# School of Dentistry 1973-74

Indiana University Bulletin



#### INDIANA UNIVERSITY

Academic Programs in

**★College of Arts and Sciences ★Division of Optometry** 

**★School of Business\*** 

**Division of Continuing Education**†

**★School of Dentistry** 

**★School of Education\*** 

**Division of General and Technical Studies** 

**★Graduate School** 

★School of Health, Physical Education, and Recreation

\*Herron School of Art

Indianapolis Law School

**★School of Law** 

★Graduate Library School

**★School of Medicine** 

**★Division of Allied Health Sciences**Division of Postgraduate and Continuing Education

**★School of Music** 

**★Normal College of the American Gymnastic Union** 

**★School of Nursing** 

Regional Campus Administration:

School of Public and Environmental Affairs

★School of Social Service

**★Summer Sessions** 

**★University Division** 

Bulletins for most of the above divisions of the University (marked ★) may be obtained from the Office of Records and Admissions, Bryan Hall, Indiana University, Bloomington, Indiana 47401. Other divisions for which Bulletins are available should be contacted directly: Indianapolis Law School, 735 West New York Street, Indianapolis, Indiana 46202; Division of General and Technical Studies, 317 East Second Street, Bloomington, Indiana 47401.

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

<sup>†</sup> Brochures on the Independent Study Division, Bureau of Public Discussion, Labor Education and Research Center, and Real Estate Continuing Education Programs are available from this Division (Owen Hall).

‡ Write to Regional Campus Administration, 107 North Pennsylvania, Suite

<sup>‡</sup> Write to Regional Campus Administration, 107 North Pennsylvania, Suite
806, Indianapolis, Indiana 46204, for a Bulletin, specifying the particular regional
campus.

<sup>§</sup> Write to the School of Public and Environmental Affairs for further information.

INDIANA UNIVERSITY SCHOOL OF DENTISTRY
Indiana University - Purdue University at Indianapolis

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# INDIANA UNIVERSITY BULLETIN

(OFFICIAL SERIES)

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# Calendars, Bloomington Campus

The calendar as printed is subject to change. Check the Schedule of Classes for official calendar.

#### 1972-73

1973-74

Intensive Session IV1, July 16-31

Intensive Session V, August 1-17

Classes begin Aug. 1, W Classes end Aug. 17, F

First Semester

and counseling (for			
University Division, transfer,			
and graduate students)	Aug. 22, T, 9 a.m	Aug. 21, T,	9 a.m.
Registration and counseling	Aug. 23, 24, 25, 26; \	W, Th, F, S Aug. 22, 23	, 24, 25; W, Th, F, S
Classes begin	Aug. 28, M, 7:30 a.n	Aug. 27, M	, 7:30 a.m.
Labor Day recess	Sept. 4, M	Sept. 3, M	
Midterm reports due	Oct. 20, F, 5 p.m	Oct. 19, F,	5 p.m.
Thanksgiving recess begins			
(after last class)			
Classes resume	Nov. 27, M, 7:30 a.r.	n	, 7:30 a.m.
Classes end			
Departmental exams begin	Dec. 18, M, 7:45 a.n	Dec. 17, M	, 7:45 a.m.
Departmental exams end	Dec. 20, W, 5:15 p.n	n Dec. 19, W	, 5:15 p.m.
New student orientation and counseling (for University Division, transfer,		Second Semester	
and graduate students)	Jan 9 T 9 a m	Ian 8 T	9 a.m.
Registration and counseling	Ian 10 11 12 13. V	W Th F S Ian 9 10	11 12 W Th F S
Classes begin	Ian 15 M 7:30 a m	Ian 14 M	7:30 a m
Midterm reports due			
Spring recess begins	March 5, 1, 5 p.m		, 5 p.m.
(after last class)	March 10 S	March 9	CONDUCTOR OF THE PARTY OF THE P
Classes resume			
Founders Day*			
Classes end			
Departmental exams begin	May 7 M 7.45 a m	May 6 M	7.45 a m
Departmental exams begin  Departmental exams end	May 0 W 5.15 pm	Mon 9 W	5.15 n m
Commencement			
Commencement	May 13, Sun	to be anno	unced
	Summer Sess	ions, 1973	
First Summer Session (6 weeks)		Second Summer Session (8	weeks)
May 14-June 21		June 22-August 17	A STATE OF THE STATE OF
Counseling	May 14 M	Counseling	June 22 23 F
Registration		Registration	
Classes begin		Classes begin	
Classes end		Independence Day recess	
		Classes end	
Intensive Session I, May 14-3	31	Classes cliq	
		7 0 . 777 7	- 25 Teles 12
	May 14. M	Intensive Session III. Iu	
Counseling		Intensive Session III, Ju-	
	May 14, M	Classes beginIndependence Day reces	June 25, M

Counseling June 8, F

Registration ......June 8, F Classes begin ......June 9, S

Classes end .....June 23, S

Intensive Session IIt, June 8-23

New student orientation

and counseling (for

<sup>\* 9:30, 10:30, 11:30,</sup> and 12:30 classes do not meet.

<sup>†</sup> Three Saturday class meetings necessary in this session.

<sup>‡</sup> One Saturday class meeting necessary in this session.

# Calendar, 1973-74

# School of Dentistry, Medical Center Campus

# Summer Session, 1973

Summer Session begins, 8:30 a.m.	May	14.	, M
Independence Day-School closed	July	4,	W
Summer Session ends, 4:30 p.m.	July	20,	F

### First Semester

Registration for all dental hygiene students and graduate studentsAug Classes begin for all studentsAug						
Labor Day Holiday						
Dental Alumni Days (Bloomington—classes as usual)			15;	Th,	F, S	
Thanksgiving Recess begins, 5 p.m.—Clinics closedNov						
Thanksgiving Recess ends, 8 a.m.—Clinics openNov						
Final examinations begin						
Final examinations end						
Semester ends	19,	W				

#### Second Semester

Registration for dental hygiene students and graduate students	.Jan. 9, W
Classes begin for all students	.Jan. 10, Th
Spring recess begins for all students, 5 p.m.	March 4, M
Spring recess ends for all students, 8 a.m.	.March 11, M
Final examinations begin	May 2, Th
Final examinations end.	May 8, W
Semester ends, 5 p.m.	May 10, F
Commencement	.To be announced

# Summer Session, 1974 (tentative)

Summer Session begins, 8 a.m. May	13,	M	
Memorial Day—HolidayMay	27,	M	
Summer Session ends, 5 p.m.—Clinics closedJuly	19,	F	

# Indiana University

Founded in 1820, only four years after Indiana achieved statehood, Indiana University is one of the oldest state universities west of the Alleghenies. It has consistently met its original commitment of providing a statewide system of public higher education. Among the first American universities to admit women on an equal standing with men, I.U. also provides its services without regard to race, creed, or color.

Indiana University is ranked eighth largest in the nation with an enrollment totaling 68,500 on its eight state campuses and including students from all fifty states and many foreign countries. With a faculty exceeding 3,000, its more than 100 departments offer 5,000 courses of instruction.

The major divisions of Indiana University are the Bloomington campus (the largest and oldest), Indiana University - Purdue University at Indianapolis (IUPUI), and six other campuses strategically located at population centers over the state.

### The Bloomington Campus

College of Arts and Sciences (includes the Division of Optometry)

School of Business

School of Education

School of Health, Physical Education, and Recreation

School of Law

School of Music

School of Public and Environmental Affairs

Graduate School

Graduate Library School

University (Freshman) Division

Division of Continuing Education

# Indiana University - Purdue University at Indianapolis

School of Liberal Arts

School of Engineering and Technology

School of Sciences

Indianapolis Law School

Herron School of Art

Normal College of the American Gymnastic Union

School of Social Service

Division of Business

Division of Education

University (Freshman) Division

#### On the Medical Center Campus:

School of Medicine (includes the Division of Allied Health Sciences)

School of Dentistry

School of Nursing

# The Regional Campuses

Indiana University East (Richmond)

Indiana University at Fort Wayne

Indiana University at Kokomo

Indiana University Northwest (Gary)

Indiana University at South Bend

Indiana University Southeast (New Albany-Jeffersonville)

These campuses grant degrees in the Arts and Sciences, Education, Business, and Medical Technology. Through the Division of General and Technical Studies, associate certificates are awarded in a number of para-professional areas.

Additional University facilities include Bradford Woods, the biological station at Crooked Lake, the Geologic Field Station in Montana, the Lake Monroe biology site, the Goethe Link Observatory and Morgan-Monroe Observatory of Goethe Link, the Angel Mounds historical site near Evansville, and Camp Brosius at Elkhart Lake, Wisconsin.

The Indiana University library system contains more than 4,500,000 items. Comprising this system are: the University Library; the Lilly Library, with its valuable collections of rare books and manuscripts; libraries at each of the regional campuses; school and departmental libraries; and collections at housing units in the Halls of Residence.

# The School of Dentistry

A member of the American Association of Dental Schools and fully accredited by the Council on Dental Education of the American Dental Association, the School of Dentistry is located in Indianapolis and is an integral part of the University's Medical Center. Graduates are currently practicing in all of the fifty states and most of the countries of the world.

Through the facilities of Indiana University several programs of study at the undergraduate level are available to persons interested in pursuing a career in dentistry. These include the following: one-year programs for dental assistants at the School of Dentistry in Indianapolis, on the Fort Wayne and South Bend campuses of Indiana University, and on the Evansville campus of Indiana State University; two-year certificate programs for dental hygienists at Indianapolis, Fort Wayne, South Bend, and Evansville; four-year degree programs for dental hygienists at Indianapolis and Fort Wayne; and a two-year certificate program in dental laboratory technology at Fort Wayne. In addition, under the D.D.S. program at the School of Dentistry, it is also possible to earn an A.B. degree in cooperation with the College of Arts and Sciences.

Additional information concerning any of these programs may be obtained by writing to the appropriate address as listed on the inside back cover.

Dental Library. The library, located in the School of Dentistry Building, contains 90,644 items, of which 32,264 are texts and volumes of periodicals encompassing all the areas of dentistry and several fields in the allied sciences, including medicine. The library currently receives 684 periodicals covering these subjects. Numerous gifts of books and periodicals are received from graduates and friends of the School. Dental students also have access to the library of the School of Medicine.

**Dental Clinics.** Clinical facilities are excellent and patients are drawn from a population area of some 1,000,000 persons. The great variety of cases treated provide each student with abundant opportunity to perfect techniques.

The School also maintains dental clinics in Riley and Long Hospitals and the Rotary Building, all on the Medical Center campus, and dental students attend special clinics at LaRue D. Carter, General, and the Veterans Administration Hospitals.

In addition to the clinics which provide instruction for the dental student, members of the faculty are available for lectures and clinics before district and local dental societies and study clubs throughout the state.

The dental clinics remain open during most of the summer months, but no formal classes are held. Except for students on probation, attendance is not required, but junior and senior students are encouraged to attend to obtain additional clinical instruction and experience.

Living Facilities. Single and married students from all Indiana University Indianapolis schools and divisions are eligible to file housing applications for accommodations which are located on the Medical Center campus. Applications should be filed as early as possible since there is always a waiting list.

Accommodations for single men and women are available in the single student dormitory and in the connecting Union Building. Rates for double-occupancy rooms vary from \$61 a month in the Union to \$247.50 a semester in the dormitory. Single-room rates are \$86 a month in the Union (when available), and \$350 a semester in the dormitory (usually available only in the summer).

Rates for apartments for married students vary from \$100 to \$136 per month (all utilities paid) for efficiency and one-bedroom type apartments, unfurnished and furnished, in the Warthin Apartment Building and the Union Building. Two-bedroom unfurnished apartments in Winona Village rent for \$72 per month (only for couples with children).

Rates are subject to change by action of the Trustees.

Inquiries concerning University housing and requests for applications should be addressed to: Director of Housing, Indiana University Medical Center, 1100 West Michigan Street, Indianapolis, Indiana 46202. An Off-Campus Rental Information File is also located in the Medical Center Housing Office where interested persons may check the card file in person for rental listings.

Student Health Service. This service is available to students of the Schools of Medicine, Nursing, and Dentistry, of the Division of Allied Health Sciences and the Graduate School of Social Service, and of the Normal College of the American Gymnastic Union, 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.

### Schedule of Fees, 1973-74

#### School of Dentistry

Rates are subject to change by action of the Board of Trustees.

Arts and Sciences and Dental	Indiana Resident Nonreside	nt
Hygiene 1st and 2nd year\$2	20 per credit hour \$40 per credit h	nour
	20 per credit hour\$40 per credit h 25 per credit hour\$50 per credit h	
*Dentistry\$4	25 per semester\$900 per semeste	er
Regional Campuses Undergraduate \$2	20 per credit hour\$40 per credit h 25 per credit hour\$50 per credit h	
†Admission Application\$1	5\$15	

#### Fee Refund Schedule

Refund for Full Withdrawal	Refund for Partial Withdrawal for Those Paying by the Credit Hour
100%	
50% or all except \$50, whichever is larger	0%
50% or all except \$50,	
whichever is larger	0%
0%	0%
	Refund for Full Withdrawal 100%

<sup>\*</sup> An advance payment of \$25 on fees is required after a student has been accepted. This advance payment is not returnable.

<sup>†</sup> This fee is paid only once, is not refundable and is not applied to other fees. A student applying for admission to the School of Dentistry who has never attended Indiana University as a regularly admitted student (on the Bloomington or any of the other Indiana University campuses) will be required to pay this fee. A money order or check must be sent in a special envelope provided for this purpose.

# Expenses (in Addition to Fees)

First Year	Second Year	Third Year	Fourth Year
Dental Textbooks (approximate)\$140	\$190	\$130	\$15
*Dental Instruments (approximate) 750	750	400	ernq A_D
Dental Hygiene Textbooks, Instruments, and Uniforms (approximate) 406	108	ent specieratus is el <del>up</del> tor chest	d litru—

# Rule Determining Resident and Nonresident Student Status

This Rule establishes the policy under which students shall be classified as residents or nonresidents upon all campuses of Indiana University. A nonresident student shall pay a nonresident fee in addition to fees paid by a resident student.

This Rule shall take effect July 1, 1972; provided, that no person properly classified as a resident student before July 1, 1972, shall be adversely affected by this Rule, if he attended the University before that date and while he remains continuously enrolled in the University.

"Residence" as the term, or any of its variations, is used in the context of this Rule means the establishment of a permanent dwelling place within the State and the continued occupancy of such dwelling. A person entering the State from another state or country for the predominant purpose of attending an institution of higher education does not acquire residence for the purpose of this Rule. The fact that a person pays taxes and votes in the State does not result in the acquisition of residence as the term is used in this Rule.

1. A person shall be classified as a "resident student" if he has continuously resided in Indiana for at least twelve (12) months immediately preceding the first scheduled day of classes of the semester or other session in which the individual enrolls in the University; subject to the exception stated in paragraph 2.

a. The residence of a minor follows that of the parents or of a legal guardian who has actual custody of the minor or administers the property of the minor. In the case of divorce or separation, if either parent meets the residence require-

ments, the minor child will be considered a resident.

b. A minor who comes from another state or country for the predominant purpose of attending the University shall not be admitted to resident student status upon the basis of the residence of a guardian, except upon appeal to the Trustees in each case.

c. A person who otherwise would be deemed a nonresident shall not gain resident student status by reason of marriage; nor shall resident student status be lost

by reason of marriage.

- 2. A minor child shall be classified as a resident student without meeting the twelve (12) month requirement of physical presence within Indiana if his presence in Indiana results from the establishment by his parents of their permanent residence within the state and if he proves that the move was predominantly for reasons other than to enable such minor to become entitled to the status of "resident student."
- 3. When it shall appear that the family of a person properly classified as a "resident student" under paragraph 2 has removed its permanent home from Indiana, such person shall then be reclassified to the status of nonresident; provided, that no such reclassification shall be effective until the beginning of the semester next following such removal.
- 4. Physical presence in Indiana for the predominant purpose of attending a college, university, or other institution of education, except high school or its equivalent,

<sup>\*</sup> Many instruments required for the education of a dental student can be used after graduation if the student exercises care.

shall not be counted in determining the twelve (12) month period of residence; nor shall absence from Indiana for such purpose deprive a person of resident status.

- 5. Nationality of a person shall not be a factor in determining resident student status if such person has the legal capacity to remain permanently in the United States.
- 6. A person once properly classified as a resident student shall be deemed to remain a resident student so long as remaining continuously enrolled in the University until his degree shall have been earned, subject to the provisions of paragraph 3; conversely, a person once properly classified as a nonresident student shall remain a nonresident student until such time as he shall receive the degree for which he is enrolled.
- 7. The Registrar or the person fulfilling those duties on each campus shall classify each student as resident or nonresident, and may require and question proof of relevant facts. The burden of proof is upon the student making a claim to resident student status.
- 8. A Standing Committee on Residence shall be appointed by the President of the University.
- 9. A student who is not satisfied by the determination of the Registrar may lodge a written appeal with the Standing Committee on Residence, which Committee shall review the appeal in a fair manner and shall, if time and circumstances permit or require, afford to the student a personal hearing. The Committee shall report its determination to the Registrar who shall forward it to the student.
- 10. The Standing Committee on Residence is authorized to classify a student as a resident student, through not meeting the specific requirements herein set forth, if such student's situation presents unusual circumstances and the individual classification is within the general scope of this Rule, or is consistent with a decision of the Trustees; provided, that each such instance shall be promptly reported to the Trustees for approval.

11. A student, within thirty days after notice of an adverse decision by the Committee on Residence, may file an appeal to the Trustees with its Secretary.

- 12. A student or prospective student who shall knowingly provide false information or shall refuse or conceal information for the purpose of achieving resident student status shall be subject to the full range of penalties, including expulsion, provided for by the University, as well as to such other punishment which may be provided for by law.
- 13. A student who does not pay additional monies which may be due because of his classification as a nonresident student, within thirty (30) days after demand, shall thereupon be indefinitely suspended.
- 14. A student or prospective student who fails to request resident student status within a particular semester or session shall be deemed to have waived any alleged overpayment of fees for that semester or session.

Student Loans. The School maintains an emergency loan fund for students who would otherwise be unable to continue their dental education. This fund is available during their last three years. Financial assistance is also available from the Indiana Dental Association, while loans and scholarships may be obtained through the Health Professions Scholarship Loan Program for members of all four classes on the basis of need. Arrangements may also be made through commercial banks for various types of loan programs.

Student American Dental Association. The local chapter of this organization is fully recognized by the American Dental Association, and membership is open to all students in the School of Dentistry. The function of the organization is to consider problems incident to the student's approaching graduate experiences based on the principles established for the guidance and government of the ADA. Members automatically become members of the ADA upon graduation.

Honor Fraternity. The national dental honorary fraternity, Omicron Kappa Upsilon, is represented by the component chapter of Theta Theta. All nominations are made from the upper one-fifth of the graduating class, with membership being voted annually by the faculty members to 12 percent of the class. The key, which is symbolic of the fraternity, is awarded to each newly elected member.

#### ACADEMIC INFORMATION

Predental Counseling. A student may be admitted to the School of Dentistry upon receipt of his baccalaureate degree; at the end of three years in the College of Arts and Sciences; or, in exceptional cases, upon completion of two years of undergraduate preparation.

Predental students desiring to discuss their academic programs may arrange appointments with predental advisers either at Bloomington or in Indianapolis. Interested students may write or call the Recorder of the School of Dentistry in Indianapolis. Notices of the presence of predental advisers on the Bloomington campus also appear periodically in the announcement column of the Indiana Daily Student.

Predental Work. Since very few students are accepted by the Indiana University School of Dentistry with the minimum of two years of predental courses, the suggested predental curriculum is a three-year or, in many cases, a four-year program. The predental collegiate training may be taken at any accredited college or university. Details of courses offered in the various accredited colleges may vary, so the courses should be carefully considered when a program is planned, particularly in the field of science. All required science courses, for example, must always include lecture and laboratory. Further, it is advisable to include extra work in the area of biology. Additionally, courses in the social sciences, humanities, mathematics, literature, language, art, and business are recommended.

Since the prescribed curricula vary greatly from college to college, students who are not certain about the arrangement of their predental work are advised to contact the Recorder, Indiana University School of Dentistry, 1121 West Michigan Street, Indianapolis, Indiana 46202. Students who take their predental work at other schools will be required to have it evaluated to determine whether or not it has met the standards of admission of the School of Dentistry.

The following courses are recommended as desirable electives for students attending Indiana University in Bloomington: Introductory Psychology I (Psychology P101), Greek and Latin Elements in Medical Terminology (Classics C209), Public Speaking (Speech S121).

It is recommended that the student complete the general chemistry, organic chemistry, and biology requirements in the first two years, leaving physics for the third year, as there are questions over these areas on the Dental Admissions Test.

#### Admission. Applicants must present:

1. A completed formal application accompanied by the supporting documents enumerated below. Application should be submitted between July 1 and December 1 of the academic year preceding that in which the applicant wishes to enter.\*

2. High school credentials which will satisfy requirements for admission to the

Iunior Division of Indiana University.

3. A dental admissions test, which each applicant must take, and which must be in possession of the Committee on Admissions in ample time to allow consideration of the results along with the applicant's other records. Details concerning this test may be obtained by contacting the School (see back cover) or by writing the American Dental Association, 211 East Chicago Street, Chicago, Illinois 60611.

<sup>\*</sup> It is not necessary for the applicant to complete the academic requirements before making application, although all requirements must be completed before final acceptance can be given.

- 4. Official transcripts from each college attended reflecting a total minimum of 60 semester hours or 90 quarter hours of approved predental collegiate work to include:
  - a) Two semesters of credit in English (minimum of six hours)
  - b) Two semesters or three quarters of biology or zoology
  - c) Two semesters or three quarters of general physics
  - d) Two semesters or three quarters of general chemistry
  - e) One semester or two quarters of organic chemistry

5. For Indiana residents, credit points equal to at least twice the number of hours of credit (a C average), although few students are accepted with just a C average. The nearer a B average the student has, the more likely are his chances of being accepted. For nonresidents of Indiana, a minimum B average (3.0 on a 4.0 scale) is necessary for consideration.

All entrance credentials must be approved by the Committee on Admissions of the School of Dentistry. The Committee strongly encourages personal interviews. Preferential

consideration will be given to applicants who are residents of Indiana.

Admission to Advanced Standing. Credentials indicating satisfactory completion of courses in a school which has at least comparable preliminary requirements and maintains a similar curriculum will be considered for admission of a student to the School at an advanced level. Examinations in all subjects may be required of applicants for advanced standing. Occasionally, graduates of foreign dental schools who desire a degree from Indiana University may be admitted. These students are given a special course of study which requires a minimum of three years and includes completion of all the routine senior requirements.

Withdrawals. The faculty reserves the right to request the withdrawal of any student whose conduct, health, or academic performance would appear to render him unfit for the practice of dentistry. Voluntary withdrawals, approved by the Dean during the first four weeks of a semester and during the first two weeks of a summer session, are arbitrarily marked W. After this time, such withdrawals are marked W or WF according to whether the student is passing or failing in the work of the course at the time of withdrawal, and the student shall be required to show adequate reasons for withdrawal to the Dean. In those cases where students discontinue attendance without officially withdrawing, the instructor shall report the grade of WF.

Grades. A student's grade in each course will be determined by the combined results of examinations and classroom work. The quality of a student's work will be indicated by the following grades: A, B, C, D, S (satisfactory), F (failure), and I (incomplete). A failure requires repetition of the course or additional work approved by the Dean.

Incompletes. A student who misses a final examination and who has a passing grade up to that time is given a temporary 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.

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 six months of the date of its recording (except in clinical courses), or the Dean of the School of Dentistry 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. A student may not register in a course in which he has a grade of Incomplete.

Attendance. Instruction in all courses will begin as scheduled. A student who has not completed his registration within one day after the last stated day of registration will not receive credit for the year's work.

The minimum acceptable attendance for any course in which the student desires to receive credit is 85 percent of the time scheduled for instruction. The margin of 15 percent is intended only for unavoidable absence due to illness, death of relatives, delayed registration, and other such causes as the Dean shall consider exceptional.

In case of serious personal illness, properly attested, whereby a student's attendance falls to not below 75 percent during the school year, the student may be permitted to make up 10 percent of the required 85 percent minimum by systematic work during vacation under competent instruction at his own expense. Such work must be done at the School of Dentistry and must have the sanction of the Dean and the instructor in charge of the course.

**Promotions.** No student will be promoted in good standing unless he has at least twice as many credit points as hours. A student who has incompletes or failures, or both, in courses amounting to more than 30 percent of the scheduled hours for the semester may be dropped from his class.

#### SEVEN-YEAR COMBINED DEGREE PROGRAM

#### A.B./D.D.S. Program

A student admitted to the School of Dentistry after completing 90 hours in the College of Arts and Sciences at Indiana University, and who has satisfied the Group I-V requirements, including a concentration in the College, may apply 32 hours earned in his first year in dentistry as electives and at the end of this year earn the A.B. degree. He should consult the department of his concentration or the College of Arts and Sciences. Foreign language is not a requirement of the School of Dentistry. However, it is required in the Combined Degree Program.

# Undergraduate Courses, 1973-74

The letter before the course number indicates field of study or category; the first digit of the course number indicates the year in which the course is offered as follows: 5, first year; 6, second year; 7, third year; 8, fourth year. The figures given in parentheses with "cr." indicate credit hours. The abbreviation "P" refers to the course prerequisite or prerequisites. These courses are subject to change without notice.

#### Anatomy

D509-D510 Oral Anatomy: First Year I (Lecture and Laboratory) (1-1½ cr.)

Morphological and functional study of the teeth; their arrangement and occlusion.

D511 Human Anatomy: First Year II (7 cr.)

Gross anatomical features of human body; special emphasis on head and neck; lecture and laboratory.

D513 Histology: First Year I (5 cr.)

Histogenesis and minute structure of human tissues and organs; morphologic evidence of their function.

### Biochemistry

B505 Biochemistry for Dental Students: First Year I (7 cr.)

Chemical nature of major tissue constituents, intermediary metabolism, chemical regulation of body functions. Principles of nutrition; emphasis on biochemistry of teeth.

### Complete Denture

D635 Complete Denture: Second Year II (Lecture, Laboratory, and Clinic) (4 cr.)

Lectures, laboratory, and clinical exercises in basic techniques; prepares student to solve clinical problems encountered in third and fourth years.

D763-D764 Complete Denture: Third Year I (Lecture and Clinic) (1-1 cr.)

D765 Complete Denture: Third Year II (Clinic) (1 cr.)

Lectures, seminars, reading assignments, clinical practice; diagnosis and treatment planning and their influence on prosthetic procedures.

D863-D864 Complete Denture: Fourth Year I (Lecture and Clinic) (1-2 cr.)

D865-D866 Complete Denture: Fourth Year II (Lecture and Clinic) (1-2 cr.)

Demonstrations, lectures, seminars, and clinical practice covering all phases of complete denture prosthetics; diagnosis and treatment planning, with clinical assignments in treatment of more advanced abnormalities.

#### Dental Materials

D611-D612 Dental Materials: Second Year I-II (2-1 cr.)

Discussion and demonstration of physical and chemical properties of dental materials; effect of manipulation upon these properties; clinical applications stressed.

#### Endodontics

D617-D618 Endodontics: Second Year II (Lecture and Laboratory) (1-1 cr.)

Correlation of basic endodontic clinical procedures and related biologic principles.

D816 Endodontics: Fourth Year (Clinic) (1/2 cr.)

Clinical applications of principles of endodontics taught in preclinic years. Correct selection of cases, effective treatment procedures, restoration of pulpless tooth following endodontic treatment.

# Fixed and Removable Partial Prosthodontics

D613-D614 Fixed Partial Prosthodontics: Second Year I (Lecture and Laboratory) (2-2½ cr.)

D615-D616 Fixed Partial Prosthodontics: Second Year II (Lecture and Laboratory) (1-1 cr.)

Lecture and laboratory cover fundamentals, indications, contraindications, and construction of full veneer and partial veneer crowns, the inlay as a retainer, use of the pinledge, soldered joint and subocclusal rest, and indications and contraindications for fixed bridges.

D619-D620 Removable Partial Prosthodontics: Second Year II (Lecture and Laboratory) (2-2 cr.)

Basic principles of diagnosis, surveying, mouth preparation, clasp design, saddle outline, types of bars and their rigidity, selection of teeth, assembly, processing, and insertion and care of partial dentures.

- D715-D716 Fixed Partial Prosthodontics: Third Year I (Lecture and Laboratory) (2-3 cr.)
- D717 Fixed Partial Prosthodontics: Third Year II (Clinic) (1 cr.)

  Lectures, laboratory studies, and clinical practice in diagnosis; pontic design and construction; indications and construction of porcelain and acrylic veneers, changes in vertical dimensions, and anterior-MacBoyle retainer; elastic impression technique, construction of bridges and partial veneer
- D791 Removable Partial Prosthodontics: Third Year I (Lecture) (1 cr.)
- D795-D796 Removable Partial Prosthodontics: Third Year II (Lecture and Clinic) (1-1 cr.)

Plans for mouth preparation and designs for removable partial dentures, survey of clinical models, splinting, and equilibration through grinding and restorative procedure.

- D809-D810 Fixed Partial Prosthodontics: Fourth Year I (Lecture and Clinic) (1-3 cr.)
- D819-D820 Fixed Partial Prosthodontics: Fourth Year II (Lecture and Clinic) (1-3 cr.)

Precision attachments, oral rehabilitation, seminar discussions of clinical cases. Clinical construction of upper and lower anterior and posterior bridges; individual crowns of gold, gold and porcelain, gold and plastic, and plastic and porcelain.

D871-D872 Removable Partial Prosthodontics: Fourth Year I-II (1-1 cr.)

Mouth preparation for and construction of clinical partial dentures.

#### Maxillofacial Prosthetics

D831-D832 Maxillofacial Prosthetics: Fourth Year I-II (1/2-1/2 cr.)

Multidisciplinary lectures in the prosthetic habilitation and rehabilitation of patients with congenital, acquired, or developmental intra-oral, para-oral, extra-oral, and facial and cranial bone defects, including prosthetic reconstruction involving cleft palate and loss of tissue following tumor surgery, accidents, and war injuries.

### Microbiology

J650 Microbiology for Dental Students: Second Year I (4 cr.)

Microbiology as it applies to problems of the oral cavity; importance of microbiology to practicing dentists; methods and procedures of sterilization and asepsis.

#### Occlusion

D640-D641 Occlusion: Second Year I (Lecture and Laboratory) (1-1½ cr.)

The student will be instructed in the relationships which exist between the teeth in the upper and lower jaws, and the influence upon this relationship by the temporomandibular joint. The dynamics of occlusion and articulation will be studied in detail. Technique projects will be performed that reinforce the student's understanding of the dynamics of occlusion and articulation learned in the associated lecture course.

# Operative Dentistry

D515-D516 Operative Dentistry: First Year I (Lecture and Laboratory) (1-5 cr.)

D517-D518 Operative Dentistry: First Year II (Lecture and Laboratory) (1-3 cr.)

Training in principles of operative dentistry and basic technical procedures; classification of cavity preparation, instrumentation and manipulation, and physical properties of materials. Prepares for clinical program to follow.

D723-D724 Operative Dentistry: Third Year I (Lecture and Clinic) (1-2 cr.)

D725-D726 Operative Dentistry: Third Year II (Lecture and Clinic) (1-3 cr.)

Clinical procedures in care of unit, working positions, application of rubber dam; anesthesia; impression procedures, selection of restorative materials, and cavity preparation for assigned patients.

D823-D824 Operative Dentistry: Fourth Year I (Lecture and Clinic) (1-3 cr.)

D825 Operative Dentistry: Fourth Year II (Clinic) (3 cr.)

Current concepts of operative dentistry; research findings and new techniques evaluated and described in a manner to encourage clinical application during fourth year.

# Oral Diagnosis/Oral Medicine

D711-D712 Oral Diagnosis: Third Year I-II (11/2-11/2 cr.)

Lectures and clinical practice in oral examination, history taking, coordination of symptomatology; interpreting radiographs and detecting etiologic factors, both systemic and local, of oral disorders; clinical teaching supplemented by prepared case histories with color photographs.

D811-D812 Oral Diagnosis: Fourth Year I-II (½-½ cr.)

Continuation of D711-D712. Clinical practice provides an opportunity to see and study various kinds of oral diseases of numerous patients who appear for treatment. Also lectures on applied psychology in dentistry.

#### Oral Rehabilitation

D808 Rehabilitation: Fourth Year I (1 cr.)

Lectures by representatives of medical, dental, and allied health specialties emphasizing multidisciplinary approach in rehabilitation of patients with congenital and acquired oral facial defects.

### Oral Surgery

D706 Principles of Surgery: Third Year II (1 cr.) Fundamental principles of surgery as applied to the mouth.

D733-D734 Oral Surgery: Third Year I (Lecture and Clinic) (1-1/2 cr.)

D735-D736 Oral Surgery: Third Year II (Lecture and Clinic) (1-1/2 cr.)

Lectures, demonstrations, clinical practice in local anesthesiology, surgical anatomy, and basic principles of surgery; diagnosis and treatment of diseases and infections of face, neck, oral cavity, and adjacent tissues; supervised removal of teeth and minor surgery procedures.

D818 Anesthesiology: Fourth Year II (1 cr.)

Indications, contraindications, techniques for use, and principles of various general anesthetic agents.

D833-D834 Oral Surgery: Fourth Year I (Lecture and Clinic) (1-1/2 cr.)

D835-D836 Oral Surgery: Fourth Year II (Lecture and Clinic) (1-1/2 cr.)

Lectures, seminars, clinical practice, and demonstrations of diagnosis and treatment planning; surgical treatment of oral disorders including tumors, impacted teeth, alveolar abscesses, deformities, harelip, cleft palate, and mandibular and maxillary fractures.

#### Orthodontics

D601-D602 Fundamentals of Occlusion: Second Year I-II (1-1 cr.)

Normal occlusion—dental, skeletal, neuromuscular patterns; diagnosis of dento-facial abnormalities, and growth and development of cranio-facial complex.

D771-D772 Orthodontics: Third Year II (1-11/2 cr.)

Dental and facial anomalies and the study of diagnostic methods and classifications. Technical exercises used in prevention and correction of malocclusions.

D803 Orthodontics: Fourth Year I (1 cr.)

Case analysis and treatment planning of comprehensive orthodontic problems; role of general practitioner in detection, interception, treatment.

# Pathology

C607 General Pathology: Second Year I (5 cr.)

Principles of disease production in human body; gross specimens and histologic analyses as means of teaching common ways in which living tissues and organs of body respond to various injurious agents.

D608-D609 Oral Histology and Pathology: Second Year I-II (2-3 cr.)

Microscopic study of oral tissues and their development, including developmental abnormalities and acquired disorders. Illustrated lectures covering oral lesions. Close association is maintained with clinical dental departments.

D610 Oral Histology and Pathology Laboratory: Second Year II (1 cr.)

A laboratory course covering the microscopic study of oral lesions of both developmental abnormalities and acquired disorders.

D821-D822 Senior Pathology Conference: Fourth Year I-II (1/2-1/2 cr.)

Interesting clinical cases are studied grossly, radiographically, and histologically; diagnosis established and proper method of treatment outlined.

#### Pedodontics

D708 Pedodontics: Third Year II (1 cr.)

Child management; growth, development, and morphology of the deciduous dentition; restorative and preventive procedures for children.

D709 Advanced Pedodontic Technic: Third Year I (½ cr.)

Current advanced technical procedures in pedodontics.

343-D844 Pedodontics: Fourth Year I (Lecture and Clinic) (1-1 cr.)

D845 Pedodontics: Fourth Year II (Clinic) (1 cr.)

Restorative and preventive procedures for children performed in clinic and correlated with material presented in lecture course; clinical assignments in practice of dentistry for children.

#### Periodontics

D607 Periodontics: Second Year II (1 cr.)

Diagnosis, treatment, and prevention of periodontal disease; maintenance of oral health.

D753-D754 Periodontics: Third Year I (Lecture and Clinic) (1-1/2 cr.)

D755-D756 Periodontics: Third Year II (Lecture and Clinic) (1-1/2 cr.)

Periodontal diseases confronting the general practitioner, their etiology, symptomatology, and accepted methods of treatment.

D851-D852 Periodontics: Fourth Year I-II (½-½ cr.)

Review of principles taught in preceding years; emphasis on instrumentation and clinical procedures; subject material provided by clinical cases.

### Pharmacology and Therapeutics

D705 Therapeutics and Dental Pharmacology: Third Year II (1-1/2 cr.)

Lectures and quizzes in rational use of drugs, supported by pharmacotherapeutics, toxicology, posology, materia dentica, prescription writing, and clinical demonstrations.

D781 Internal Medicine: Third Year II (1 cr.)

The more important systemic diseases and drugs used in their treatment.

D794 Pharmacology: Third Year I (2 cr.)

Lectures and quizzes; site and mechanism of typical drugs; drugs used most frequently in dentistry.

### Physiology

F509 Human Physiology: First Year II (6 cr.)

Study of muscle, nervous systems, body fluids, circulation, respiration, digestion, metabolism, excretion, endocrines, sense organs, and body systems.

#### Practice Administration

D504 History of Dentistry: First Year II (1 cr.)

Dentistry in prehistoric, ancient, medieval, and modern periods through textbook assignment; discussion of development of modern phases of practice; development of dental education traced; dental code of ethics explained.

D804 Jurisprudence: Fourth Year II (1 cr.)

Cases on elementary law; contracts and torts as applied to dental practice and professional relationships, duties and liabilities, malpractice, and statutes governing dental practice.

D805 Practice Administration: Fourth Year I (1 cr.)

Office administration, patient relations, professional cooperation, collections, insurance, investments, and taxes.

# Preventive Dentistry

D503 Dental Seminar: First Year II (1 cr.)

Designed to aid in orientation of first year dental students.

D507 Oral Biology: First Year II (2 cr.)

Biochemistry and physiology of enamel, biochemistry of saliva and connective tissue, etiology of dental caries and periodontal disease; formation and prevention of dental calculus.

D714 Preventive Dentistry: Third Year (1½ cr.)

Theory of preventive dentistry and relationship of biochemistry to prevention of dental disease; special clinic course to teach standard laboratory diagnostic procedures in planning an effective preventive program for dental patient; correlating diagnosis with treatment plan.

D813 Preventive Dentistry: Fourth Year II (1 cr.)

Coordinates previous preventive dentistry teaching into a practical plan of preventive dentistry for the dental practitioner; philosophy and techniques important to building a modern dental practice which emphasizes prevention.

### Public Health

D806 Public Health: Fourth Year II (1 cr.)

Problems relating to public health as applied to dentistry; how health problems are integrated with local communities; state and national programs.

### Radiology

D719-D720 Radiology: Third Year I-II (Lecture and Clinic) (2-1/2 cr.)

Facets of dental radiography: X-ray production characteristics of ionizing radiation, manipulation of X-ray machines, preparation of radiographs and their interpretation, radiological health hygiene.

D814 Radiology: Fourth Year (Clinic) (1/2 cr.)

Seniors are assigned to the Radiology Clinic to improve skills in radiographic technique and interpretation.

## Special Clinics

Third- and fourth-year students are scheduled for numerous special clinics in the Marion County General Hospital and in the Riley and Long Hospitals, as well as in the School of Dentistry.

D501-D502 Introduction to Clinical Dentistry: First Year I-II (½-½ cr.)

Orientation to the clinic, radiography, oral diagnosis and treatment planning, personal oral health, surgical procedures, and local anesthesia.

#### Clinical Procedures

D400 Clinical Procedures: Third Year (1 cr.)

P: third-year standing. Students assigned to various dental clinics for instruction and experience in patient care.

D401 Clinical Procedures: Fourth Year (1 cr.)

P: fourth-year standing. Students assigned to various dental clinics for instruction and experience in patient care.

D402 Clinical Procedures (1 cr.)

Students assigned to various dental clinics for instruction and experience in patient care.

# Undergraduate Curriculum in Dentistry

			-			
	First	Year				
This schedule is subject to change.	F	irst Ser	nester	Second	Semester	
		I	Laboratory		Laboratory	Total
CONTRACT TO SERVER TO SHE TO SERVE	hard the		or		or	Credit
Courses		ecture	Clinic	Lecture	Clinic	Hours
Histology		2	3	0	0	5
Oral AnatomyPhysiology		1 0	$\frac{11/_{2}}{0}$	0 3	0 3	2½ 6
Human Anatomy		0	0	2	5	7
Bicchemistry		6	1	0	0	7
Dental Seminar		0	0	1	0	1
History of Dentistry		0	0	1	0	1
Oral Biology		0	0	2 0	0	2
Introduction to Clinical Dentistry Operative Dentistry		0	5	1	3 3	10
Total						421/2
Total	Second					12/2
Complete Denture		0	0	2	2	4
Fixed Partial Prosthodontics		2	21/2	1	1	61/2
Microbiology		2	2	0	0	4
General Pathology		3	2	0	0	5 3
Dental MaterialsFundamentals of Occlusion		2	0	1	0	2
Oral Histology and Pathology		2	0	3	1	6
Endodontics		0	0	1	î	2
Periodontics		0	0	1	0	1
Occlusion		1	11/2	0	0	21/
Total						36
	Third	Year				
Pharmacology		2	0	0	0	2
Operative Dentistry		1	2	1	3	7
Complete Denture		1	1	0	1	3 6
Fixed Partial Prosthodontics Therapeutics and Dental Pharmacology		2 0	3	0	1 1/2	11/
Radiology		2	0	0	1/2	21/
Orthodontics		1	0	1	1/2	21/
Oral Diagnosis		1	1/2	1	1/2	3
Periodontics		1	1/2	1	1/2	3
Oral Surgery		1	1/2	1	0 1/2	3 1
Principles of Surgery		0	0	1	0	1
Pedodontics		0	0	1	0	1
Advanced Pedodontic Technique		0	1/2	0	0	1/
Removable Partial Prosthodontics		1	0	1	1	3
Preventive Dentistry		0	0	1	1/2	11/
Total						411/
37355		Year				-
Operative Dentistry		1	3	0	3	7 3
PedodonticsFixed Partial Prosthodontics		1	1 3	0	1 3	8
Oral Surgery		1	1/2	1	1/2	3
Oral Diagnosis		0	1/2	0	1/2	1
Periodontics		0	1/2	0	1/2	1
Complete Denture		1	2	1	2	6
Practice Administration		1	0	0	0	1
Jurisprudence		0	0	1	0	1
Public Health		0	0	1	0	1
Preventive Dentistry		0	0	0	1/2	1
Senior Pathology Conference		1/2	0	1/2	0 72	1
Endodontics		0	0	0/2	1/2	1
Removable Partial Prosthodontics		0	1	0	1	2
Anesthesiology		0	0	1	0	1
Orthodontics		1	0	0	0	1
Rehabilitation		1	0	0	0	1
Maxillofacial Prosthetics		1/2	0	1/2	0	1

# Dental Hygiene

Dean and Professor McDonald; Research Professor Phillips; Distinguished Professor Shafer; Professors Barton, O'Leary, Standish, Starkey, Swartz, Swenson, Vaught; Associate Professors Gish, Norman, Ping; Assistant Professor and Director Boundy; Assistant Professors Carr, Kasle, Smith, Totten, Wysocki; Instructors Dahl, Hefner, Scott, Smith, Weaver

The dental hygienist is a 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 an Associate in Science degree and a program which leads to a Bachelor of Science degree. While the associate degree 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. A minimum of 28 semester hours of prescribed college courses is required for admission. The following courses must be included: English Composition, Sociology, Chemistry (with a laboratory), Speech, Psychology, Advanced Sociology, and a Literature, Philosophy, or Fine Arts sequence. Applicants should contact the Director of Dental Hygiene, Indiana University School of Dentistry, before enrolling in the freshman year. The second and third or sophomore and junior years must be taken at the School of Dentistry at Indianapolis, Indiana University at Fort Wayne, Indiana University at South Bend, or Indiana State University at Evansville. The fourth or senior year may be taken in the Division of Allied Health Sciences of the School of Medicine in Indianapolis.

Since each year more qualified applicants apply than can be accepted, only those who show an aptitude for and an interest in a professional career and the ability to pursue academic work at a college level are admitted. Additional information may be obtained by writing to the appropriate address as listed on the inside back cover.

# COURSES FOR THE PROFESSIONAL CURRICULUM FOR DENTAL HYGIENISTS

H212-H213 Human Biology I-II: First Year (4-4 cr.)

Combined course including anatomy, physiology, pathology; emphasis on head and neck.

H214 Dental Anatomy: First Year (3 cr.)

Gross study of morphology of teeth, their arrangement, and occlusions; manufacture of reproductions of various types of human teeth.

H215 Pharmacology and Therapeutics: First Year (2 cr.)

Actions and uses of drugs and theory of anesthetics; emphasis on drugs used in dentistry.

H216 Chemistry and Nutrition: First Year (3 cr.)

Specific ideas in chemistry are correlated with working principles in dentistry—previous knowledge of chemistry assumed.

H217 Preventive Dentistry: Second Year (1 cr.)

Detection and prevention of dental diseases.

H218 Dental Prophylaxis Technic: First Year (3 cr.)

Utilizing manikin heads student develops operative technic in removing stains and deposits from teeth; lectures on dental hygiene profession.

H219 Clinical Practice: First Year (4 cr.)

Treatment of juvenile and adult patients in clinics of dental school and dental clinics of Riley Hospital.

H221 Clinical Dental Hygiene Procedures: Summer (1 cr.)

Assignments in the clinics of the dental school for instruction and experience in dental prophylaxis technics.

H301-H302 Clinical Practice I-II: Second Year (5-5 cr.)

Continuation of H219 to include the following clinical functions: performing rubber dam application; taking primary impressions; performing matrix placement and removal; placement and removal of temporary restorations; placement, carving, and finishing of amalgam restorations; and placement and finishing of resin, composite, and silicate restorations.

H303 Radiology: Second Year (2-1 cr.)

Principles associated with production of X rays and manipulation of X-ray machine.

H304 Oral Pathology: Second Year (2 cr.)

Developmental abnormalities and acquired disorders of teeth and surrounding structure.

H308 Dental Materials: Second Year (2 cr.)

Composition, physical and chemical properties of materials used in dentistry.

H309 Practice of Community Dental Hygiene: Second Year (2 cr.)
Supervised field experience in a school health program.

H310 Technical Writing: Second Year (2 cr.)

Evaluation and reporting of research in dentistry.

H311 Dental Health Education: Second Year (2 cr.)

A study of the concepts, methods, and audio-visual aids in dental health education used in private dental practice and schools.

## Courses Outside the School of Dentistry

Allied Health E443 Public Health Education Methods (3 cr.) (Second Year)

Allied Health S321 Principles of Environmental Health (3 cr.) (Second Year)

HPER H160 First Aid (1 cr.) (Second Year)

Microbiology J207 Microbiology for Dental Hygienists (4 cr.) (First Year)

Psychology P102 Introductory Psychology II (3 cr.) (Second Year)

# Graduate Work in Dentistry

Dental Graduate Faculty: Dean and Professor McDonald; Assistant Dean and Professor Standish (Chairman); Research Professor Muhler; Assistant Dean and Research Professor Phillips; Distinguished Professor Shafer; Assistant Dean and Associate Professor Bogan; Professors Andrew, Barton (Secretary), Dykema, Garner, Gilmore, Hopper, Lund, Mitchell, O'Leary, Patterson, Shanks, Swartz; Associate Professors Bixler, Cunningham, Gifford, Gish, Jordan, Katz, Kelley, Klein, Norman, Potter, Schnell, Weinberg; Assistant Professors Baldwin, Carr, Hansen, Koerber, Matlock, McDonald, Mercer, Miller, Stookey, Tomich, Van Roekel

Advisory Faculty: Professors Boyd, Gregory, Roche, Starkey, Swenson; Associate Professors Chalian, Hutton; Assistant Professors Kasle, Simpson

The Master of Science in Dentistry (M.S.D.) program is intended primarily for students who have received the doctorate in dentistry and who wish to go on to obtain an adequate background in one of the various specialized fields of dentistry or of the allied basic sciences, in order to broaden their dental background or to complete the academic requirements for specialty boards. Under special circumstances, the M.S.D. degree may be conferred upon outstanding individuals not holding the D.D.S. or equivalent degree who have demonstrated ability in dental research and education and who give good evidence of continuing in these fields.

Students may also register in the Graduate School of Indiana University and work toward the M.S. or Ph.D. degree. Emphasis in the M.S. program, available in the fields of dental materials, oral diagnosis-oral medicine, oral pathology, orthodontics, and preventive dentistry, is on nonclinical subjects. The M.S. and Ph.D. degrees are available in the fields of anatomy, physiology, microbiology, pharmacology, biochemistry, and dental science on the Medical Center campus.

The M.S.D. degree may be granted in the following major areas of concentration: anatomy, biochemistry, crown and bridge prosthetics, dental materials, endodontics, operative dentistry, oral diagnosis-oral medicine, oral pathology, oral surgery, orthodontics, pedodontics, periodontics, preventive dentistry, prosthetic dentistry, public health, and radiology.

In general, students who wish to practice or teach a clinical subject are encouraged to work toward the M.S.D., while those more interested in the basic science courses would be advised to complete the requirements for the M.S. degree.

The Ph.D. program in dental science is designed specifically for individuals who desire to teach and pursue a career in dental research and education. An outside minor of advanced courses in dental science is offered which is especially designed to give students an understanding of the basic problems to be met in the clinical dental sciences and a familiarity with the application of the basic sciences to dentistry.

Admission. Only students who have a minimum accumulative grade average of B will be considered for admission, unless under exceptional circumstances the prospective student can provide evidence that he is capable of successfully completing the graduate dental program. Application forms (see back cover) must be accompanied by transcripts of undergraduate and professional work together with such additional materials as may serve to determine eligibility and ability to conduct satisfactorily an advanced course of study.

Faculty Committee. Candidates for degrees are assigned to a graduate faculty committee. This committee is composed of the chairman of the candidate's major subject, who serves as the chairman of the committee, and four additional graduate faculty members. It is the purpose of this committee to advise the student concerning his academic problems.

Degree Requirements. Requirements for the M.S. and Ph.D. degrees are outlined in the Bulletin of the Graduate School. Requirements for the M.S.D. are as follows:

Course Work. A minimum of 30 hours of course work, of which at least 18 hours must be devoted to didactic work. Of this total of 18 hours, no more than six may be in an advanced clinical practice investigation. A total of six hours must be in research; however, no additional credit will be allowed if the student takes courses in excess of six hours. Each student must satisfactorily complete an original research problem.

Required courses must be taken in the proper sequence, as specified by the student's committee. In most departments there are additional program requirements designed to meet such criteria as may be specified by the several dental specialty boards and the Council on Dental Education for Accredited Advanced Dental Education Programs for the Preparation of Specialists.

Final credit requirement is determined by each student's graduate committee and is usually dependent upon the student's previous academic accomplishments.

Residence. Students must meet a residency requirement of two semesters. Normally, a student acquires a semester of residence by carrying a course load of 14 to 16 hours for an academic semester. Students carrying a course load in excess of 16 hours do not receive extra residence credit. Those carrying less than a normal course load receive credit at the rate of six weeks of residence credit for each five semester hours completed.

**Examinations.** The members of the student's committee will conduct preliminary oral examinations covering essentially the candidate's fields of study. The student must complete his preliminary oral and written examination six months prior to his intended date of graduation. He is eligible to take these examinations upon the completion of one half of his didactic course requirements.

Thesis. The student must submit typed drafts of his thesis to the members of his faculty committee two weeks prior to his thesis examination. Upon acceptance by the faculty committee, and at least two weeks prior to commencement, the student must deliver to the graduate office four unbound final copies of the thesis, an acceptance sheet signed by his committee, a 500-word abstract, and a vita sheet.

Fees. Fees for resident students in the graduate dental program are \$25 per credit hour, and for nonresidents \$50 per credit hour. An advanced payment of \$200 on fees is required after a student has been accepted. This fee is not returnable except in instances where students are called to active military duty.

Instrument Charges. Graduate students in the clinical courses will be required to purchase instruments and, in some instances, pay a rental fee. Those who already own the instruments approved by the department prior to the opening of school need not purchase duplicates. The approximate charges for dental instruments and expendable materials are as follows:

Fixed and Removable Partial

Prosthodontics				
Expendable Instruments	\$1,092			
Rental fee	100	per	calendar	year
Endodontics				
Rental fee	50	per	calendar	year
Operative Dentistry				
Instruments	610			
Rental fee	100	per	calendar	year
Orthodontics				
Instruments	844			
Pedodontics				
Expendable materials	129			
Rental fee	70	per	calendar	year
Periodontics				
Instruments	566			
Prosthetics				
Instruments	425			

# Major Fields of Graduate Study

In addition to the general requirements for the degree program as described in the preceding pages, the various departments may specify additional didactic or clinical requirements in order to qualify for a major or minor in that field. For program details, the student should consult with the departmental adviser.

#### **ANATOMY**

Course Requirements: Major, 15 hours; Minor, 6-8 hours\*

Recommended Courses: G901, G903, G909, G910, G932, G990, G991, G994

Elective Courses: C605, G902, G904, G907, G908, G948, G971, G974

#### **BIOCHEMISTRY**

Course Requirements: Major, 13 hours; Minor, 10 hours\*

Recommended Courses: G909, G910, G929, G970, G971, G972, G973, G974, G985 Elective Courses: F812, F816, F842, G959, R909, R910, R911, R912, R913, G982

### FIXED AND REMOVABLE PARTIAL PROSTHODONTICS

Course Requirements: Major, 10-12 hours; Minor, 6-8 hours\*

Recommended Courses: G909, G910, G911, G923, G937, G938, G939, G940, G941,

G942, G943, G944, G962, R909, R910, R911

Elective Courses: G901, G912, G913, G948, G956, G967, G974

#### DENTAL MATERIALS

Course Requirements: Major, 13 hours; Minor, 6-8 hours\*

Recommended Courses: G909, G910, G911, G912, G913, G921, R909, R910, R911

Elective Courses: G936, G941, G951

#### **ENDODONTICS**

Course Requirements: Major, 14 hours; Minor, 6-8 hours\*

Recommended Courses: C605, G902, G905, G907, G908, G909, G910, G926, G946,

G948, G956, G957, G959, G965, R909, R910, R911, G980

Elective Courses: G901, G904, G905, G906, G953, G969, G974, G994

#### OPERATIVE DENTISTRY

Course Requirements: Major, 12 hours; Minor, 6 hours\*

Recommended Courses: G901, G902, G910, G913, G925, G950, G951, G952, G953,

R909, R910, R911

Elective Courses: R901, G907, G908, G911, G941, G944, G956, G962, G965, G967,

G974, R912, R913, G982, G983, G985, G994

#### ORAL DIAGNOSIS—ORAL MEDICINE

Course Requirements: Major, 14 hours; Minor, 6-8 hours\*

Recommended Courses: C605, G901, G902, G906, G907, G908, G909, G910, G918,

G965, G968, G969, G986

Elective Courses: G904, G905, G959, G994, R914, R916

#### ORAL PATHOLOGY

Course Requirements: Major, 12 hours; Minor, 6 hours\*

Recommended Courses: C605, G902, G903, G904, G905, G906, G907, G909, G910,

G920

Elective Courses: R914, G908, G955, G959, G965, G968, G969, G992, G993, G994

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<sup>\*</sup> Credit in the major area will range from 10-15 hours, with 6-10 hours required in the minor area course concentration. Additional hours of elective course work must be carried to complete a minimum of 30 credit hours.

#### ORAL SURGERY

Course Requirements: Major, 12 hours; Minor, 6-8 hours\*

Recommended Courses: G902, G904, G905, G906, G907, G909, G991, R903, R904,

R905, R906, R907

Elective Courses: C605, G908, G935, G947, G955, G965, G969, G994, R901

### **ORTHODONTICS**

Course Requirements: Major, 14 hours; Minor, 6 hours\*

Recommended Courses: R914, G927, G947, G958, G960, G963, G964, R900

Elective Courses: G901, G902, G905, G965, R902, R908

#### **PEDODONTICS**

Course Requirements: Major, 15 hours; Minor, 6-8 hours\*

Recommended Courses: G902, G909, G922, G931, G934, G935, G936, G945, G947,

G962

Elective Courses: G901, G907, G912, G917, G946, G965, G968, R909, R910, R911, R912, R913, G993, G994, G999

#### **PERIODONTICS**

Course Requirements: Major, 15 hours; Minor, 6-8 hours\*

Recommended Courses: G901, G902, G905, G907, G909, G910, G928, G965, G966,

G967

Elective Courses: G948, G955, G959, G968, R909, R910, R911, G991

#### PREVENTIVE DENTISTRY

Course Requirements: Major, 18 hours; Minor, 6 hours\*

Recommended Courses: G909, G910, G930, G967, G974, R909, R910, R911, R912,

R913, G982, G983, G985, G995, G996

Elective Courses: G902, G934, G948, G970, G971, G972, G973

#### COMPLETE DENTURE

Course Requirements: Major, 12 hours; Minor, 8 hours\*

Recommended Courses: G902, G909, G910, G914, G915, G916, G917, G919, G940,

G962, G991

Elective Courses: G901, G911, G913, G947, G948, G967, G974, R912, R913

#### PUBLIC HEALTH

Course Requirements: Major, 16 hours; Minor, 7-9 hours\*

Recommended Courses: G909, G910, G933, G982, G983, G995, G996, G997, G998, G999

Elective Courses: G971, G974, R909, R910, R911, R912, R913

Noncredit Courses: Community Health Education, Personnel Management, Business and Professional Speaking

#### RADIOLOGY

Course Requirements: Major, 14 hours; Minor, 6 hours\*

Recommended Courses: G908, G910, G924, G946, G948, G961, G975, G978, G979

Elective Courses: G904, G974, R909, R910, R911, R912, R913

<sup>\*</sup> See footnote on preceding page.

# Postgraduate Study in Dentistry

A student who wishes to take graduate courses in dentistry but does not plan to work toward an advanced degree, or who is not eligible to enter a graduate dental program, may take certain courses as a postgraduate student. In such instances the student will receive academic credit upon payment of the regular fees for such courses. All grades earned will be recorded in the Office of Records and Admissions and will also appear on official University transcripts. A certificate of attendance may be issued upon completion of requirements prescribed by the department.

# Graduate Courses, 1973-74

C605 General Pathology (1-5 cr.)

Broad fields of disease; inflammation and infection; study of material in classroom and at autopsy; disease related to anatomic systems correlated with clinical subjects.

G901 Advanced Oral Histology and Embryology (2 cr.)

Normal structures of oral cavity, their growth and development; microscopic study of tissues.

G902 Advanced Oral Pathology (1-6 cr.)

All phases of disease of oral cavity and adjacent structures; oral manifestations of systemic disease; disturbances of growth and development, infections, and neoplasms; microscopic study of tissue sections.

G903 Histologic Technique (1 cr.)

Theoretical and practical preparation of tissue for microscopic study and application of special techniques in routine laboratory procedures and research.

G904 Special Pathology of Neoplasms (3 cr.)

Neoplastic disease in oral pathology; microscopic diagnosis; clinical features and treatment of tumors.

G905 Special Pathology of Bone (1-3 cr.)

Histology, physiology, pathology of bone with reference to maxilla and mandible; development, growth, maintenance, functional adaptation of bone; bone in pathologic states such as developmental disturbances, inflammatory disturbances, disturbances of metabolism, tumors.

G906 Tumor Clinic (½ cr.; 1 cr. maximum)

Clinical manifestation of neoplastic diseases; various types of therapy; tumors of head and neck.

G907 Oral Surgery Pathology Conference (½ cr.; 1 cr. maximum)

Presentation of cases which are diagnostic problems; student prepares several cases for presentation.

G908 Advanced Radiographic Interpretation (2 cr.)

Theory and practice of radiographic interpretation; correlation between gross anatomy, histology, pathology, and the radiograph.

G909 Recent Advances in Dentistry (1 cr.)

Recent developments in dentistry; introduction to statistics and how research problems should be designed.

G910 Seminar (1 cr.)

G911 Theory of Dental Metallurgy (1-5 cr.)

Composition, chemical reactions, physical properties, clinical significance of metals, resins, and other materials used in dentistry; phases of metallography, physical chemistry, physics pertinent to this field.

G912 Specifications and Test Methods in Dental Materials (1-5 cr.)

Specialized test methods; attention to A.D.A. specifications.

G913 Clinical Application of Dental Materials (1-4 cr.)

Practical application of basic knowledge; unique problems of dental materials and avenues for future research.

G914 Advanced Complete Denture Theory (1-3 cr.)

Advanced theories of prosthetic denture service; discussions on hinge axis, involved articulators, comparative values of the various types of denture materials and prosthetic teeth.

G915 Advanced Complete Denture Clinic (1-6 cr.)

Clinical practice following advanced theories and practices suggested in G914.

G916 Special Problems in Complete Denture Design (1-4 cr.)

Treatment of patients with difficult and unusual prosthetic denture problems.

G917 Maxillofacial Prosthetics (1-6 cr.)

Lectures, seminars, demonstrations, clinical practice, and hospital routine in the prosthetic rehabilitation of individuals with congenital, acquired, or developmental intra-oral and extra-oral defects.

G918 Research: Oral Diagnosis-Oral Medicine (cr. arr.)

G919 Research: Complete Denture (cr. arr.)

G920 Research: Oral Pathology (cr. arr.)

G921 Research: Dental Materials (cr. arr.)

G922 Research: Pedodontics (cr. arr.)

G923 Research: Fixed Partial Prosthodontics (cr. arr.)

G924 Research: Radiology (cr. arr.)

G925 Research: Operative Dentistry (cr. arr.)

G926 Research: Endodontics (cr. arr.)

G927 Research: Orthodontics (cr. arr.)

G928 Research: Periodontics (cr. arr.)

G929 Research: Biochemistry (cr. arr.)

G930 Research: Preventive Dentistry (cr. arr.)

G931 Advanced Pedodontics (1-3 cr.)

Two-semester course; diagnostic, restorative, preventive phases of pedodontics; evaluation of the literature.

G932 Research: Anatomy (cr. arr.)

G933 Research: Public Health (cr. arr.)

Advanced Clinical Pedodontics (1-6 cr.) G934

Advanced restorative and preventive procedures in pedodontics; instruction and clinical experience in restorative dentistry, dental caries control, hereditary and congenital dental anomalies, oral habits, interceptive orthodontic precedures.

G935 Dental Pediatrics (2 cr.)

Dental problems of the chronically ill and handicapped child; lectures, discussions, and ward rounds cover normal and abnormal physical and emotional growth of the child.

G936 Principles of Pedodontic Restorative Procedures (1-3 cr.) Restorative and interceptive orthodontic procedures.

Advanced Clinical Instruction in Removable Partial Prosthodontics (2-6 cr.) Clinical construction of clasp-retained removable partial dentures, involving both normal mouths and those mulilated by accidents or extensive surgery.

Advanced Removable Partial Prosthodontics Technique (1-6 cr.)

Includes precision attachments; surveying of models and designing of appliances; planning over-all treatment for partially edentulous mouths.

G939 Porcelain Jacket Crown Technique (2 cr.)

Construction of porcelain jacket crowns to dimension and form; rebuilding nonvital or mutilated teeth to prepared form; multiple construction in one arch and in opposing arches.

Advanced Clinical Instruction in Fixed Partial Prosthodontics (1-6 cr.)

Construction of porcelain jacket crowns, acrylic bridges, stabilizing splints, occlusal reconstruction, increasing vertical dimension, full mouth reconstruction, splinting of abutment teeth, reconstruction of crown form of abutment teeth in preparation of mouths for removable bridges and partial

G941 Advanced Fixed Partial Prosthodontics Technique (1-4 cr.)

Construction of porcelain jacket crowns; reproduction of anatomic variation and color distribution; construction of plastic veneers and masking materials over gold; precision attachment technique.

Gnathology Seminar (1-3 cr.)

Stuart concept of gnathology, occlusion, relationship of mandible to maxilla in rest position and in function, location of hinge axis.

Tooth Form and the Modifications Required in the Construction of Retainers and Pontics (1-2 cr.)

Topographical anatomy and contours in restorations of gold, porcelain, resin; methods of modifying or altering function for stimulation or protection of alveolar process and periodontal membrane.

G944 The Principles of Gnathology (1-3 cr.)

Application of gnathology to oral rehabilitation; techniques advocated by Drs. Stuart, D'Amico, DePietro, Granger; theory of clutch and cheek bite transfers.

Pedodontic Seminar (1 cr.)

P: G934, G931, G935. For second-year graduate students and residents; current literature, research design, advanced case analysis and diagnosis.

Advanced Clinical Radiography (1-4 cr.)

G948 prerequisite or taken concurrently. Clinical study of intra-oral and extra-oral radiographic techniques; various errors associated with oral radiographic techniques; problems and mechanisms associated with operation of a teaching-service clinic in oral radiography.

47 Cephalometrics (1-4 cr.)
P: G991. Technique of procuring films of living individuals; tracing of important facial landmarks and planes; taking of significant angular and linear readings, and transposing same to a graph.

Advanced Radiology (2 cr.)

Applications in X-ray production, intra-oral and extra-oral techniques, film processing, radiographic interpretation, radiation hygiene.

G949 (J949) Microbial Physiology (3 cr.)

Chemical and physical nature of bacteria, their metabolic and physical properties, their response and adaptation to their environment.

#### G950 Advanced Clinical Operative Dentistry (1-6 cr.)

Comprehensive restorative care correlated with modern preventive dentistry principles; current concepts of operative dentistry.

#### G951 Fundamental Concepts of Operative Dentistry (2 cr.)

Historical background of cavity preparation; engineering principles and mechanics of tooth reduction illustrate systematized cavity preparation.

#### G952 Analysis of Operative Procedures (2 cr.)

Restorative techniques and physical properties of dental materials correlated to properties of tooth structure; pulp protection and permanency of restorations.

#### G953 Recent Advances in Operative Dentistry (2 cr.)

Current concepts dictated by research; correlation of reports on the literature.

#### G954 Principles of Crystal Growth (2 cr.)

Physical and chemical properties of crystalline solids in light of their atomic structure and with respect to their environment; applications to medical and dental growths.

#### G955 Endocrinology (1-3 cr.)

General endocrinology and basic endocrine mechanisms; adrenal, pancreatic, thyroid, and parathyoid functions; oral and dental problems specifically associated with endocrine malfunction.

#### G956 Advanced Endodontics (1-6 cr.)

Instruction and training in the treatment of complex endodontic cases.

#### G957 Analysis of Endodontic Theory (1-4 cr.)

Review, study, and application of currently advocated endodontic procedures.

#### G958 Bio-Mechanics (1-4 cr.)

Principles of force application used in altering dento-facial relationship; appliance design, fabrication, and activation; specific treatment procedures discussed and applied on the typodont.

#### G959 Oral Microbiology (1-3 cr.)

Oral bacteria flora and their relationship to various branches of dentistry.

#### G960 Advanced Orthodontic Clinic (1-6 cr.)

Details of treatment plan based on careful analysis; timing phenomena; re-analysis of treatment; cleft palate, surgical correction, temporomandibular syndrome.

#### G961 Advanced Radiographic Concepts (1 cr.)

Principles of radiography in temporomandibular joint studies, sialography, panoramic radiography, laminography, cineradiography, cephalometry.

#### G962 Fundamentals of Occlusion (2-4 cr.)

Basic normal and abnormal processes which influence occlusion of humans as compared to that of herbivore, carnivore, and rodents; effects of unsatisfactory occlusion.

#### G963 Advanced Orthodontic Techniques (2 cr.)

Details of wrought and cast appliances used in treatment of malocclusions.

#### G964 Dento-Facial Analysis (2 cr.)

P: G947. Methods of determining and evaluating deviation from normal dental, skeletal, muscular, integumental patterns; treatment objectives with respect to stability, esthetics, function.

# G965 Histophysiology and Pathology of the Periodontium (2 cr.)

Gross clinical observations correlated with microscopic findings of normal periodontium and periodontium under stress of orthodontic care, periodontal disease, periapical pathosis, systemic diseases; physiological role of tissues at cellular level.

#### G966 Advanced Clinical Periodontics (1-4 cr.)

Advanced cases of special interest involving diseases of soft tissue and bony support treated and evaluated.

#### G967 Advanced Periodontics (1-4 cr.)

Periodontal diseases relating to etiology, symptomatology, treatment, differential diagnosis.

#### G968 Advanced Clinical Oral Diagnosis-Oral Medicine (1-6 cr.)

Usual and unusual oral pathologic problems of patients.

#### G969 Advanced Didactic Oral Diagnosis-Oral Medicine (2 cr.)

Advanced diagnostic techniques and instruments applied with clinical signs and symptoms of oral and peroral diseases.

#### G970 Advanced Biochemistry Laboratory (1-3 cr.)

Special problems in intermediary metabolism; cellular respiration and experiments relating to inorganic metabolism; experimental hormonal problems.

#### G971 Intermediary Metabolism (3 cr.)

Metabolic pathways of fats, carbohydrates, proteins; cellular respiration and its effect on oral tissues.

#### G972 Proteins and Nucleic Acids (2 cr.)

Composition of proteins and protein-like substances; structure, method of analysis, relation of protein to other biological factors.

G973 Vitamins, Mineral Metabolism, and Hormones (2 cr.)

Structure and relation to disease and metabolism of these substances in relation to normal and abnormal dental diseases.

G974 Advanced Nutrition (2 cr.)

Special nutritional problems relating to calcification and soft tissue health; relation of fats, carbohydrates, proteins, vitamins, minerals, drugs on dental structures.

G975 Basic Radiological Physics (2 cr.)

Basic properties of various types of ionizing radiation, their interaction, with matter, fundamentals of radiation detection and measurement, basic instrument design.

G978 Fundamentals of Radiation Biology (2 cr.)

P: G975. Effects of ionizing radiation on biological systems; concepts of mechanisms of action and effects at molecular, cellular, organ, total body levels.

G979 Radiology Literature Evaluation (1 cr.)

Evaluation of scientific and radiological literature; principles of research and scientific writing.

G980 Advanced Surgical Endodontics (1-6 cr.)

P: G956 and G957. Principles of advanced surgical endodontics.

G981 Principles of Restorative Dentistry (1-4 cr.)

Interdepartmental course; operative dentistry, pedodontics, fixed and removable partial prosthetics.

G982 Clinical Field Studies (1-3 cr.)

Preliminary preparations for clinical field study including delineation of purpose, review of history, methods, personnel needed, equipment, sample size, data to be collected, study sites, etc.; review of projects with opportunity to prepare field study outline.

G983 Dental Problems of Special Population Groups (1-3 cr.)

Health and dental problems of chronically ill, aged, handicapped, institutional patients; methods of care.

G985 Fluoride Metabolism (2 cr.)

History, clinical studies, pharmacology, toxicology, biochemistry of fluoride compounds; current evaluations of newer methods of using fluoride compounds.

G986 Histopathological Laboratory Techniques (1 cr.)

Preparation of soft tissue for microscopic study; special techniques with decalcified specimens; special staining procedures.

G987 Principles of Applied Oral Medicine (1-4 cr.)

Interdepartmental course; phases of dentistry requiring an understanding of patient's general health; disciplines covered are oral diagnosis, endodontics, periodontics, radiology.

G988 Principles of Oral Surgery (1-4 cr.)

Interdepartmental course on principles of oral surgery; disciplines covered are oral histology, oral pathology, and oral surgery.

G989 Principles of Pediatric Dentistry (1-4 cr.)

Interdepartmental course covering dental care of children; disciplines covered are pedodontics, orthodontics, fundamentals of occlusion.

G990 Advanced Anatomy (1-3 cr.)

Gross anatomical features of human body.

G991 Advanced Anatomy and Physiology of Head and Neck (1-4 cr.)

Surgery oriented dissection of all of the structures of the head and neck.

G992 Biology of the Tooth and Periodontium (1-4 cr.)

Microscopical study of tooth and periodontium; response of tissues to pathology, instrumentation, filling materials used in operative, endodontic, crown and bridge procedure; animals used to illustrate response of tooth tissues to these procedures.

G993 Animal Experimental Procedures (1-3 cr.)

Handling of animals and observation of results; student develops an outline of exercises best suited for his particular interests.

G994 Applications of Genetic Principles to Problems in Dentistry (2 cr.)

General principles of human genetics; importance of genetics to problems encountered in dentistry.

G995 Biostatistics as Applied to Public Health Problems (1-4 cr.)

Collection, tabulation, elementary analyses of data, including vital statistics, treatment of rates, distribution of variates sampling variation.

G996 Epidemiology (1-3 cr.)

Principles of epidemiology; dental caries, periodontal disease, malocclusion, dental health problems of special population groups.

G997 Environmental Health (2 cr.)

Field trips to water and sewage treatment plants, dairies, food processing plants including vending machine facilities; basic environmental health and sanitary science; fluoridation and radiation hygiene.

G998 Community Health Programming and Services (1-4 cr.)

Public health practices; health and human behavior; health education in public health; group purchasing plans including pre and post payment, open and closed panels, indemnity and co-insurance programs offered by profit and non-profit organizations.

G999 Public Health Practice (1-6 cr.)

Functions, scope, and historical background of public health; organization of official and voluntary public health agencies; maternal and child health, mental health, public health, nursing, hospital services, dental health.

R900 Theoretical Mechanics (2 cr.)

Statics and strength of materials reviewed and applied to specific orthodontic problems; biophysics of tooth movement, appliances in equilibrium, energy storage in orthodontic appliances.

R901 Cleft Palate Rehabilitation (2 cr.)

Complete management of cleft lip and/or cleft palate patients from birth to adulthood; multidisciplined concept.

R902 The Biology of Growth and Differentiation (2 cr.)

Biologic sequence of events whereby a single, totipotent fertilized ovum becomes, through progressive growth and differentiation, a series of highly specialized cells performing limited activities.

R903 Roentgenographic Interpretation of the Face and Skull (3 cr.)

Extraoral roentgenography of facial bones and skull, sialography, planography, diagnosis of facial trauma.

R904 Anesthesia Clinic and Seminar (cr. arr.)

General anesthesia as applied in the operating room for all types of surgical problems as well as for dental procedures for ambulatory outpatients.

R905 Advanced Oral Surgery (1-3 cr.)

Major and minor advanced oral surgical procedures, treatment planning and variable approaches to similar problems; development of surgical judgment.

R906 Advanced Oral Surgery Seminar (1-3 cr.)

Broad background for advanced oral surgery; interpretation of physical findings, special laboratory procedures and evaluations, changing concepts in antibiotic and chemotherapeutic treatment, medicolegal aspects of surgery.

R907 Research: Oral Surgery (1-6 cr.)

R908 Speech Pathology—Speech Science (1-6 cr.)

Speech pathology and audiology; etiologic and rehabilitative aspects of speech, language, and hearing disorders.

R909-R910-R911 Advanced Preventive-Dentistry I-II-III (2-2-1 cr.)

Basic concepts and theories relative to the promotion of oral health, etiology, and approaches to the prevention of oral diseases: their application to clinical practice, community dentistry, and dental research.

R912-R913 Clinical Preventive Dentistry I-II (2-1 cr.)

Application of preventive dentistry concepts, principles, and techniques to dental patients. Patient education and motivation.

R914 Statistics (2 cr.)

Problems of experimental design, including statistical methods for handling measures of central tendency, variation, reliability, significance; determination of significance.

R915 Occlusion (1-4 cr.)

This two-semester course includes a comprehensive consideration of published research in occlusion, temporomandibular joint disturbances, and muscle problems. Clinical evaluation and treatment procedures are considered.

R916 Scientific Writing (2 cr.)

This course is designed to inform graduate students of techniques of writing and editing which will help them in their writing projects in graduate school and in their future careers.

R917 Joint Case Management Seminar (1 cr.)

This course will present the didactic and clinical aspects of diagnosis and treatment planning for patients with complex dental problems. Class sessions will include discussions of pertinent literature in periodontics and restorative dentistry as well as the diagnosis and treatment planning of actual clinical cases.

Students who have as their objective a career in education and research are encouraged to complete a minor from the following selection of graduate courses in the School of Education. Complete description of these courses can be found in the Bulletin of the School of Education, Graduate Division.

C675 Supervised College Teaching (2-3 cr.)

P508\* Practicum in Measurement (2-3 cr.)

P510 Psychology in Teaching (2-3 cr.)

R566\* Audio-Visual Communications in Formal Education (2-3 cr.)

<sup>\*</sup> Prerequisites will be waived for dental students.

## Faculty of the School of Dentistry

- Adams, Harold S., B.S. (Massachusetts State College, 1929), Director of the Environmental Health Program (Public Health), and Associate Professor of Public Health (School of Medicine)
- Adams, James W., D.D.S. (The Ohio State University, 1936), Consultant in Orthodontics
- Adams, Lehman D., Jr., D.D.S. (Indiana University, 1949), Instructor in Oral Surgery Allen, Evelyn M., M.L.S. (Indiana University, 1966), Assistant Librarian
- ALTER, EUGENE A., D.D.S. (Indiana University, 1967), Instructor in Oral Diagnosis/ Oral Medicine
- Amos, David T., D.D.S. (Indiana University, 1955), Assistant Professor of Dental Sciences
- Anderson, Joseph E., D.D.S. (Indiana University, 1961), Lecturer in Anatomy (School of Medicine)
- Andrew, Warren A., Ph.D. (University of Illinois, 1936), M.D. (Baylor University, 1943), Chairman, and Professor of Anatomy (School of Medicine)
- Arbuckle, Gordon Russell, D.D.S. (Indiana University, 1970), Instructor in Orthodontics
- Arens, Donald E., D.D.S. (Indiana University, 1959), Assistant Professor of Endodontics Ashmore, James E., Ph.D. (St. Louis University, 1955), Chairman, and Professor of Pharmacology
- Avery, David R., D.D.S. (Indiana University, 1966), Chairman of Undergraduate Pedodontics, and Associate Professor of Pedodontics
- Bach, John W., D.D.S. (Indiana University, 1949), Instructor in Operative Dentistry Baetsle, Bradley A., D.D.S. (Indiana University, 1965), Assistant Professor of Orthodontics
- Bailey, John W., D.D.S. (Indiana University, 1966), Instructor in Operative Dentistry Bailey, L. Rush, D.D.S. (Northwestern University, 1934), Professor of Complete Denture
- BAILIE, STEPHEN K., D.D.S. (Indiana University, 1963), Instructor in Orthodontics
- BAKER, DONALD WAYNE, D.D.S. (Indiana University, 1966), Assistant Professor of Pedodontics
- Baldwin, James J., D.D.S. (Indiana University, 1954), Assistant Professor of Orthodontics
- BARBOUR, JOHN R., D.D.S. (Indiana University, 1967), Assistant Professor of Orthodontics
- BARR, ERVINE B., D.D.S. (Indiana University, 1947), Assistant Professor of Oral Diagnosis/Oral Medicine
- Barton, Douglas H., D.D.S. (Indiana University, 1969), Lecturer in Dental Hygiene and Dental Assisting, Indiana University at South Bend
- Barton, Paul, A.M. (University of Washington, 1948), Professor of Community Dentistry Bauer, Travis L., D.D.S. (Indiana University, 1964), Instructor in Operative Dentistry
- Beavers, Thomas H., D.D.S. (Indiana University, 1944), Assistant Professor of Oral Diagnosis/Oral Medicine
- Beck, Ronald R., Ph.D. (Ohio University, 1968), Associate Professor of Physiology (School of Medicine)
- Beiswanger, Bradley B., D.D.S. (Indiana University, 1967), Assistant Professor of Preventive Dentistry
- Bell, Carl D., D.D.S. (University of Michigan, 1965), Director of the Dental Health Task Force Project, and Assistant Professor of Pedodontics
- Berman, Jacob, K., M.D. (Jefferson Medical College of Philadelphia, 1921), Professor Emeritus of Surgery (School of Medicine)
- BIEDENWEG, CLARENCE A., M.S. (Indiana University, 1941), Lecturer in Dental Hygiene, Indiana University at Fort Wayne
- BIGELOW, JOSEPH L., D.D.S. (Indiana University, 1959), Consultant in Oral Surgery BIPPUS, JEANNE, A.S. (Bristol Community College, 1971), Instructor in Dental Assisting, Indiana State University at Evansville

BIXLER, DAVID, Ph.D. (Indiana University, 1955), D.D.S. (1959), Chairman, Department of Oral Facial Genetics, and Professor of Dental Sciences

BLOOMER, RICHARD S., D.D.S. (Indiana University, 1967), Assistant Professor of Periodontics

Boesinger, Robert P., D.D.S. (Indiana University, 1935), Assistant Professor of Operative Dentistry

BOGAN, ROBERT L., D.D.S. (Indiana University, 1954), Assistant Dean; Coordinator of Graduate Prosthodontics Program, and Associate Professor of Fixed and Removable Partial Prosthodontics

BOJRAB, DAVID G., D.D.S. (Indiana University, 1965), Lecturer in Dental Hygiene and Dental Assisting, Indiana University at Fort Wayne

BOONE, MALCOLM E., D.D.S. (Indiana University, 1946), Associate Professor of Complete Denture

Boren, Nancy, R.D.H., M.S. (Columbia University, 1970), Lecturer in Dental Hygiene, Indiana University at South Bend

BORKOWSKI, JOHN, D.D.S. (Indiana University, 1955), Assistant Professor of Fixed and Removable Partial Prosthodontics

BORMAN, WILLIAM, D.D.S. (Indiana University, 1942), Assistant Professor of Oral Diagnosis/Oral Medicine

BOUNDY, SUZANNE STYERS, M.S. (Old Dominion University, 1970), Assistant Professor, and Director of the Dental Hygiene Program

BOYD, DREXELL A., D.D.S. (Indiana University, 1934), Professor of Operative Dentistry Bozic, Donald F., D.D.S. (Indiana University, 1967), Assistant Professor of Pedodontics Bradley, Steven R., D.D.S. (Indiana University, 1967), Assistant Professor of Pedodontics

Bratton, Robert L., D.D.S. (Indiana University, 1968), Instructor in Operative Dentistry

Braun, Stanley, D.D.S. (The Ohio State University, 1963), Consultant in Orthodontics Brennan, Ralph E., D.D.S. (Indiana University, 1953), Lecturer in Dental Hygiene and Dental Assisting, Indiana University at South Bend

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Requests for application forms or information on any of the programs in dental education should be directed to the appropriate address below:

Indiana University - Purdue University at Indianapolis School of Dentistry 1121 West Michigan Street Indianapolis, Indiana 46202

The offices are open 9 a.m. to 5 p.m., Monday through Friday, for those who desire to call or visit.

Dental Assisting and Dental Hygiene

Director of the Dental Auxiliary Programs Indiana University at Fort Wayne 2101 Coliseum Boulevard East Fort Wayne, Indiana 46805

Director, Curriculum for Dental Hygiene Programs Indiana University - Purdue University at Indianapolis School of Dentistry 1121 West Michigan Street Indianapolis, Indiana 46202

Graduate Dentistry

S. Miles Standish, Assistant Dean of Graduate and Postgraduate Education Graduate Dental Program 1121 West Michigan Street Indianapolis, Indiana 46202