American Society of Clinical Pathologists
- N.M.T. (ASCP)—Nuclear Medical Technologist; approved by the American Medical Association and the American Society of Clinical Pathologists
- O.T.R.—Registered Occupational Therapist; approved by the American Medical Association and the American Occupational Therapy Association
- R.D.H.-Registered Dental Hygienist; approved by the American Dental Association
- R.P.T.—Registered Physical Therapist; approved by the American Medical Association and the American Physical Therapy Association
- R.R.L.—Registered Medical Record Librarian; approved by the American Medical Association and the American Association of Medical Record Librarians
- R.T.—Registered Radiologic Technologist; approved by the American Medical Association and the American Registry of Radiologic Technologists

## PROGRAM DIRECTORS

J. LYNN ARBOGAST, M.D., Director of the Division of Allied Health Sciences

HAROLD S. ADAMS, B.S., Director of Public Health-Environmental Health

MRS. FRANCES C. EKSTAM, M.S., Director of Physical Therapy

DOROTHY ERICSON, A.M., Director of Occupational Therapy

A. REBEKAH FISK, M.S., Director of Public Health Dental Hygiene

CHARLES H. HELMEN, M.D., Director of Radiologic Technology

SAMUEL H. HOPPER, Ph.D., Director of Public Health Administration and Education

MARY E. LACY, R.R.L., Director of Medical Records

ALVIN M. LoSASSO, M.D., Director of Inhalation Therapy

ARNOLD R. TAMMES, M.D., Director of Medical Technology

FRANK VELLIOS, M.D., Director of Cytotechnology

BATCHELOR, MRS. SUZANNE, B.S. (Indiana University, 1965), (M.T. (ASCP), 1965), Lecturer in Medical Technology

BATTERSBY, J. STANLEY, M.D. (Indiana University, 1939), Professor of Surgery

- BAUM, MRS. RUTH E., B.S. (Indiana University, 1964), (R.P.T., 1964), Instructor in Physical Therapy
- BEHNKE, ROY H., M.D. (Indiana University, 1946), Professor of Medicine

ACKERMAN, M. ANNE, M.S. (University of Michigan, 1965), (R.D.H., 1951), Assistant Professor in Dental Hygiene (School of Dentistry)

ADAMS, HAROLD S., B.S. (Massachusetts State College, 1929), Director of Public Health-Environmental Health Program, and Associate Professor of Public Health

ALEXANDER, PAUL J., M.D. (University of Washington, 1953), Professor of Pathology ARBOGAST, J. LYNN, M.D. (Indiana University, 1936), Director of the Division of Allied Health Sciences, and Professor of Pathology

BLAND, HESTER B., H.S.D. (Indiana University, 1956), Lecturer in Public Health Education

BOLINGER, GARRY L., M.D. (Indiana University, 1965), Lecturer in Medical Technology

BONSETT, CHARLES A., M.D. (Indiana University, 1952), Associate in Neurology

BRITTAIN, HARRY M., Lecturer in Statistics

- BROSE, MRS. LINDA, B.S. (Indiana University, 1962), (M.T. (ASCP), 1962), Lecturer in Medical Technology
- CAMPBELL, J. A., M.D. (University of Cincinnati, 1938), Chairman, and Professor of Radiology
- CARR, JACK D., D.D.S. (Indiana University, 1939), M.S. (Butler University, 1957), Assistant Professor of Radiology
- CHANDLER, JUDITH ANN, R.T. (Indiana University, 1964), Lecturer in Radiologic Technology
- CHUA, GONZALO T., M.D. (University of Philippines, 1964), Lecturer in Radiologic Technology
- CRESS, THOMAS L., M.D. (Indiana University, 1963), Resident in Pediatrics
- DEFALQUE, RAY J., M.D. (University of Louvain (Belgium), 1956), Associate Professor of Anesthesiology
- DRITSAS, EUGENIA, Ph.G. (Massachusetts College of Pharmacy, 1924), (M.T. (ASCP), 1931), Instructor in Serology
- EKSTAM, MRS. FRANCES C., M.S. (Indiana University, 1960), (R.P.T., 1944), Director of the Physical Therapy Program, and Associate Professor of Physical Therapy
- ERICSON, DOROTHY, A.M. (Columbia University, 1959), (O.T.R., 1952), Director of the Occupational Therapy Program, and Assistant Professor of Occupational Therapy
- FASSNACHT, GEORGE G., M.C.E. (New York University, 1940), Lecturer in Public Health
- FEELEY, MRS. MARY, B.S. (Butler University, 1945), (M.T. (ASCP), 1946), Lecturer in Medical Technology
- FINDLEY, THEODORE P., M.D. (Indiana University, 1964), Lecturer in Medical Technology
- FISHER, FRANK E., B.S.E.E. (Purdue University, 1930), Lecturer in Public Health
- FISK, A. REBEKAH, M.S. (Butler University, 1958), (R.D.H., 1923), Director of Public Health Dental Hygiene Program, and Assistant Professor in Clinic (School of Dentistry)
- FRANKEN, EDMUND A., M.D. (University of Oklahoma, 1961), Assistant Professor of Radiology
- GALLAGHER, ELIZABETH, A.B. (Butler University, 1959), (O.T.R., 1938), Instructor in Occupational Therapy, and Supervisor of Occupational Therapy Unit, Long Hospital
- GARCEAU, GEORGE J., M.D. (Northwestern University, 1924), Distinguished Professor of Orthopedic Surgery
- GISH, CHARLES W., D.D.S. (Indiana University, 1949), M.S.D. (1960), Assistant Professor of Pedodontics and Consultant in Public Health Dentistry (School of Dentistry)
- GLOVER, JOHN L., M.D. (Vanderbilt University, 1958), Assistant Professor of Surgery
- GRIFFIN, NANCY L., B.S. (Texas Woman's University, 1958), (O.T.R., 1958), Instructor in Occupational Therapy
- GRIMWOOD, MRS. KAY, R.T. (Indiana University, 1966), Lecturer in Radiologic Technology
- HAGAR, MRS. MARY C., R.N. (Miami Valley Hospital, Dayton, Ohio, 1929), (R.P.T., 1946), Lecturer in Physical Therapy, and Supervisor of the Physical Therapy Unit, Long Hospital
- HAMILTON, MRS. CONSTANCE R., B.S. (Indiana University, 1964), (R.D.H., 1963), Instructor in Dental Hygiene (School of Dentistry)
- HARLOW, JO ANN, R.T. (Indiana University, 1965), Lecturer in Radiologic Technology HAYMOND, MRS. MARY M., B.S. (College of St. Scholastica, 1940), (R.R.L., 1942),
- Assistant Director and Instructor in the Medical Records Program
- HELMEN, CHARLES H., M.D. (Indiana University, 1953), Director of Radiologic Technology, and Associate Professor of Radiology
- HEMMEL, ANN L., B.S. (St. Mary College, Xavier, Kansas, 1960), (A.R.I.T., 1964), Co-director of Inhalation Therapy Program, and Instructor in Inhalation Therapy

HERT, ORAL H., B.S. (Purdue University, 1948), Lecturer in Public Health

- HINE, MAYNARD K., D.D.S. (University of Illinois, 1930), M.S. (1932), Dean of the School of Dentistry; Chairman, and Professor of Periodontics (School of Dentistry) HOCKER, NARCISSA, M.S. (Indiana University, 1964), (M.T. (ASCP) BB, 1955), In-
- structor in Immunohematology
- HOPPER, SAMUEL H., Ph.D. (Massachusetts Institute of Technology, 1937), Chairman of the Executive Committee of the Department of Preventive Medicine; Director of Public Health Administration and Education, and Professor of Public Health
- HORNBACK, NED B., M.D. (University of Wisconsin, 1956), Assistant Professor of Radiology
- HUBBARD, JESSE D., M.D. (Johns Hopkins University, 1951), Associate Professor of Pathology
- Huss, Joy, A.B. (Whittier College, 1953), (O.T.R., 1959), (R.P.T., 1962), Instructor in Occupational Therapy, and Supervisor of Occupational Therapy Unit, Riley Hospital
- JOHNSTON, JOHN F., D.D.S. (Indiana University, 1921), University Professor of Den-tistry (School of Dentistry)
- JONES, ELIZABETH A., M.S. (Indiana University, 1949), M.P.H., (University of Michi-gan, 1965), Lecturer in Public Health
- JUMP, ROBERT L., B.P.S. (Purdue University, 1955), Lecturer in Public Health
- KEHREIN, SUETTA, R.T. (Indiana University, 1964), Assistant Director, and Teaching Associate in Radiologic Technology
- KEPPLER, JOHN F., B.S. (Purdue University, 1938), Lecturer in Public Health
- KING, HAROLD, M.D. (Yale University, 1946), Professor of Surgery
- KLINE, JOAN L., B.S. (Indiana University, 1967), (R.D.H., 1954), Instructor in Dental Hygiene (School of Dentistry)
- KOEHNEKE, ANITA, B.S. (Washington University, 1956), (R.P.T., 1948), Lecturer in Physical Therapy, and Supervisor of the Physical Therapy Department, Riley Hospital
- LACY, MARY ANN, A.B. (College of St. Scholastica, 1954), (R.R.L., 1954), Director, and Assistant Professor of Medical Records
- LADUE, RUTH, A.M. (Stanford University, 1966), (R.P.T., 1945), Instructor in Physical Therapy
- LEE, WIE SHING, Ph.D. (Indiana University, 1966), Instructor in Pathology
- LEHMAN, RACHEL M., B.S. (Indiana State University, 1929), (M.T. (ASCP), 1936), Instructor in Medical Technology
- LOEHR, WILLIAM M., M.D. (University of Louisville, 1935), Professor of Radiology
- LoSasso, ALVIN M., M.D. (The Ohio State University, 1963), Director of Inhalation Therapy Program, and Assistant Professor of Anesthesiology
- McCowen, Max C., M.S. (Indiana State University, 1938), Lecturer in Public Health
- McDonnell, Terry, R.T. (Indiana University, 1963), Lecturer in Radiologic Technology
- McLelland, Malcolm J., M.S. (Indiana University, 1941), Lecturer in Public Health
- MANDELBAUM, ISIDORE, M.D. (State University of New York Medical Center, 1952). Associate Professor of Surgery
- MANFREDI, FELICE, M.D. (University of Rome (Italy), 1949), Associate Professor of Medicine
- MARSHALL, ALBERT L., M.D. (Indiana University, 1935), Lecturer in Public Health
- MATLOCK, JAMES F., D.D.S. (Indiana University, 1943), M.S.D. (1962), Assistant Professor of Radiology (School of Dentistry)
- MATTHEWS, WILLIAM M., M.D. (Indiana University, 1946), Associate Professor of Anesthesiology
- MILLER, JERRY, M.D. (Temple University, 1947), Associate Professor of Anesthesiology
- MILLER, M. DEVON, M.S. (Indiana University, 1966), Instructor in Medical Records
- MILLER, R. E., M.D. (Indiana University, 1951), Professor of Radiology
- MINTON, SHERMAN A., JR., M.D. (Indiana University, 1942), Associate Professor of Microbiology
- MISHKIN, FREDERICK S., M.D. (University of Chicago, 1962), Assistant Professor of Radiology

MOSER, MICHAEL, R.T. (Parkview, 1955), Lecturer in Radiologic Technology

- NATHAN, CAROL, B.S. (New York University, 1958), (O.T.R., 1958), Instructor in Occupational Therapy
- NOBLE, RONNIE J., M.D. (Indiana University, 1964), Lecturer in Medicine

NOLAN, MRS. ANNA J., R.R.L. (1941), Lecturer in Medical Records

- NORMAN, RICHARD D., D.D.S. (Indiana University, 1958), M.S.D. (1964), Assistant Professor of Dental Materials (School of Dentistry)
- OFFUTT, ANDREW C., M.D. (Indiana University, 1940), L.L.D., (Franklin College, 1957), Assistant Professor of Public Health
- PAREKH, AMRITIAL C., Ph.D. (University of Minnesota, 1960), M.D. (1965), Assistant Professor of Pathology
- PHILLIPS, RALPH W., M.S. (Indiana University, 1955), Research Professor of Dental Materials
- PING, RONALD S., D.D.S. (Indiana University, 1941), Acting Chairman, and Associate Professor of Oral Surgery (School of Dentistry)
- POLLIARD, MRS. CAROLINE S., B.S. (University of New Hampshire, 1952), (O.T.R., 1952), Instructor in Occupational Therapy
- RAIDT, HAROLD, M.S. (University of Kentucky, 1934), Professor of Microbiology
- RAMSDEN, ELSA L., Ed.D. (Boston University, 1962), (R.P.T., 1957), Assistant Professor of Physical Therapy
- RANDOLPH, MRS. SHIRLEY L., A.M. (University of Southern California, 1959), (R.P.T., 1955), Instructor in Physical Therapy
- REESE, ISAAC C., M.S. (University of Rochester, 1961), Assistant Professor of Radiology (Nuclear Medicine)
- RIDLEY, ELTON, M.B.A. (University of Chicago, 1952), Director of Hospitals, and Assistant Professor of Hospital Administration
- RIEKENA, JOHN, B.S. (University of Puget Sound, 1961), (O.T.R., 1961), Lecturer in Occupational Therapy, and Director of Prevocational Evaluation, Crossroads Rehabilitation Center, Indianapolis
- ROESCH, RYLAND P., M.D. (Indiana University, 1948), Associate Professor of Anesthesiology
- ROSS, JOSEPH C., M.D. (Vanderbilt University, 1954), Professor of Medicine
- SEYMOUR, MARGARET, O.T.R. (University of Toronto (Canada), 1947), Instructor in Occupational Therapy
- SHAFER, WILLIAM G., D.D.S. (Indiana University, 1952), Chairman, and Professor of Oral Pathology (School of Dentistry)
- SHANKS, JAMES C., JR., Ph.D. (Northwestern University, 1957), Clinical Director of Speech Pathology Services, and Associate Professor of Speech Pathology (Otorhinolaryngology and Bronchesophagology)
- SHUMACKER, HARRIS B., M.D. (Johns Hopkins University, 1932), Chairman, and Professor of Surgery
- SIMEK, MRS. ERNA, A.M. (Washington University, 1954), (O.T.R., 1944), Assistant Professor of Occupational Therapy
- SMITH, CHARLES E., D.D.S. (Indiana University, 1961), M.P.H. (University of Michigan, 1965), Instructor in Pedodontics and Preventive Dentistry (School of Dentistry)
- SMITH, DONALD E., M.B.A. (University of Chicago, 1963), Associate Director of Hospitals, and Lecturer in Hospital Administration
- SMITH, ROGER A., B.S. (Indiana State University, 1961), (C.T. (ASCP), 1964), Instructor in Cytotechnology
- SNIDER, RICHARD T., Ph.D. (University of Houston, 1966), Instructor in Psychology (Psychiatry), and Lecturer in Occupational Therapy
- SOLOW, ELIZABETH B., M.S. (Indiana University, 1962), Instructor in Medical Technology
- SPOLYAR, LOUIS W., M.D. (Indiana University, 1936), Assistant Professor of Public Health
- STANDISH, SAMUEL M., D.D.S. (Indiana University, 1945), Chairman, Division of Clinical Oral Pathology, and Associate Professor of Oral Pathology (School of Dentistry)

- STARKEY, PAUL E., D.D.S. (Indiana University, 1943), Chairman, Division of Clinical Pedodontics, and Professor of Pedodontics (School of Dentistry)
- SUMMERS, WILLIAM A., Ph.D. (Tulane University of Louisiana, 1940), Professor of Microbiology
- SUTHERLIN, MARILYN C., B.S. (Indiana University, 1954), (R.R.L., 1954), Lecturer in Medical Records
- SWARTZ, MARJORIE L., M.S. (Indiana University, 1959), Associate Professor of Dental Materials (School of Dentistry)
- SWINEHART, JAMES W., M.D. (Indiana University, 1964), Lecturer in Medical Technology
- TAMMES, ARNOLD R., M.D. (University of Iowa, 1956), Director of Medical Technology, and Associate Professor of Pathology
- THAYER, LINDA, R.T. (Indiana University, 1965), Lecturer in Radiologic Technology
- THOMPSON, RUTH ANN, B.S. (University of Kentucky, 1954), (M.T. (ASCP), 1954), Lecturer in Medical Technology
- TOSICK, WILLIAM A., M.D. (Hahnemann Medical College, 1939), Assistant Professor of Radiology
- TOTTEN, CARLA J., B.S. (Indiana University, 1967), (R.D.H., 1955), Instructor in Dental Hygiene (School of Dentistry)
- VAN HUYSEN, GRANT, D.D.S. (University of Pennsylvania, 1925), Chairman, and Professor of Oral Anatomy (School of Dentistry)
- VELLIOS, FRANK, M.D. (Washington University, 1946), Chairman, and Professor of Pathology
- WEBSTER, RICHARD C., Ph.D. (University of Kansas, 1949), Associate Professor of Anatomy (School of Medicine, School of Dentistry)
- WEISELL, WILLIAM B., L.L.D. (Columbia University, 1940), Instructor in Jurisprudence
- WHITTEN, J. B. JR., D.D.S. (University of Kansas City, 1962), M.S.D. (Indiana University, 1966), Assistant Professor of Oral Pathology (School of Dentistry)
- WIDEMAN, SUSAN J., R.T. (Indiana University, 1961), Lecturer in Radiologic Technology
- YOHO, ROBERT O., A.M. (Indiana University, 1939), (H.S.D., 1957), Instructor in Public Health
- Young, M. KATHRYN, A.M. (University of Michigan, 1937), (R.P.T., 1946), Assistant Professor of Physical Therapy
- Young, MILDRED, M.S. (Butler University, 1966), (M.T. (ASCP), 1942), Lecturer in Hematology

## FACULTY AND STAFF-FORT WAYNE

- ALDRED, ALLEN W., M.D. (Indiana University, 1953), Assistant Professor of Pathology, Lutheran Hospital
- AUST, CHARLES H., M.D. (Indiana University, 1953), Assistant Professor of Pathology, Lutheran Hospital
- Fox, DAVID R., (M.T. (ASCP), 1961), Lecturer in Medical Technology, St. Joseph's Hospital
- FRANKHOUSER, CHARLES, M.D. (State University of New York, 1950), Assistant Professor of Pathology, Parkview Memorial Hospital
- GRIEST, WALTER D., M.D. (University of Cincinnati, 1944), Director, and Assistant Professor of Pathology, Lutheran Hospital
- MACHLAN, THERESA M., (M.T. (ASCP), 1952), Lecturer in Medical Technology, Lutheran Hospital
- O'SHAUGHNESSY, PHILLIP E., D.D.S. (Indiana University, 1960), Assistant Director of Dental Auxiliary
- PAULY, LEONARD R., M.D. (University of Louisville, 1948), Assistant Professor of Pathology, St. Joseph's Hospital
- RUMSCHLAG, DONALD R., B.S. (St. Francis College, 1962), (M.T. (ASCP), 1960), Lecturer in Medical Technology, St. Joseph's Hospital
- SCHIMMELE, RALPH G., D.D.S. (Indiana University, 1952), Assistant Professor of Operative Dentistry, Consultant in Crown and Bridge and Partial Denture, and Director of Dental Auxiliaries on the Regional Campuses

SCHLADEMAN, KARL R., M.D. (Northwestern University, 1942), Director, and Assistant Professor of Pathology, Parkview Memorial Hospital

SCHNEIDER, LOUIS, M.D. (New York University, 1940), Director, and Assistant Professor of Pathology, St. Joseph's Hospital

SCHWARTZ, SAM, B.S. (Purdue University, 1956), Cert. Microbiology, 1965, Lecturer in Medical Technology, Parkview Memorial Hospital

WHITCOMB, RAE JEAN (M.T. (ASCP), 1961), Lecturer in Medical Technology, Parkview Memorial Hospital

## FACULTY AND STAFF-BEECH GROVE

BUEHL, ISABELLE A., M.D. (Indiana University, 1959), Assistant Professor of Pathology CARRIER, DOROTHY ANN, B.S. (Lander College, 1963), (M.T. (ASCP), 1963), Lecturer in Medical Technology

CHARNLEY, JUDITH, B.S. (Ball State University, 1954), (M.T. (ASCP), 1955), Lecturer in Medical Technology

CLARK, MRS. ELIZABETH ANN, (M.T. (ASCP), 1942), Lecturer in Medical Technology

COSTIN, ROBERT L., M.D. (Indiana University, 1956), Director, and Instructor in Pathology

HIBBEN, MRS. KATHRYN L., (M.T. (ASCP), 1952), Lecturer in Medical Technology MACALLISTER, MRS. EVELYN M., B.S. (Indiana University, 1962), (M.T. (ASCP), 1962), Teaching Supervisor and Instructor in Medical Technology

ROBERTSON, MRS. EMILY K., A.B. (Macalester College, 1947), (M.T. (ASCP), 1952), Lecturer in Medical Technology

UTKE, MRS. EVELYN M., A.B. (University of North Carolina at Greensboro, 1943), (M.T. (ASCP), 1957), Lecturer in Medical Technology

## AFFILIATED LECTURERS

ARNOLD, GERALDINE, A.B. (Butler University, 1956), R.P.T. (University of Iowa, 1945), Chief Physical Therapist, Veterans Administration Hospital, Indianapolis

BABIAK, DEMETRIUS, B.S. (New York University, 1949), R.P.T. (1949), Chief Physical Therapist, Veterans Administration Hospital, Louisville, Ky.

BAILEY, FLORENCE, B.S. (Fitzsimmons General Hospital, 1944) R.P.T. (1944), Supervisor, Physical Therapy, Good Samaritan Hospital, Cincinnati, Ohio

BATES, ELAINE, B.S. (Mt. Mary College, 1953), O.T.R. (1954), Director, Department of Occupational Therapy, LaRue D. Carter Memorial Hospital

BOGER, LORETTA, B.S. (Wittenberg University, 1937), R.P.T. (Cleveland Clinic, 1946), Chief Physical Therapist, Cleveland Metropolitan General Hospital, Cleveland, Ohio

CAMP, MAXINE, B.S. (Wayne State University, 1957), O.T.R. (1957), Director, Occupational Therapy, Methodist Hospital, Indianapolis

FREDRICKSON, DOROTHY, A.M. (Stanford University, 1948), Director, Physical Therapy Department, Vanderbilt Hospital, Nashville, Tenn.

GEHRIS, JOSEPH, B.S. (College of William and Mary, 1953), R.P.T. (Medical College of Virginia, 1953), Chief Physical Therapist, Community Hospital, Indianapolis

GOLDBLATT, ANNA LOU, B.S., R.P.T. (Medical College of Virginia, 1959), Chief of Education, St. Francis Hospital, Pittsburgh, Pa.

GRUMMON, RUTH, A.B. (Depauw University, 1938), O.T.R. (1940), Director, Occupational Therapy, Marion County General Hospital, Indianapolis

HAYES, WAYNE, B.S. (Indiana University, 1960), R.P.T. Supervision, Physical Therapy, St. Mary's Hospital, Decatur, Illinois

KENNEDY, ROBERT, B.S. (Purdue University, 1956), R.P.T. (University of Pennsylvania, 1957), Director, Physical Therapy, Parkview Memorial Hospital, Fort Wayne

KINSMAN, DEBORAH, M.S. (Stanford University, 1949), R.P.T. (1942), Associate Director, Physical Therapy Department, Vanderbilt Hospital, Nashville, Tenn.

LEWIS, JOHN A., B.S., R.P.T. (Duke University, 1955), Chief Physical Therapist, St. Joseph's Hospital, South Bend

LINZIE, MRS. WILMA, B.S. (Milwaukee-Downer College, 1947), O.T.R. (1948), Chief Occupational Therapist, Veterans Administration Hospital, Indianapolis

- LURIE, MARCIA, B.S. (Indiana University, 1964), O.T.R. (1964), Occupational Therapist, Marion County General Hospital, Indianapolis
- MILES, MRS. MARY, B.S., R.P.T. (University of Wisconsin, 1957), Clinical Instructor, Highland View Hospital, Cleveland, Ohio
- MURPHY, KATHLEEN, B.S. (Washington University, 1954), O.T.R. (1954), Occupational Therapist, Veterans Administration Hospital, Indianapolis
- NAIL, MRS. JOAN, B.S. (Indiana University, 1966), O.T.R. (1966), Children's Service, LaRue D. Carter Memorial Hospital, Indianapolis
- PITT, DONALD, B.S. (Purdue University, 1958), R.P.T. (University of Buffalo, 1960), Chief Physical Therapist, Methodist Hospital, Indianapolis
- RAGLA, MARLENE, B.S. (Western Michigan University, 1958), O.T.R. (1959), Children's Unit, Central State Hospital, Indianapolis
- STRUNK, JOSEPH, R.P.T. (Medical College of Virginia, 1950), Chief Physical Therapist, Veterans Administration Hospital, Cincinnati, Ohio
- WEEKS, MRS. ZONA, B.S. (University of Wisconsin, 1958), O.T.R. (1959), Unit Supervisor, GM/S and Physical Disabilities, Veterans Administration Hospital, Indianapolis
- WHITFIELD, VIRGINIA, B.S. (University of Pittsburgh, 1945), R.P.T. (Duke University, 1946), Supervisor, Home for Crippled Children, Pittsburgh, Pennsylvania
- YODER, MRS. CATHERINE, B.S. (Western Michigan College, 1954), O.T.R. (1954), Director, Occupational Therapy, Central State Hospital, Indianapolis

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SEMESTER	TRANS.	HRS.	PTS.	INC		AV	ER.	GPR.	REMARKS
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