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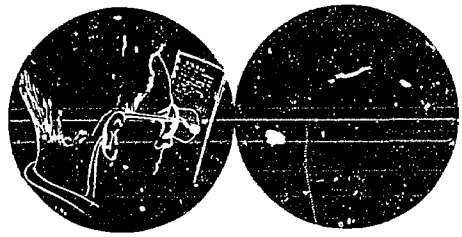
ABSTRACT

This brochure gives basic facts about optometry which may be helpful in considering such a career. Included are a discussion as to what an optometrist is, the development of the profession, the need for practitioners projected by State to 1980, types of services rendered, and the variety of employment opportunities available. Over one-third of the brochure comprises a listing of the educational requirements to be met for admission into each of the twelve schools or colleges of optometry accredited by the Council on Optometric Education of the American Optometric Association. Sources of further information on optometry as a career are given. (SC)



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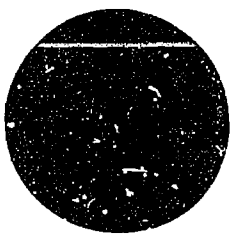
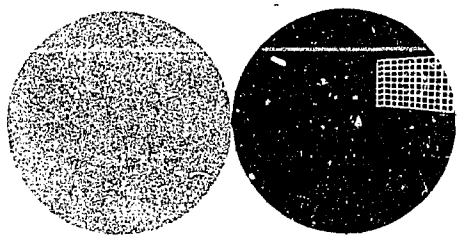
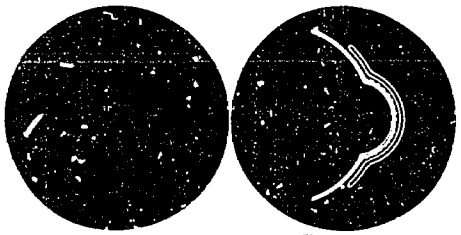
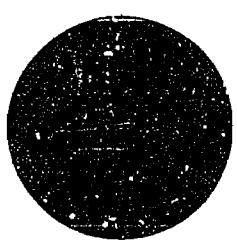




CAREERS



WITH VISION



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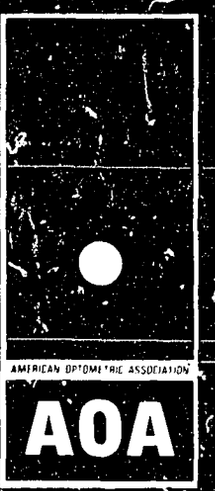
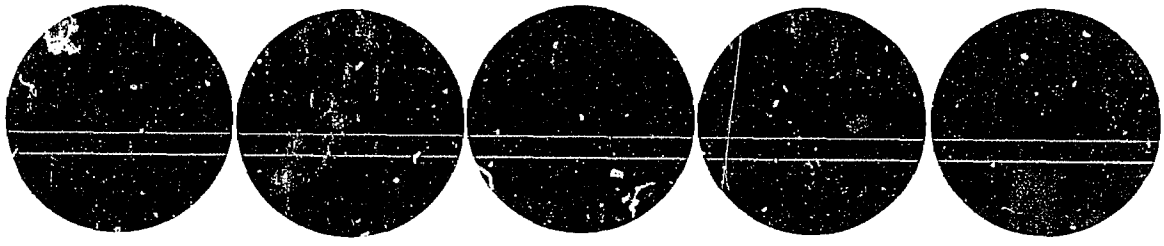


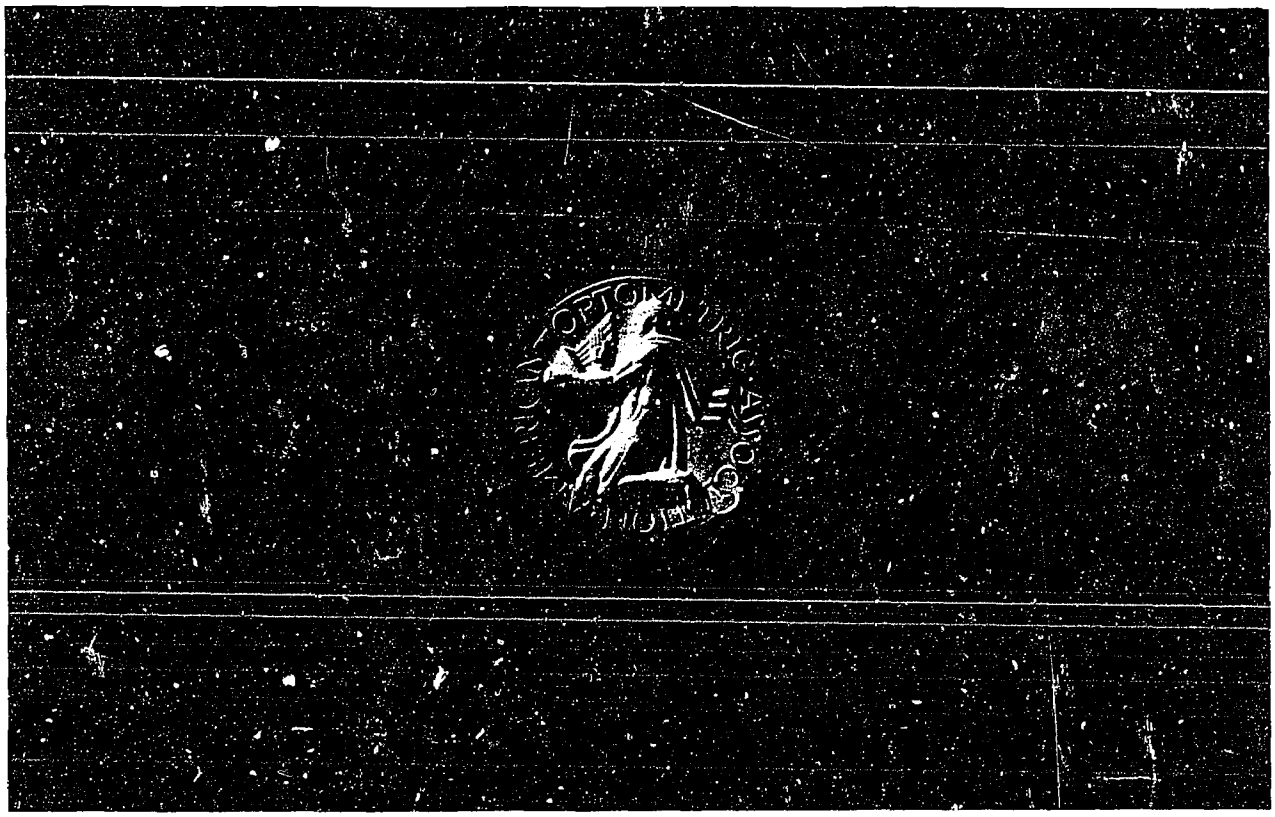
Choosing a career is one of life's most important decisions. Selection and preparation for life's work will affect one's entire future, so each of the many factors involved must be carefully weighed and considered. This booklet is prepared in hope of being of help to the counselor who must provide information, and to the individual who alone must make the decision.

Often the difference between a successful career, and a tedious bare existence, lies in selecting the right career and preparing for it properly. The best career for one individual may not suit the next person at all. To select the right career, it is important to obtain as much information as possible on those of interest before making a final decision. Some of this information can be gathered from vocational guidance counselors, books, some from school experience. A great deal of insight into professional careers, such as optometry, will be obtained from talking with people already established in the profession. The American Optometric Association will be pleased to supply the name of an optometrist in your area who will discuss with you the many aspects of this profession as a career.

This brochure serves to give you basic, essential facts about optometry, which will be helpful in making a decision on the profession as a career. Remember throughout, that optometry is a profession in the health-care field which requires dedication and a basic desire to serve people—patients, profession, and community.

Committee on Career Guidance





What Is Optometry?

Optometry is the profession specifically licensed to care for human vision.

It is based on scientific knowledge concerning human vision. The sciences of optics, chemistry, pathology, biology, neurology, physics, physiology, anatomy and psychology all make important contributions. Doctor of Optometry (O.D.) is the professional name of those licensed and engaged in the practice of optometry, who apply their knowledge and skills to enable their patients to engage in those activities requiring efficient, and comfortable vision. They utilize special instruments and techniques to determine the visual strengths and weaknesses of their patients. Where appropriate needs exist, they provide visual care programs which do not use drugs or surgery but, instead, utilize such things as concentrated visual exercises, eyeglasses and contact lenses.

In addition to the optometrists, there are others who are also involved in caring for human vision. An ophthalmologist or oculist is a physician (M.D.) who specializes in diagnosis and treatment of defects and diseases of the eye, performing surgery when necessary or prescribing other types of treatment. An optician is a person who grinds lenses, fits them into frames and adjusts the frames to the wearer. An optician does not perform visual examinations nor prescribe treatment.

Why Be An Optometrist?

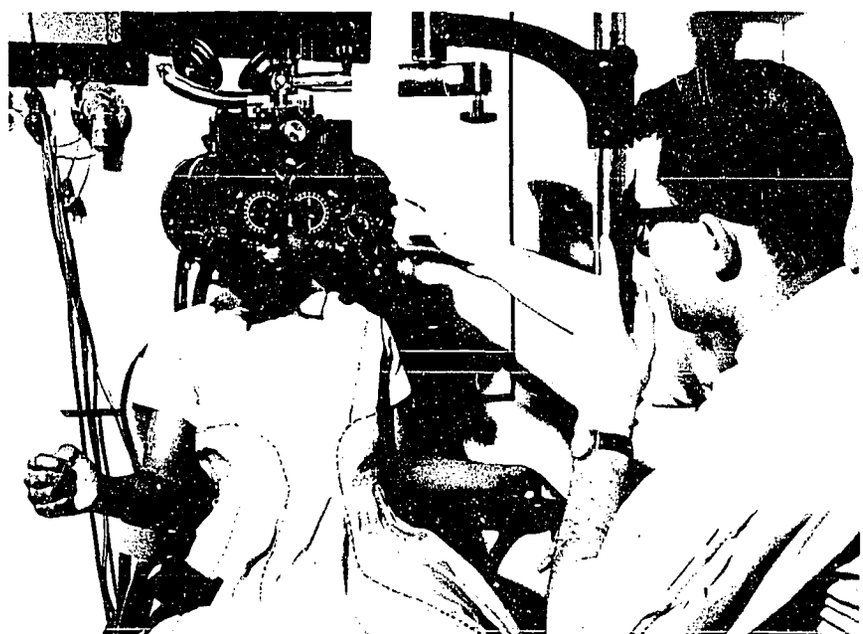
If you ask one of the leading optometrists in your community this question, he will probably answer with some of the following points for you to consider as you explore the possibility of entering this profession:

1. An optometrist is interested in people and is willing to dedicate himself to helping them. He considers his patient first as a total human being and second as a person with vision needs.

2. Optometry is a challenging career that attracts inquiring scientific minds.

3. Optometry is one of America's most needed professions. As our industrial society becomes more highly mechanized, vision requirements become more exacting. The number of those needing professional help for near-point visual tasks, including both older citizens and school children, is steadily growing. Awareness of the importance of sound visual hygienic practices in the formative pre-school years is increasing. Therefore, the need and demand for professional vision care are rapidly increasing.

4. Optometry is a rewarding career, both economically and personally. The optometrist's patients become his friends and he shares a special joy with a youngster who, perhaps for the first time in his life, can see well enough to read or to hit a ball. There is an inner feeling of personal satisfaction and self-fulfillment derived from spending every working hour helping others.



5. Optometry is served by vigorous and progressive state and national professional associations which provide a wide variety of important services to their members, enabling them to participate in and work for the advancement of their chosen profession.

6. Through knowledge of the importance of vision care to the general welfare, many optometrists feel a special sense of responsibility to their communities. These socially aware practitioners become leaders in church and school groups, local civic groups and local or state government. They strive to better the communities in which they live and work.

7. Optometry is a profession which allows time for civic activities which lead to community betterment. The ability to arrange one's own working hours permits participation in those things which develop leadership abilities and are of benefit to all men.

Things To Ask Yourself

1. Do I enjoy being in close, personal contact with the public? Do I want to contribute something to my fellow man?

2. Am I willing to accept the primary responsibility for all professional and administrative decisions in my office? Am I willing to accept the responsibility to care for and protect the vision of another person?

3. Am I interested in mathematics, physics, physiology, pathology, psychology, chemistry and other scientific studies which are required to earn the Doctor of Optometry degree?

The Need For Practitioners

More than 20,000 new optometrists will be needed by 1980 to meet the ideal ratio of one optometrist for every 7,000 persons.

Today, the schools and colleges of optometry are graduating only enough optometrists to take the places of those who have died or retired. Because the population of the United States is growing and more Americans are recognizing the need for proper vision care, due to an increased understanding of the relation of visual efficiency to industrial production, driving, student achievement, adjustment to aging, and other crucial areas of modern society, there is a heightened demand for professional vision care services. The number of new practitioners entering the optometric profession has not kept pace with this demand.

Urgent Need In Urban Areas

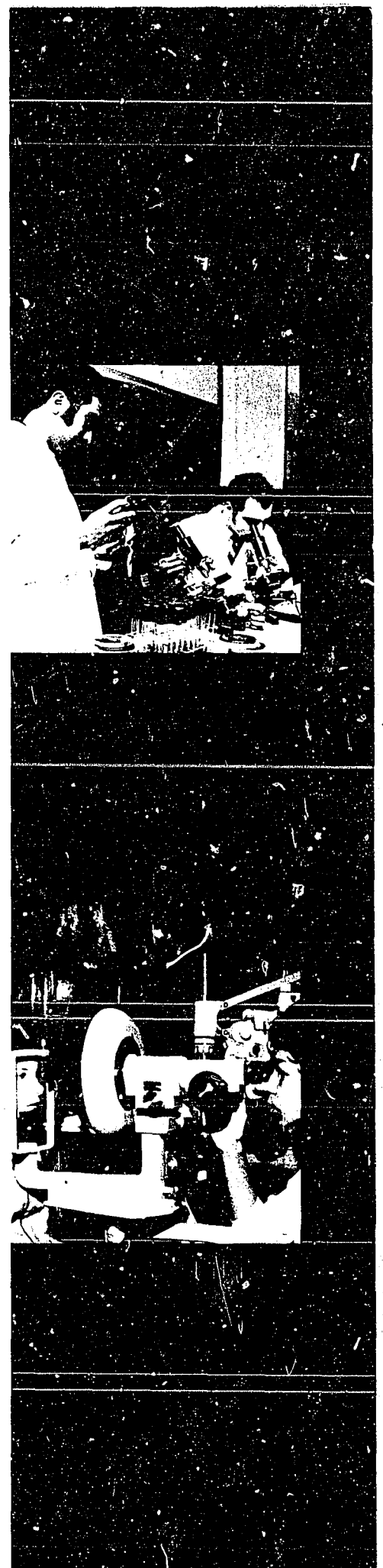
The greatest need for optometrists lies in the urban areas. Regardless of the reasons, inner-city ghetto children appear to have a higher incidence of learning disabilities, perceptual difficulties and developmental visual problems than do the more "advantaged" children in other parts of the city This presents a special challenge to all optometrists and especially to optometrists from minority groups, who have the talent and ability to relate to the problems of the people in the urban area. But optometrists of all racial, nationalistic and religious backgrounds are needed in suburban and rural areas also and a young optometrist should choose an area where he feels he can contribute the most. He should establish the type of practice which will allow him to gain a deep personal satisfaction, as well as economic contentment, through serving the vision needs of others.

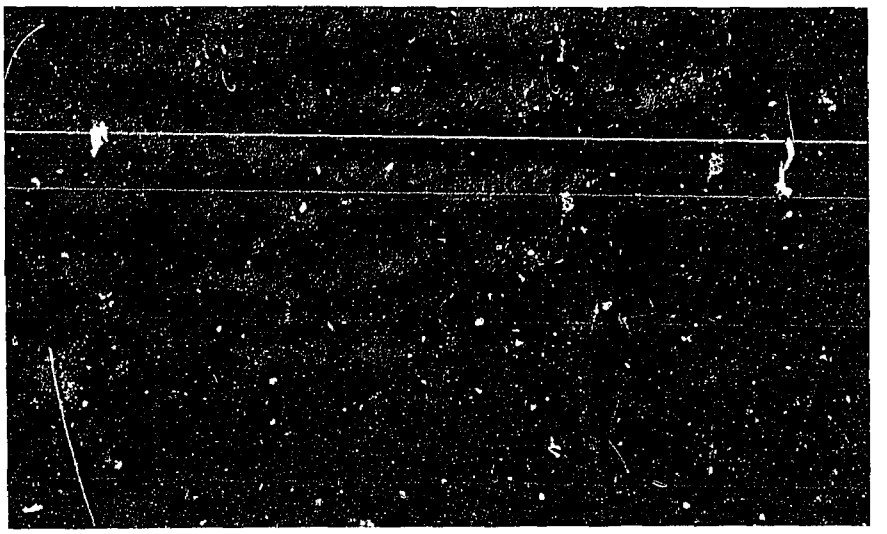
A Special Message For Women

Although optometry is an ideal profession for the qualified woman, only about 2.84% of the approximately 18,000 full-time optometrists in the United States are women.

Optometry offers many advantages—flexible hours, community prestige, excellent annual income and the chance to be involved in the health care of people of all races and ages. If the woman is married and has a family, she may arrange her work schedule to fit both her family's needs and the needs of her career.

Women currently in optometry are working as solo practitioners, associated with other optometrists, and as educators. All facets of specialization are theirs for the choosing—optometry places no barriers in the path of the qualified woman.





Development Of The Profession

While the development of optometry as a profession has taken place within the last sixty years, most of the sciences and arts upon which optometry is based began centuries ago. Experiments with the physical laws of optics were conducted by Pythagoras (560 BC) and Euclid (280 BC). An early application of these laws to vision care took place in 1276, when Roger Bacon wrote a detailed description of his use of convex lenses "to make small letters appear large."

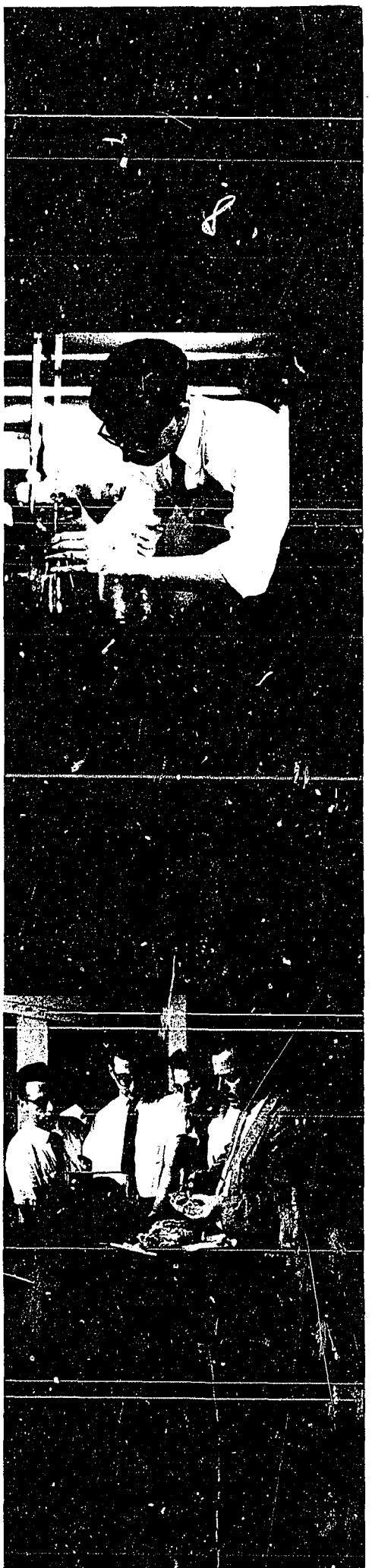
By the middle of the nineteenth century, lenses and refraction of light were well understood and the demand for eyeglasses grew rapidly. Before the advent of the optometrist, eyeglasses were obtained without a vision examination. The fitting of glasses was a trial-and-error procedure. The wearer selected from various lenses the ones which seemed to fit his personal requirements best.

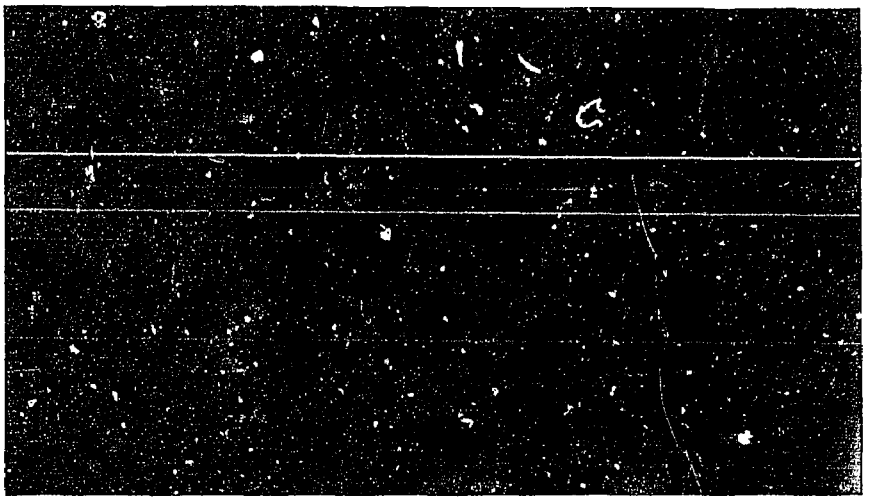
Glasses, at first, were expensive. They were used by the wealthy and were a status symbol. It took many years for glasses to become generally accepted as one of man's most essential aids. The twentieth century has produced lenses of quality and design which are ground with precision and skill when a thorough vision examination indicates glasses are required.

In 1898, vision specialists organized into an association and in 1919 adopted the name "American Optometric Association." The principal purpose of the Association is to assist its members in providing the public with the best possible vision care through education and information, and to gain legislative regulation of the practice of optometry. The AOA cooperates with affiliated associations in the states where individual professional services are provided to members, and it represents the collective membership in matters affecting optometry nationally.

By 1910, Columbia University, New York, had inaugurated a two-year optometry program. In 1914, a four-year degree program in optometry and applied optics was added to the curriculum of The Ohio State University. Following this, other schools and colleges of optometry came into being. At present there are twelve schools and colleges of optometry in the United States; all are accredited by the Council on Optometric Education, recognized as the accrediting agency for optometry by the National Commission on Accrediting.

By 1968, all schools and colleges of optometry in the United States required a six year curriculum leading to a Doctor of Optometry degree. This includes at least two years of pre-optometry studies and four years of professional courses.

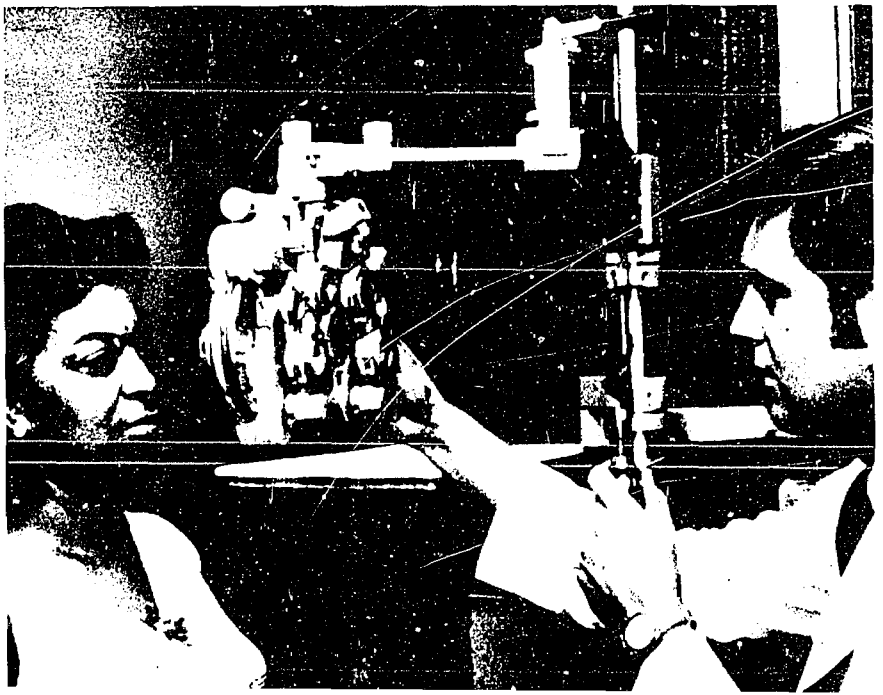




Optometry's Unique Services

The "examining optician" of 1896 bears only an ancestral resemblance to the professional optometrist of today. Modern optometry has become a unique profession because it provides complete vision care. A vision examination is not merely some mechanical test of an eye as an optical instrument. The eye is a living thing and vision, which takes place in the brain—not in the eye—affects and is affected by the whole body and personality. Hence, a complete vision examination requires much more than refraction to determine the focus of the eyes and the prescribing of eyeglasses, if needed.

In recent years hundreds of books have been published in the field of visual science. There are a great many scientific articles and research reports published each year dealing with the many and varied aspects of optometry. The federal government, industry and educational institutions are not only interested in vision, but are participating in the further development of this science.



Children's Vision

Psychologists and educators are becoming increasingly aware of the complex role of vision in the growth and development of children. They are particularly aware of the difficulties that occur in education when children have vision problems. Up to 80% of delinquents and semi-delinquents, studied by the White House Conference on Juvenile Delinquency, had learning difficulties, specifically in reading, and poor vision was found to be a contributing factor in 50% of these cases.

Optometry is playing a pioneer role in discovering and solving school vision problems, especially in the development and use of visual training and orthoptics. This is the result of the dedication of many optometrists who specialize in children's vision, and others who serve as optometric consultants to individual schools and school systems.

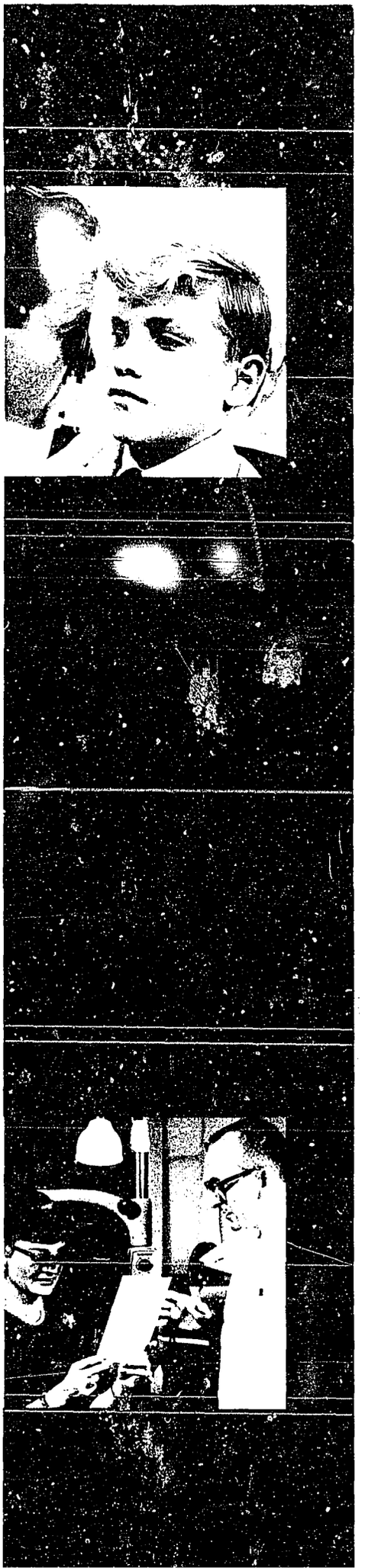
Contact Lenses

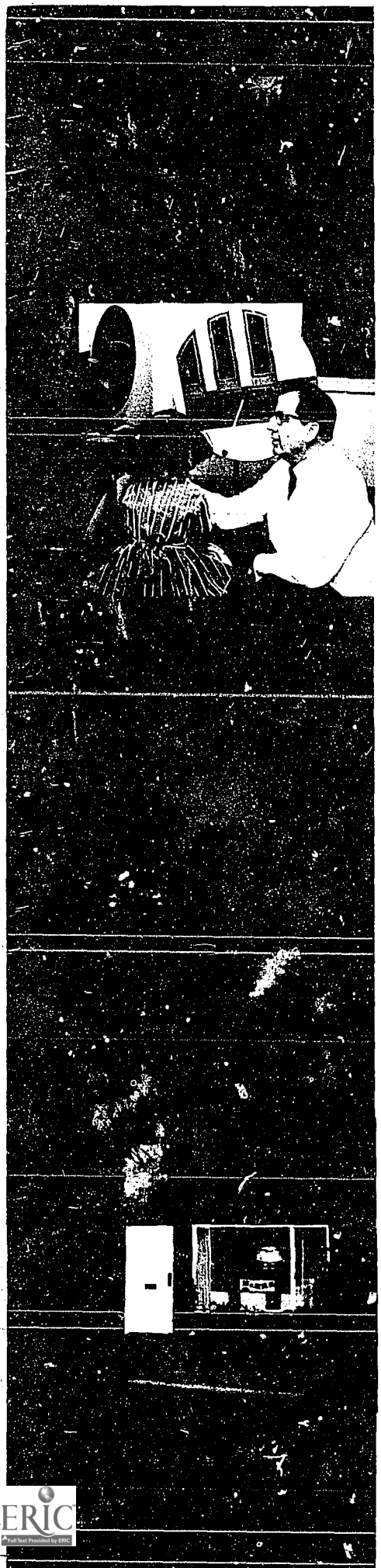
Optometry has played a leading role in the development and use of contact lenses. An increasing number of persons are finding that contact lenses provide vision unequaled by ordinary spectacles. For the person who has had a cataract removed, the contact lens provides the only effective means to attain near normal vision. Contact lenses are especially important to entertainers, persons participating in sports, persons who, for cosmetic reasons, do not wish to wear spectacles, and myopic children.

Some optometrists devote their time exclusively to this specialty, while others include it as part of their general practice of optometry.

Aids For The Partially Sighted

Most of the effective aids for the partially sighted have been developed by optometrists. These aids are important to the older age group. They are also a boon to thousands of children with seriously impaired vision. Optometrists have led the way in improving telescopic and microscopic lens systems. It is not uncommon for persons classified as legally blind to have their vision restored sufficiently to read, watch television or engage in other useful vision tasks.





Visual Training

Optometrists maintain that vision is a learned skill and that skills which are learned can be taught. This is the basis of scientific visual training in which optometry has pioneered.

Visual training has long been recognized as an effective method of correcting some types of strabismus (crossed eyes). It is also effective in teaching people to perform specific vision tasks more efficiently.

Some optometrists, because of special interest and skill in visual training, devote a large part of their practice to it. Others include it as one of their services.

Visual training is used to rehabilitate many faulty visual performances. It is most effective with children, but not limited to them. It is used to sharpen visual perception, speed development of vision skills, enhance vision for reading, and at the same time, increase comfort and overall efficiency.

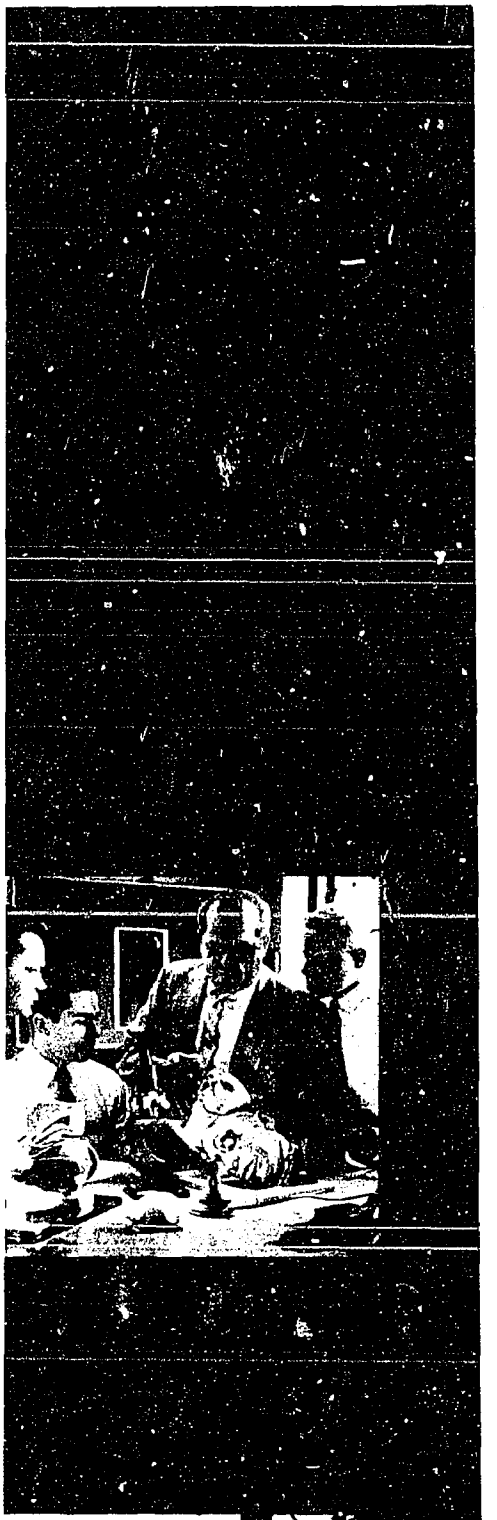
Private or Associate Practice

Optometric schools provide all the training necessary to establish a practice. Many good locations are available and opportunities for service exist in urban areas, the suburbs and small towns. Many areas throughout the country are in real need of optometrists.

While many optometrists open their own offices soon after receiving their licenses, today's graduates seem to prefer association with established practitioners. In this way, they avoid the immediate need for capital investment to equip an office. Eventually, the associate can purchase the practice when the older optometrist retires, or he can open his own office after becoming more established in the community. The American Optometric Association provides a placement service for its membership which helps find opportunities for associateships.

Clinical Practice

Many optometrists find it advantageous to become associated with other optometrists to form a group practice. Sometimes this simply involves sharing common facilities such as waiting rooms or office personnel, while in other cases, it involves bringing together a group of specialists. For example, one optometrist may have special interest and facility for visual training, while another may spend most of his time prescribing and fitting contact lenses.



Group Practice

Some optometrists are employed in private, public and hospital clinics. Others are associated with union or employee group prepaid insurance plans. Many are associated with institutions and rehabilitation centers.

Some optometrists prefer to make clinical practice a permanent career; others ultimately go into practice for themselves. Occasionally, optometrists in private practice are engaged on a part-time basis or as consultants in such institutions as homes for the aged and prisons where the extent of the practice does not require a full-time person.

Military Service

Upon graduation from optometry school, many optometrists apply for and receive commissions in the armed services. Optometrists entering the armed forces receive commissions as officers in the Optometry Section of the Army, Air Force or Navy. Some resign after fulfilling their military obligations to enter civilian practice, while others choose military service as their permanent career.

Optometry officers are usually assigned to clinics in hospitals or large dispensaries where their duties include visual examinations, vision screening of military personnel and other optometric services. In addition, they may supervise optical technicians as well as participate in various occupational vision and research programs.

In recent years, all three military branches have added career advancement programs. Under these programs, optometric officers may be chosen to receive graduate-level training leading to Master of Public Health, M.S. or Ph.D. degrees in Physiological Optics. Officers, so trained, participate in the health care planning and advanced vision research projects conducted by the military.

Many optometrists, who choose the military as a career, enter private practice upon retirement, usually as an associate in an established practice. This means that the military optometrist not only has a retirement income but can continue his profession after serving in the military.

Selective Service Deferment

Under current regulations, including the military Selective Service Act, pre-optometry and optometry students "satisfactorily pursuing" their course of study shall be deferred. Students must request deferment. The dean of the school must report the student's progress each year.

Optometrists are included under the "Doctor's Draft" provision of the law, graduates shall remain liable for service as optometry officers in the armed forces until their 35th birthday. Special calls for optometrists will be made by the Selective Service System when the armed forces are not able to meet their requirements through normal recruitment channels.

For detailed information see your local service recruiter or draft board.

Environmental Vision

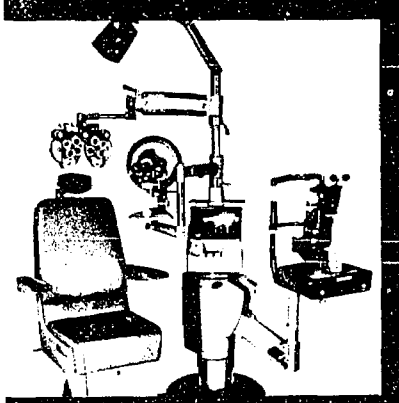
Optometrists in industry evaluate the vision requirements of each special occupation. They also assist management and engineers in placing persons in work for which they are best suited visually. They analyze industrial plants to determine safe and efficient lighting and equipment placement, as well as to prescribe adequate eye protection for workers.

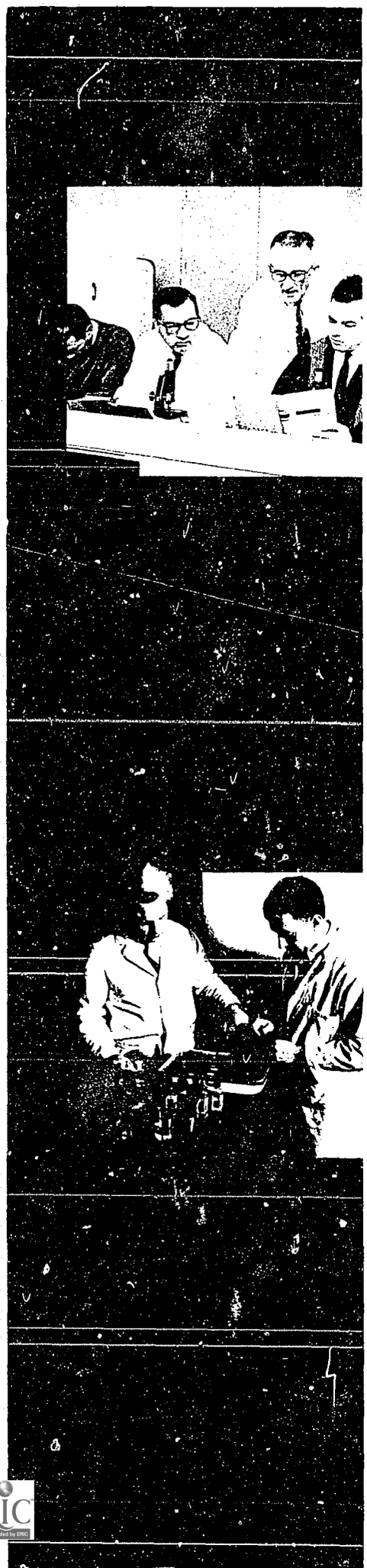
Government Agencies

The Veterans' Administration, as well as all three branches of the armed forces, employs civilian optometrists in various research and service capacities. Optometrists are also utilized in a variety of advisory and product-testing capacities by such agencies as the Department of Agriculture, Interstate Commerce Commission, Department of Transportation, the Bureau of Standards, Civil Aeronautics Authority and the Bureau of Public Roads. Full-time employees are under civil service in the professional category. Many optometrists who serve in advisory capacities to various government agencies also maintain private practices.

Ophthalmic Industry

Ophthalmic equipment manufacturers retain optometrists to conduct research, to design and to test products, as well as to acquaint others with new developments. Optometrists, who wish to combine optometry with an industrial career, often find administrative opportunities in this industry.





Teaching

In recent years, noteworthy changes have occurred in optometric education. These changes have brought with them an increasing recognition of the profession's responsibility to develop more trained educators and to encourage greater research in visual science. A milestone occurred within the past decade when optometric education matured to the present six-year professional course, with a standard curriculum in all optometric institutions. As one of the health professions, optometry's curricular content relies heavily on research and bodies of knowledge accumulated by scholars in the field of visual and related health sciences. Optometric education also relies heavily upon disciplines within the relevant natural sciences including physics, particularly optics; biology, particularly that related to knowledge of the human being; and psychology, particularly that which deals with relevant behavioral modes of the human being. Another important source of curricular content is found through systematic observation of societal needs.

Closely paralleling curricular development is the increased enrollment of students, made possible by the construction of new and the expansion of existing facilities. Sociological studies also reflect the need for greater numbers of practitioners to meet the visual needs of an expanding population. These expansions in both the academic and clinical phase of the curriculum, in student numbers, and in educational facilities, have greatly increased the projected demand for optometric educators. Pay and academic rank for educators and researchers in optometry compare favorably with other institutions of higher learning.

Research Opportunities

Careers in vision research generally require additional graduate training. Students showing interest and ability in research activities, during undergraduate professional years, are encouraged to enter graduate programs in various optometry schools as well as in departments in univer-

sities which have strong capability in visual science research. Financial support for graduate students is generally available through federal and private scholarships, fellowships, and loans.

Students interested in gaining additional information concerning research careers in optometry should write to: Director, Professional Development Division, American Optometric Association, 7000 Chippewa Street, St. Louis, Missouri 63119.

Public Health

The profession of optometry is becoming more and more community-oriented, both in response to the vision care needs of the nation and to the challenging legislation in the health-care field during the last few years. The public health portion of the curriculum is being increased in most of the schools and colleges of optometry. The broadening field of public health optometry or community vision care provides many new and different opportunities for the optometrist today. Young optometrists and military optometrists, in increasing numbers, are preparing themselves for challenging careers in public health administration, community health planning, public health research and participation in broad vision programs. A number of optometrists are going on for the Master of Public Health and Master of Public Administration degrees.

Some optometrists have key administrative responsibility in federal health agencies. Optometrists are involved in many of the comprehensive neighborhood health centers, Model Cities health programs across the nation and programs for Indians.

The optometrist today truly has the opportunity and the challenge to be a full-fledged member of the developing health-care team which must approach national health problems through innovative community programs and applied research.

ANALYSIS OF OPTOMETRIC

STATE	Percent of Practitioners		Municipalities Served		Population 1980 (Estimated to nearest thousand)
	Optom.	Med.	Optom.	Med.	
Alabama	68	32	78	22	4,223,000
Alaska	75	25	6	1	360,000
Arizona	61	39	28	19	2,469,000
Arkansas	78	22	68	20	2,319,000
California	72	28	594	209	27,742,000
Colorado	62	38	49	21	2,588,000
Connecticut	64	36	81	37	3,744,000
Delaware	63	37	11	5	689,000
Florida	74	26	134	59	9,019,000
Georgia	66	34	103	35	5,563,000
Hawaii	65	35	15	6	862,000
Idaho	77	23	36	9	821,000
Illinois	80	20	287	92	12,778,000
Indiana	74	26	143	48	5,831,000
Iowa	76	24	136	35	2,921,000
Kansas	75	25	95	35	2,513,000
Kentucky	71	29	91	30	3,559,000
Louisiana	58	42	68	24	4,571,000
Maine	77	23	53	19	1,083,000
Maryland	54	46	65	27	4,851,000
Massachusetts	73	27	200	82	6,236,000
Michigan	71	29	197	75	9,929,000
Minnesota	71	29	138	39	4,209,000
Mississippi	65	35	60	22	2,735,000
Missouri	73	27	144	35	5,172,000
Montana	71	29	42	12	817,000
Nebraska	75	25	64	18	1,605,000
Nevada	72	28	9	2	701,000
New Hampshire	66	34	26	14	815,000
New Jersey	70	30	223	108	8,993,000
New Mexico	65	35	26	14	1,384,000
New York	64	36	334	163	21,868,000
North Carolina	65	35	135	64	5,993,000
North Dakota	78	22	37	9	704,000
Ohio	71	29	257	93	12,416,000
Oklahoma	71	29	90	34	2,793,000
Oregon	73	27	68	24	2,414,000
Pennsylvania	69	31	351	156	12,689,000
Rhode Island	82	18	28	10	1,006,000
South Carolina	69	31	66	19	3,063,000
South Dakota	83	17	40	10	730,000
Tennessee	71	29	93	27	4,638,000
Texas	65	35	200	91	13,606,000
Utah	63	37	26	9	1,346,000
Vermont	70	30	18	8	472,000
Virginia	63	37	87	48	5,717,000
Washington	69	31	98	31	3,587,000
West Virginia	69	31	63	26	1,772,000
Wisconsin	71	29	156	45	4,908,000
Wyoming	72	28	20	7	386,000
Dist. Col.	48	52	1	1	1,042,000

NEEDS BY STATES BY 1980

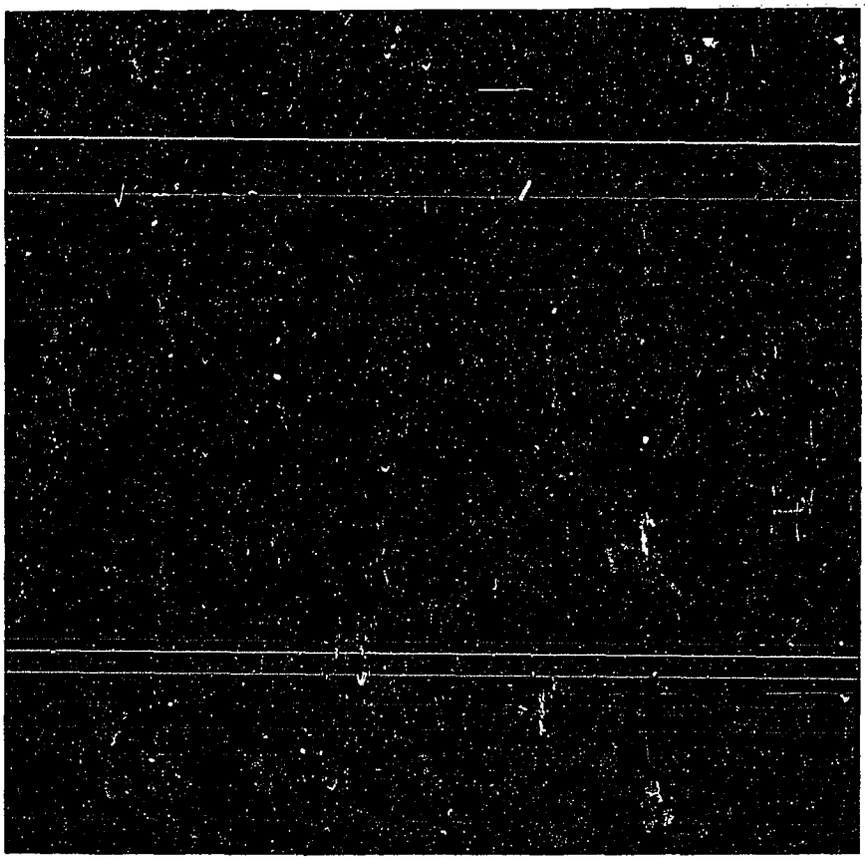
Percent Population Increase 1970 to 1980	Approximate Number Of Optometrists 1969	Additional Optometrists Needed By 1980 to Provide a Ratio of 1 to 7,000		
		Growth	Attrition	Total
12	191	413	57	470
21	15	36	4	40
35	129	224	39	263
13	159	172	48	220
32	2509	1452	753	2205
20	191	178	57	235
21	270	265	81	346
24	32	66	10	76
36	523	765	157	922
17	280	486	84	570
13	65	58	20	78
15	94	23	28	51
15	1927	---	578	578
14	546	291	164	455
6	371	46	111	157
9	249	110	77	187
8	239	269	72	341
20	239	414	72	486
9	126	29	38	67
24	203	490	61	551
12	829	63	248	311
14	789	629	237	866
14	408	193	122	315
13	128	263	38	301
12	480	259	144	403
13	98	19	29	48
8	176	53	53	106
28	40	61	12	73
20	73	43	22	65
20	712	573	214	787
27	71	127	21	148
14	1837	1287	561	1848
15	347	509	104	613
7	77	24	23	47
16	1027	747	308	1055
10	262	137	79	216
16	310	35	93	128
8	1342	471	403	874
9	144	---	43	43
14	163	275	49	324
6	99	5	30	35
14	322	341	97	438
19	829	1115	249	1364
24	89	103	27	130
13	37	30	11	41
19	296	521	89	610
16	397	115	119	234
--	162	91	49	140
14	458	243	137	380
15	39	16	12	28
22	82	67	25	92
	TOTAL	14,202	6,159	20,361

A Resume Of An Optometrist's Day

Reviewing a day in an optometrist's appointment book discloses a varied and active time, presenting many interesting and challenging cases which might include: restoring vision to a partially sighted patient; improving the reading ability of a school child; detecting and referring a case of glaucoma or perhaps a cataract; improving the function of the two eyes through visual training; fitting contact lenses or a pair of trifocals, and performing initial vision examinations and follow-up visits for those needing correction for astigmatism, nearsightedness and other vision problems.

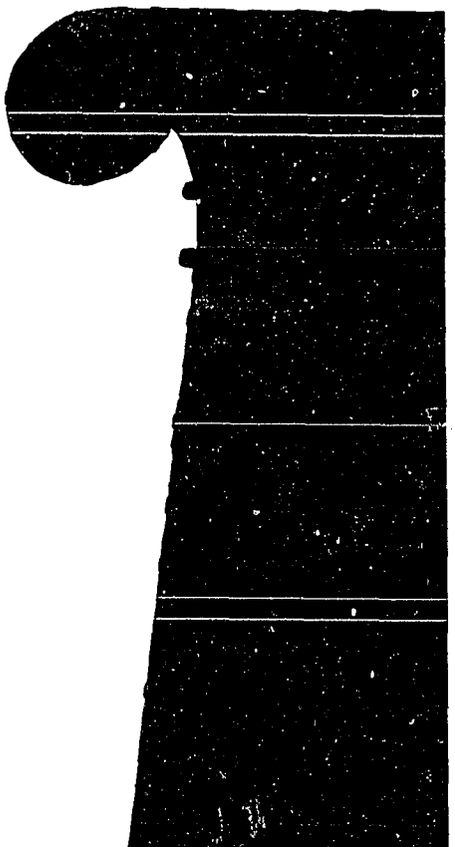
Each patient offers a different challenge to the optometrist's ability as a person and as a practitioner. No two eyes are alike, each has its unique nature.

Often a patient will reveal to his optometrist some of his personal fears and problems. As he gains the confidence of his patient, the optometrist must always remember that he has a sacred trust never to reveal to anyone else what has transpired in the doctor and patient relationship.

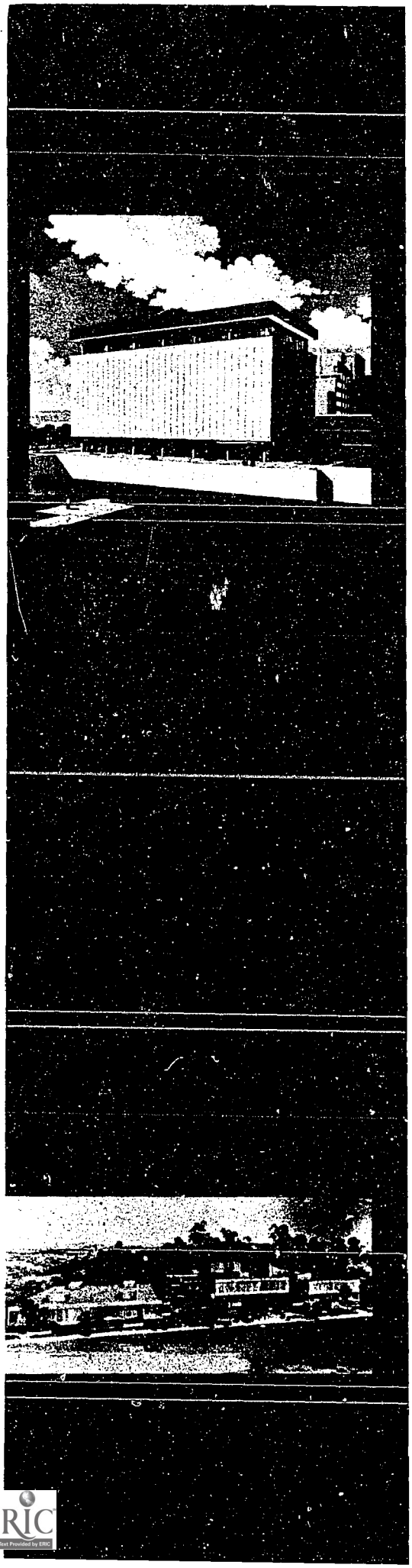


What Are The Educational Requirements?

Students should begin as early as possible to acquire education in the fundamental sciences. Two years of pre-optometric education must be taken at an accredited college or university. With the proper selection of initial courses, the student may transfer from a pre-optometry program in a junior or other accredited college to complete his degree at one of the optometric schools or colleges. In a total of a least six college years, four will be spent in professional optometric education.



The prospective optometric student should request a catalog from the school or college he expects to attend, and then plan his pre-optometric education, in compliance with its requirements. He should acquaint himself with eligibility requirements which govern licensing in the particular state, or states, where he may wish to practice, This information may be obtained by writing to the State Board of Examiners in Optometry usually located in the state capital. Upon graduation, the



graduates must pass comprehensive examinations for licensure. Once he receives a license to practice, the new optometrist may enter practice directly in most states.

The laws and regulations of all states provide that no one shall be eligible to take the licensing examination unless he is a graduate of a school of optometry approved by that State's Board of Examiners. There a. e presently twelve schools or colleges of optometry in the United States. Accreditation is by the Council on Optometric Education of the American Optometric Association, which is recognized by the National Commission on Accrediting as the official accrediting body for optometry. Accreditation by the Council is given only to schools whose courses meet high educational standards. The accredited schools are:

Illinois College of Optometry

Indiana University, Division of Optometry

Massachusetts College of Optometry

Pacific University, College of Optometry

Pennsylvania College of Optometry

Southern California College of Optometry

Southern College of Optometry

State University of New York, College of Optometry

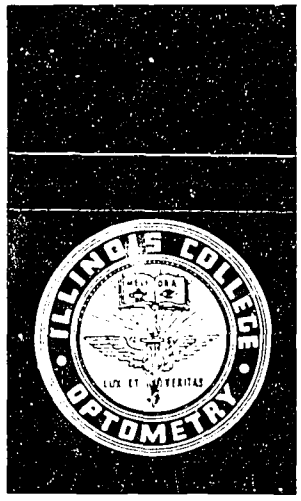
The Ohio State University, School of Optometry

University of Alabama in Birmingham, School of Optometry

University of California, School of Optometry

University of Houston, College of Optometry

The American Optometric Association compiles, each year, a comprehensive listing of scholarships and loan funds offered by various state associations, societies, and institutions. Optometry students are also eligible for federal student loans and scholarships. Information may be obtained from the optometry school of your choice.



Illinois College of Optometry

Chicago, Illinois

ADMISSION REQUIREMENTS

Candidates for admission to the professional curriculum leading to the Doctor of Optometry (O.D.) degree are required to present a minimum of two academic years of college work (sixty semester or ninety quarter hours) at an accredited college or university. They must have a total grade point average of not less than C (2.0) for all college work attempted, and a grade point average of not less than C (2.0) in each area for the required courses in order to be given consideration. Admission is on a competitive basis with high grade point averages giving greater assurance of acceptance.

The Admissions Committee reserves the right to request course descriptions, to determine whether course content meets the requirements of the College.

REQUIRED COURSES

English	two semesters
Mathematics	
College Algebra, Trigonometry	two semesters
Biological Science (with lab.)	
Biology, Zoology, or Comparative Anatomy	two semesters
Physics (with lab.)	two semesters
Chemistry (with lab.)	two semesters
Psychology	one semester

RECOMMENDED ELECTIVE COURSES

Social Studies
- Sociology
- Political Science
- Economics
- History

Humanities
- Literature
- Philosophy
- Fine Arts
- Logic

Language
- German
- Spanish
- French
- Latin

Other
- Analytical Geometry
- Public Speaking
- Biological Science
- Basic Statistics

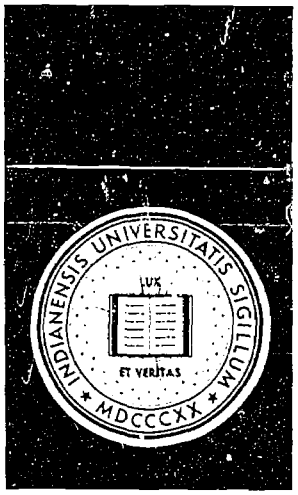
As a prerequisite, the candidate for admission must present evidence of four years in an accredited high school, or the equivalent. It is suggested that the high school studies include English, mathematics, and a laboratory science.

Aptitude and achievement tests are required by the Admissions Committee in advance of acceptance for admission.

In addition to the courses required for admission, candidates for the Bachelor of Science in Visual Science Degree must also have a grade point average of not less than C (2.0) for one year's work in each of the following areas: social studies, the humanities, a foreign language.

Further information may be obtained by writing to:

Director of Admissions
ILLINOIS COLLEGE OF OPTOMETRY
3241 South Michigan Avenue
Chicago, Illinois 60616



Indiana University
Division of Optometry

Bloomington, Indiana

Admission Requirements to the
Professional Optometry Curriculum:

Graduation from a commissioned high school or the equivalent and at least 62 semester hours of college credits acceptable toward a degree at Indiana University.

The following courses must be included:

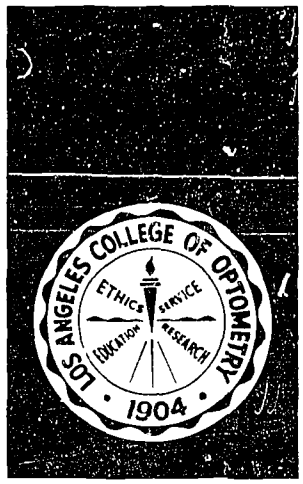
	Min. Sem. Hours
English Composition	2
Literature, Philosophy, and/or the Arts	4
Psychology, elementary and general	4
Animal Biology or General Zoology	4
Sophomore Level Zoology, Bacteriology or Physiology	3
Chemistry, General, Inorganic and/or Organic	8
Physics, including Mechanics, Heat, Sound, Light, Electricity and Magnetism	8
Analytical Geometry and Calculus	3
Foreign Language (or two years of high school foreign language and passing of a proficiency test)	Equivalent to 8

Grade: Not less than C average in all courses attempted. Courses with grades below C are not transferable to Indiana University.

Conditional Admission: Students having a total of sixty-two semester hours credit, but minor deficiencies in the required courses not in excess of eight credit hours, may be considered for admission with arrangements to remove deficiences before the completion of the second year in optometry.

Further information and application form may be obtained by writing to:

Director
DIVISION OF OPTOMETRY
INDIANA UNIVERSITY
Optometry Building
Bloomington, Indiana 47401



Southern California COLLEGE OF OPTOMETRY

Fullerton, California

Admission Requirements to the
Professional Optometry Curriculum:

A. High School

Diploma or certification of graduation with recommendations from a high school accredited to the University of California or other universities of equal standing, or in lieu thereof, the certification of a state superintendent of public instruction or similar officer that the applicant has completed scholastic preparation equivalent to that required for graduation from a high school during a four year course.

B. College

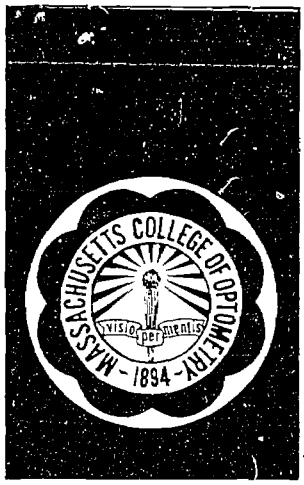
Sixty semester units are required for admission. These courses may be taken in any college or junior college whose credits are accepted by accredited colleges and universities in the United States. The following courses must be included:

Course	Semester Hours
Analytical Geometry	3
General Zoology or Biology	6
Bacteriology	3
Chemistry	8
Physics	8
Psychology	6
English	6
Total hours of specifically required subjects	40

Grades: A grade of not less than C average is required in the sixty semester units of collegiate work.

Further information and application form may be obtained by writing to:

SOUTHERN CALIFORNIA COLLEGE OF OPTOMETRY
2001 Associated Road
Fullerton, California 92631



Massachusetts College of Optometry

Boston, Massachusetts

Admission Requirements to the Professional Optometry Curriculum:

Each applicant for admission to the Massachusetts College of Optometry must have been graduated from a high school of recognized standing, in which he has completed a four-year program of studies. To gain admission, he must have a minimum of two academic years' work at an accredited college of liberal arts and sciences or junior college—or its equivalent.

High school students considering a career in optometry, should take course work emphasis in natural, physical and social sciences. Ideally, two years of mathematics and a foreign language should be completed during high school.

Pre-optometric courses at the collegiate level should include:

Animal Biology	1 year
Human or Comparative Anatomy	1 course
General Chemistry	1 year
Concepts of Organic Chemistry	1 course
General Physics	1 year
Mathematics (must include one course in calculus)	1 year
General Psychology	1 course
General Sociology	1 course
English Composition	1 year (or proficiency)

A minimum of two years of collegiate course work is required for admission; however, most applicants have completed three or four years. In addition to the courses listed above, it is essential that the student take a substantial amount of coursework in the humanities.

Further information and application form may be obtained by writing to:

Director of Student Affairs
MASSACHUSETTS COLLEGE OF OPTOMETRY
424 Beacon Street
Boston, Massachusetts 02115

State University Of New York
College Of Optometry

New York, New York

Admission Requirements to the
Professional Optometry Curriculum:

This new college of optometry will begin classes in September, 1971. It will offer a four year program of professional education leading to the degree of Doctor of Optometry. Graduate programs will also begin in the Fall of 1971. Master of Science degrees in visual science (physiological optics) and in vision and child development will also be offered.

Requirements for admission to the college include a minimum of two years undergraduate collegiate education with specific core needs in biology, chemistry, physics, psychology and mathematics. Also, the applicant must be in good physical and emotional health; provide five letters of recommendation; high school and college transcripts; and an appropriately prepared application for admission. A personal interview will be necessary.

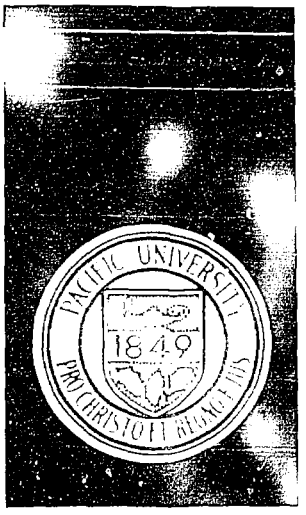
Specific course requirements are: Semester Hours

English composition	6 credits
English or American literature	6 credits
Differential and Integral Calculus	6 credits
Physics (General)	8 credits
Biology (General)	8 credits
Chemistry (General)	8 credits
Organic Chemistry	4 credits
Social Science	6 credits
Psychology (Introduction)	3 credits

An aptitude test by the Educational Testing Service may be required.

Further information and applications may be obtained by writing

The Dean
STATE UNIVERSITY OF NEW YORK
COLLEGE OF OPTOMETRY
122 E. 25th
New York, N.Y. 10010



Pacific University
College of Optometry

Forest Grove, Oregon

Admission Requirements to the
Professional Optometry Curriculum:

GENERAL REGULATIONS

For students enrolled in pre-optometry and in the professional curriculum in optometry, the regular academic regulations of the University apply. The *Pacific University Bulletin* should be consulted for regulations and requirements concerning registration, credits, attendance, withdrawals, and acceptable levels of scholarship. Other matters of academic or professional importance to optometry students, for which there are no standing provisions, may be referred to the Dean of the College of Optometry.

PRE-OPTOMETRY REQUIREMENTS

Certain college-level, minimum requirements have been established for admission to the College of Optometry. They are, a minimum of two years of college work with:

Zoology[1]	One year, to include a course in mammalian anatomy or its equivalent
Chemistry[1]	One year, to include a course in organic chemistry[2]
Physics[1]	One year
Mathematics	One year, to include an introduction to calculus[3]
Psychology[1]	One semester or two quarters

As many as possible of the following requirements in liberal arts areas and activities should be completed during preoptometry:[4]

AREA I

English Composition . . . . proficiency to be demonstrated by completing a designated writing experience course as part of Area II or by special essay examination.

Speech . . . .Proficiency to be demonstrated by "initial screening test" by completion of specific "ability guidance" work suggested from the screening, or certification by the professor of a course designated as "speaking experience" course.

P.E. 150 . . . . 4 semester hours to include 3 different activities.

AREA II

Six courses to be chosen from at least three of the following sub areas:

a. English, including both literature and writing courses. *b.* Speech, except workshops. *c.* Philosophy. *d.* Religion. *e.* Fine arts and Music . . . . excluding music ensemble courses. *f.* Western Culture. *g.* Foreign Languages. *h.* Humanities Colloquia.

AREA III

Biology, Chemistry, Physics, Geology, Mathematics . . . 8 semester hours with no more than two courses in one department.

AREA IV

Economics (BE101 only) History, Political Science, Psychology, Sociology, . . . 12 semester hours including at least 3 fields.

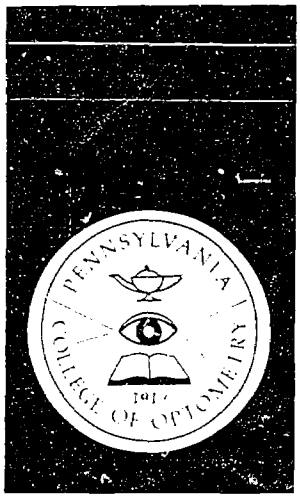
[1]General laboratory courses recommended for students in science fields are required. Courses other than those in the professional curriculum on page 16 should be selected.

[2]A one semester comprehensive course in organic chemistry will fulfill this organic chemistry requirement.

[3]A one year course combining analytical geometry and calculus will satisfy the mathematics requirement.

Further information and application forms may be obtained from:

DIRECTOR OF ADMISSIONS
PACIFIC UNIVERSITY
Forest Grove, Oregon 97116



Pennsylvania College of Optometry

Philadelphia, Pennsylvania

The professional optometry curriculum is of four years duration.

Admission Requirements to the Professional Optometry Curriculum:

The minimum academic requirements for admission are high school graduation and the completion of two years of pre-optometric college study in an accredited institution of higher learning. The four-year high school program should consist of not less than sixteen Carnegie units, and must include four years of English, one year of a Laboratory Science subject, one year of Mathematics, and two years of History and Social Science, including American History. A maximum number of courses in mathematics and science is recommended. The two years of pre-optometric college study must total a minimum of sixty semester hours of credit. These credits must include one full academic college year (or equivalent) of:

English
Mathematics
Inorganic Chemistry
General Biology (or Zoology)
Physics

The remaining credits necessary to total a minimum of sixty semester hours credit may be composed of any elective subjects for which credit toward a bachelor's degree is granted. It is recommended that additional credits in mathematics and zoology be included in the electives. Most successful applicants have more than the minimum academic requirements.

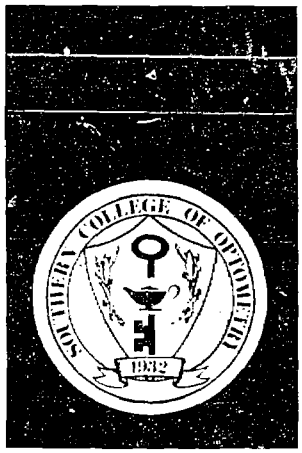
Applicants intending to qualify for the Bachelor of Science degree must have been in residence one year, accumulated a minimum of 128 semester hours credits, including completion of an undergraduate second year of College English, and a course or courses of at least six semester hours credit in the humanities or social sciences.

The point-hour ratio of an applicant must be not less than 2 points/credit hour (on the basis four points for grade of A) on all courses completed. Applicants with a point-hour ratio of 2.5 or higher will be given first consideration by the Admission Committee.

Beginning with the entering class of 1972, applicants are required to take the Pre-Admission Test for Optometry.

Further information and application form may be obtained from:

Registrar and Director of Admissions
PENNSYLVANIA COLLEGE OF OPTOMETRY
1200 West Godfrey Avenue
Philadelphia, Pennsylvania 19141



Southern College of Optometry

Memphis, Tennessee

ACADEMIC ADMISSION REQUIREMENTS

PREPROFESSIONAL COURSES. Candidates for admission to the professional curriculum in optometry, leading to the degree of Doctor of Optometry, are required to present a minimum of two academic years (sixty semester or ninety quarter hours) of college work, exclusive of military science and physical education-courses. The course work must include the following subjects or equivalents:

AREA	MINIMUM HOURS CREDIT QTR.	SEM.
English	9	6
Mathematics (including or beyond algebra and trigonometry)	8	5
Biology, with laboratory (including at least one course in animal biology or zoology	9	6
Microbiology or bacteriology.	4	3
General or inorganic chemistry, with laboratory	9	6
General physics, with laboratory	9	6
Introductory or general psychology	3	2

Electives to total 60 semester or 90 quarter hours of credit.

The elective courses of those students who desire to qualify for the Bachelor of Science degree, in addition to the Doctor of Optometry degree, must include credit in the following areas in addition to the minimum entrance requirements:

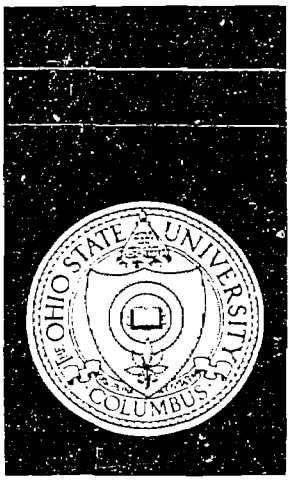
AREA	MINIMUM HOURS CREDIT QTR.	SEM.
English or literature beyond the freshman level	9	6
One of the social sciences	9	6
Mathematics beyond Entrance Requirements.	3	2
Foreign language, completion of the second college year		

The overall average of the course work presented in fulfillment of the named admission prerequisite areas must be C (2.00) or better. In addition, an average of C (2.00) or better, in all college work undertaken is required.

No preprofessional courses are offered at Southern College. The student may complete his preoptometry work at any accredited university, college, or junior college offering appropriate courses. The student must have been in good standing at the latest institution attended.

Additional information and application materials may be obtained from:

Admissions Officer
SOUTHERN COLLEGE OF OPTOMETRY
1245 Madison Avenue
Memphis, Tennessee 38104



The Ohio State University College of Optometry

Columbus, Ohio

PREPARATION FOR ADMISSION

Preparation for admission should ideally begin in high school, where the following courses are recommended:

English	Four units
United States History	One unit
Algebra	One or two units
Geometry	One unit
Biological Science	One unit
Physical Science	One or two units
Foreign Language	Two units in one language
Additional courses	To add up to 16 units total

The college level pre-optometry work may be taken at any accredited college, junior college, or university. For entrance without deficiency, the following courses are required:

One year of English Composition (9 quarter hours)
One year of Inorganic Chemistry, including Qualitative Analysis, with laboratory (15 quarter hours)
One year of General Physics, with laboratory (15 quarter hours)
Organic Chemistry, with laboratory (10 quarter hours)
Algebra and Trigonometry (5 quarter hours) if not taken in high school
Analytic Geometry and Differential Calculus (5 quarter hours)
Introductory Biology (Animal), with laboratory (5 quarter hours)
Introductory Zoology, with laboratory (5 quarter hours)
General Psychology (5 quarter hours)

Students, who have not completed two years of foreign language in high school, are required to complete 10 quarter hours of one foreign language in college.

A total of 90 quarter hours or 60 semester hours, not counting physical education, health education, military science, or hygiene, must be completed to be admitted without deficiency. To complete 90 quarter hours, a student should take at least 10 quarter hours of social sciences and 9 hours of humanities. In addition, those students who wish to earn the optional B.A. or B.S. degree, with a major in physiological optics, are urged to complete a foreign language through the last intermediate course, and this may be counted toward the 90 hours of pre-optometry work. Other courses to add up to the 90 quarter hours may include additional social science and humanities.

The College offers counseling to pre-optometry students at any college or university. For further information or application forms, write:

Dean
COLLEGE OF OPTOMETRY
THE OHIO STATE UNIVERSITY
338 West Tenth Avenue
Columbus, Ohio 43210

University of Alabama in Birmingham School of Optometry

Birmingham, Alabama

Preparation for the Professional
Optometry Curriculum

This unique school was established in the fall of 1969 and is the first school of optometry to be embraced by a medical center complex. Academic appointments and facilities are shared with existing units of the University of Alabama in Birmingham. These include the School of Dentistry, the School of Medicine, Center for Developmental Learning Disorders, and the College of General Studies. The professional optometric program requires four years of study and leads to the Doctor of Optometry (O.D.) degree. Complementary post-graduate and graduate study, and programs of research and clinical services are planned.

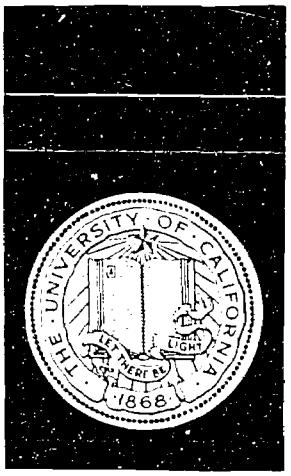
Candidates for admission to the School of Optometry should meet all the requirements for admission to the University of Alabama in Birmingham. However, admission to the professional program is based primarily on the quality of the applicant's pre-optometry scholarship and his recommendations.

Specific, college-level prerequisites include:

English	6 sem. hrs.
Inorganic Chemistry	10 sem. hrs.
Organic Chemistry	6 sem. hrs.
Physics	8 sem. hrs.
Mathematics (analytic geometry & calculus)	6 sem. hrs.
Psychology	6 sem. hrs.
Biology	9 sem. hrs.
Social and Behavioral Sciences	6 sem. hrs.

Inquiries for additional information and application forms are invited. Write to:

Dean
School of Optometry/The Medical Center
University of Alabama in Birmingham
Birmingham, Alabama 35233



University of California School of Optometry

Berkeley, California

Admission Requirements to the Professional Optometry Curriculum:

To be admitted to the School of Optometry, an applicant must meet all the requirements for admission to the University of California as described in detail in the "Admissions Circular" of the University. In general, an applicant for admission to the University in advanced standing must present evidence that:

1. He has satisfied, through either high school or college courses, the subjects required for admission of high school graduates in freshman standing.
2. His advanced work at college level had met the minimum scholarship standard required of transferring students, in no case lower than a grade point average of 2.25.
3. Admission requirements vary according to high school record and legal residence.
   a. California resident with high school recommendation: 2.25 grade point average in pre-optometry.
   b. California resident without high school recommendation: 2.4 g.p.a.
   c. Non-resident with previous bachelor's degree: 2.4 g.p.a.
   d. Non-resident without previous bachelor's degree: 2.8 g.p.a.
4. He is entitled to return as a student in good standing to the last college attended.

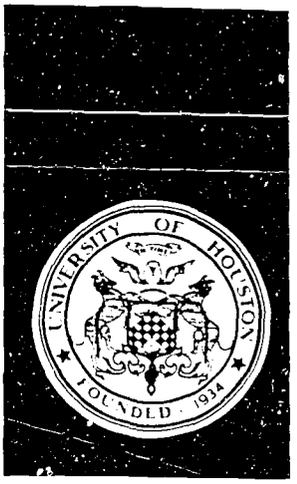
In order to be admitted to the School of Optometry in regular status, the applicant must have completed, in an accredited institution, a curriculum of not less than 60 semester units. The following subjects must have been included:

Chemistry (General and Organic), 1 year (8 to 10 semester hours)
Mathematics through Analytical Geometry
Physics (General with Laboratory), 1 year (8 to 10 semester hours)
Biology or Zoology (with laboratory) one year
Psychology, 1 semester (3 semester hours)
English, 1 year (6 semester hours)
Bacteriology, microbiology, or statistics (3 sem. hrs.)

Students who have completed at least 56 semester units of collegiate work with at least a 2.25 g.p.a., may be admitted in limited status if they have subject deficiencies.

Further information and application form may be obtained from:

Dean
SCHOOL OF OPTOMETRY
UNIVERSITY OF CALIFORNIA
Berkeley, California 94720



University of Houston
College of Optometry

Houston, Texas

Admission Requirements to the Professional Optometic Curriculum:

In order to be admitted to the College of Optometry, an applicant must meet all requirements for admission to the University of Houston as they appear in the current General Information Catalog. He must complete the equivalent of two academic years of college work, including college algebra, trigonometry, general zoology, one year of chemistry, and one year of physics with an overall grade point average of at least 2.2 (C=2.0). He also must complete the application procedures listed in the Bulletin of the College of Optometry.

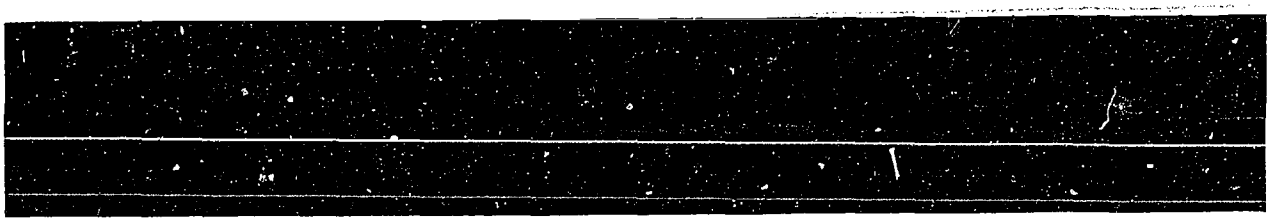
The program in optometry has been planned so that the student may fulfill all requirements for a Bachelor of Science degree by following the pre-optometric curriculum which is listed in the catalog of the College of Optometry, and then completing the first two years of the professional optometric curriculum. A student who has received a Bachelor's degree from an academically accredited institution is not required to earn another Bachelor's degree at the University of Houston.

Pre-optometric courses taken at another institution should be the evaluated equivalent of those listed in the pre-optometric curriculum. The College of Optometry welcomes inquiries concerning the selection of pre-optometric courses, and the pre-optometric student attending another institution is urged to solicit this service during his freshman and sophomore years. The following list of courses was compiled from the 1970-71 catalog.

PRE-OPTOMETRIC CURRICULUM	Semester Hours Required for Admission to the College of Optometry	Semester Hours Required for Bachelor of Science Degree
American Government	....	3
Biology: General Zoology, Bacteriology	4	8
Chemistry	8	8
English	....	9
History of the United States	....	6
Mathematics: College Algebra And Trigonometry or Higher Mathematics	6	6
Physics	8	8
Texas Government	....	3
Approved Elective: Foreign Languages; Philosophy; Religion; Economics; Sociology; Anthropology; Psychology	....	12
Free Elective	....	3
Total Hours Required	60	145

Further information and application form may be obtained by writing to:

Dean
COLLEGE OF OPTOMETRY
UNIVERSITY OF HOUSTON
Houston, Texas 77004



What Is The Professional Organization Of Optometry?

The American Optometric Association is the professional organization of optometrists. The association is a confederation of divisional associations, each of which represents a state or territory. There are also zone, county, district and city societies. Licensed practitioners who adhere to the code of ethics are eligible for membership. All optometry students are eligible for free student membership.

The American Optometric Association, in cooperation with state associations, provides a variety of services to its members. These services include assistance to undergraduates and graduates through scholarships, a professional placement service and a professional journal and newspaper.

In addition to these services, the Association provides leadership in professional matters. One result of this leadership was the establishment of a *Code of Ethics* to govern the actions of optometrists.

Where Can I Obtain More Information?

OPTOMETRIC ORGANIZATIONS AND ASSOCIATION

American Optometric Association, 7000 Chippewa, St. Louis, Missouri 63119
American Academy of Optometry, Foshay Tower, Minneapolis, Minnesota 55402
American Optometric Foundation, 201 So. Central Ave., Clayton, Mo. 63105

Each state has a state optometric association which is an affiliate of the American Optometric Association. Address of the state associations' offices and of the offices of the State Board of Examiners in Optometry, may be obtained by writing to the American Optometric Association. The A.O.A. also will supply on request addresses of the secretaries of the following organizations which do not maintain permanent offices:

International Association of Boards of Examiners in Optometry
National Board of Examiners in Optometry
Association of School and Colleges of Optometry
Association of Military Optometrists of the United States.
Beta Sigma Kappa (honorary fraternity)

PERIODICALS

American Journal of Optometry and Archives of the American Academy of Optometry (monthly), 1508 Foshay Tower, Minneapolis, Minn. 55402
AOA News (monthly), 7000 Chippewa, St. Louis, Mo. 63119
Contacto, National Eye Research Foundation, 18 S. Michigan Avenue, Chicago, Illinois 60603.
Journal of the American Optometric Association (monthly), 7000 Chippewa, St. Louis, Mo. 63119
Optometric Weekly, 5 North Wabash Ave., Chicago Ill., 60602
Optical Journal and Review of Optometry (semimonthly), Chestnut and 56th Sts., Philadelphia, Pa.
Optometric World (monthly) 3924 Sunset Blvd., Los Angeles, Calif.

Most state associations also publish monthly or quarterly journals, and there are numerous local, regional, or special-interest publications.

SUGGESTED READING

Gregg, James R., O.D. *The American Optometric Association - A History*. Optometric Development Enterprises, St. Louis, Mo., 1972. (Available through the American Optometric Association.)

Gregg, James R., O.D. *The Story of Optometry*, Ronald Press, New York, N.Y., 1965. (Available through the American Optometric Association)

Gregg, James R., O.D. and Heath, Gordon G., O.D., Ph.D. *The Eye and Sight*, D. C. Heath and Company, Boston, Mass. 1964.

Hofstetter, H. W., O.D., Ph.D. *Optometry: Professional, Economic and Legal Aspects*. C. V. Mosby Company, St. Louis, Mo. 1948 Rev. ed. 1964. (Available through the American Optometric Association)

Kitchell, Frank M., O.D. *Opportunities in an Optometry Career*, Universal Publishing and Distribution Corp., New York, N.Y. 1967. (Available through the American Optometric Association.)