The Advisor's Guide to Pre-Optometry

OPTM 787
Cynthia Easley
Bita Khalifian
March 17, 2000
Abstract: An informational guide for pre-optometry and pre-medicine advisors at Michigan colleges and universities was developed. This guide contained information designed to help the advisors more completely inform their undergraduate students about optometry as a career option. To design the guide, surveys were sent to the pre-optometry and pre-medicine advisors at 19 Michigan colleges and universities. These surveys were used to discover what the advisors currently knew about optometry as a profession and about the application procedure for optometry school. The guide was then designed to specifically address the needs of these advisors.

Hypothesis: Because many Michigan colleges and universities did not have specific Pre-Optometry curriculum nor designated Pre-Optometry only advisors, it was the authors' hypothesis that some college advisors might have felt inadequately prepared to discuss optometry as a career option with some of their students. In light of this, an informational guide designed to address the needs of the college advisor would be beneficial to the advisor and the student both.

Introduction: Optometry is a unique health profession with great growth potential. It offers the ability to be directly involved in patient care and develop lifelong ties to patients and the community. Optometry is also very flexible in that there are many different modes of practice, good income, and a high degree of job satisfaction.

Despite the attractiveness of the optometry profession, many pre-professional students who would be a great asset to the profession are not aware of optometry as an option, and are, therefore, drawn into other professions. To offset this and help inform Michigan students about the benefits of optometry as a career, an informational guide directed to Michigan’s pre-health profession college advisors was designed.

Methods: In order to determine what advisors did and did not know about optometry, a survey (see figure 1) with postage paid return envelope was sent to pre-health profession advisors at nineteen Michigan colleges and universities (see figure 2). These nineteen schools were selected from the list of undergraduate schools (“Principle Colleges
Attended”) found in the Optometry Admission Testing Program 1998 test application packet. Of the nineteen surveys sent out, seven were returned with responses and two returned without responses. The comments of the seven advisors who responded formed the basis for the design of the guide.

**Figure 1**

<table>
<thead>
<tr>
<th>Optometry Information Packet Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you the advisor for only Pre-Optometry, or for other Pre-Professional/Pre-Med programs too?</td>
</tr>
<tr>
<td>__ Pre-Op only  __ Pre-Med  __ Other: ______________</td>
</tr>
<tr>
<td>2. Approximately how many Pre-Professional students total do you have each year?</td>
</tr>
<tr>
<td>__ less than 5  __ 5-10  __ 10-20  __ 20-50  __ 50+</td>
</tr>
<tr>
<td>3. Of these, how many of your students are interested in Optometry School?</td>
</tr>
<tr>
<td>__ less than 5  __ 5-10  __ 10-20  __ 20-50  __ 50+</td>
</tr>
<tr>
<td>4. Do you feel that with the current amount of available information that you are able to adequately assist your students with Optometry School admissions?</td>
</tr>
<tr>
<td>__ yes  __ no</td>
</tr>
<tr>
<td>5. How interested are you in receiving a concise packet of information designed to help you better provide for your Pre-Optometry students?</td>
</tr>
<tr>
<td>__ very interested  __ somewhat interested  __ not interested</td>
</tr>
<tr>
<td>6. What features would you like to see in such a packet? (Check all that apply)</td>
</tr>
<tr>
<td>__ description of optometry profession  __ list of suggested undergrad. extracurricular activities</td>
</tr>
<tr>
<td>__ list of Optometry Schools and addresses  __ cost of graduate tuition, books and equipment</td>
</tr>
<tr>
<td>__ the admissions process  __ description of clinical settings at each school</td>
</tr>
<tr>
<td>__ required pre-requisites for each school  __ National Board Exams/Licensing</td>
</tr>
<tr>
<td>__ importance of undergraduate grades and OAT scores  __ Other: ______________</td>
</tr>
<tr>
<td>7. Of your Pre-Optometry students each year, approximately how many get accepted into Optometry school?</td>
</tr>
<tr>
<td>__ less than 25%  __ 25-50%  __ 50% +</td>
</tr>
<tr>
<td>8. What are the reasons that your Pre-Professional students decide against attending optometry school?</td>
</tr>
<tr>
<td>__ are not aware of optometry as an option  __ cost of schooling too high</td>
</tr>
<tr>
<td>__ get accepted to other professional school instead  __ four extra years of school is too long</td>
</tr>
<tr>
<td>__ not interested in vision  __ do not know how to apply to optometry school</td>
</tr>
<tr>
<td>__ poor grade/OAT scores  __ other: ______________</td>
</tr>
<tr>
<td>9. Does your school have a Pre-Optometry program?  __ yes  __ no</td>
</tr>
<tr>
<td>10. Does your school have a Pre-Optometry club?  __ yes  __ no</td>
</tr>
</tbody>
</table>
### Figure 2

<table>
<thead>
<tr>
<th>College 1</th>
<th>College 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrian College</td>
<td>Michigan State University</td>
</tr>
<tr>
<td>Albion College</td>
<td>Michigan Technology University</td>
</tr>
<tr>
<td>Andrews University</td>
<td>Northern Michigan University</td>
</tr>
<tr>
<td>Central Michigan University</td>
<td>Oakland University</td>
</tr>
<tr>
<td>Eastern Michigan University</td>
<td>University of Detroit</td>
</tr>
<tr>
<td>Ferris State University</td>
<td>Wayne State University</td>
</tr>
<tr>
<td>Hillsdale College</td>
<td>Western Michigan University</td>
</tr>
<tr>
<td>Hope College</td>
<td>University of Michigan, Ann Arbor</td>
</tr>
<tr>
<td>Kalamazoo College</td>
<td>University of Michigan, Dearborn</td>
</tr>
<tr>
<td>Madonna College</td>
<td></td>
</tr>
</tbody>
</table>

### Results:
The compiled results of the seven advisors who responded are as follows:

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Response (numbers of Advisors)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre-Op only: 2&lt;br&gt;Pre-Med only: 2&lt;br&gt;Pre-Graduate Health Professions: 3</td>
</tr>
<tr>
<td>2</td>
<td>Less than 5 Pre-Professional students: 0&lt;br&gt;Between 5 and 10: 1&lt;br&gt;Between 10 and 20 students: 0&lt;br&gt;Between 30 and 50 students: 3&lt;br&gt;50 or more Pre-Professional students: 3</td>
</tr>
<tr>
<td>3</td>
<td>Less than 5 students interested in Optometry School: 4&lt;br&gt;Between 5 and 10 students: 3&lt;br&gt;More than 10 interested students: 0</td>
</tr>
<tr>
<td>4</td>
<td>Felt they already had an adequate amount of Pre-Op information: 6&lt;br&gt;Did not feel had enough information: 1</td>
</tr>
<tr>
<td>5</td>
<td>Very interested in receiving a packet of Optometry information: 5&lt;br&gt;Somewhat interested: 2&lt;br&gt;Not interested: 0</td>
</tr>
<tr>
<td>6</td>
<td>In order of interest (respondents were asked to indicate all that applied):&lt;br&gt;- Description of Optometry: 7/7 (100%)&lt;br&gt;- Importance of undergraduate grades and OAT scores: 7/7 (100%)&lt;br&gt;- List of pre-requisites for each Optometry School: 6/7 (85.7%)&lt;br&gt;- Description of the admissions process: 5/7 (71.4%)&lt;br&gt;- List of suggested undergraduate extracurricular activities: 5/7 (71.4%)&lt;br&gt;- Description of the clinical settings at each school: 5/7 (71.4%)&lt;br&gt;- List of the Optometry Schools and addresses: 4/7 (57.1%)&lt;br&gt;- Cost of tuition, books, and equipment: 4/7 (57.1%)&lt;br&gt;- Info. about National Board Examinations and licensing: 2/7 (28.6%)</td>
</tr>
</tbody>
</table>
• Filled in the ‘Other’ blank with a request for a list of benefits / characteristics unique to Optometry as opposed to other health care professions: 1/7 (14.3%)  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Less than 25% of their Pre-Op students get accepted to Optometry school: 0</td>
</tr>
<tr>
<td></td>
<td>25-50%: 1</td>
</tr>
<tr>
<td></td>
<td>Over 50%: 4</td>
</tr>
<tr>
<td></td>
<td>Unknown: 2</td>
</tr>
</tbody>
</table>

| 8  | Reasons advisors felt their Pre-Professional students did not attend Optometry School, in order of prevalence (respondents were to pick all that applied and one advisor omitted this question): |
|    | • Students disinterest in vision: 5/6 (83.3%)                                         |
|    | • Students were not aware of optometry as an option: 3/6 (50.0%)                     |
|    | • Students did not know how to apply to Optometry School: 1/6 (16.7%)               |
|    | • Accepted to another professional school instead: 1/6 (16.7%)                      |
|    | • Four years of schooling too long: 1/6 (16.7%)                                      |
|    | • Poor grades / poor OAT scores; the cost of schooling too high; or for any ‘Other’ reason: 0/6 (0.0%) |

| 9  | Yes, their school has a Pre-Optometry program: 2                                   |
|    | No, no Pre-Optometry program: 2                                                    |
|    | Written-in indication that indicated Pre-Optometry was grouped together with Pre-Medicine or other Pre-Professional programs: 3 |

| 10 | Yes, have a Pre-Optometry Club: 2                                                 |
|    | No, does not have a Pre-Optometry Club: 5                                          |

**Discussion:** The responses received from the survey made it clear that all seven of the advisors who responded were interested in receiving an informational guide to help them advise their Pre-Optometry students. It was also made clear that five of the seven (71.4%) of the advisors who responded were not solely Pre-Optometry advisors. Once it was realized that the majority of advisors were also encouraging their students to join other professions, it was apparent that the unique benefits of optometry over other health professions had to be addressed. Also, the steps of the application process and the resources to contact each of the sixteen schools and colleges of Optometry needed to be included – making it easier for those advisors and students who may not have the benefit of a specific pre-optometry program. In addition, because only two of the seven advisors indicated that their school has a pre-optometry club, a guide on how to start a pre-optometry club developed by James Miller, O.D. was included as a supplement to the guide.
Every effort was made to include all relevant information in an easy to use format. Also, the topics in the survey that the highest percentage of advisors indicated as being important were emphasized. However, some of the information that the advisors indicated that they were interested in, such as the cost of tuition and books, is information that changes on a yearly basis. Every effort was made to provide direction as to where students and advisors can find the most up-to-date information, and to also provide a general frame of reference with ball-park figures.

The authors realize that the scope of this project was somewhat limited in that only 19 of Michigan’s colleges were surveyed, and that only 7 of those colleges sent in a response. Therefore, the results of the survey may not be truly indicative of the knowledge Michigan’s college advisors do have.

The authors also realize that the methodology may be flawed, concerning one point in particular – there was no area on the survey to indicate which school that advisor represented, so it is unknown which 7 of the 19 schools who received the survey actually filled it out. An attempt to obtain this information by an analysis of the zip codes stamped on the return envelopes was made – but proved to be futile. It is known, however, that the advisors at University of Michigan - Ann Arbor and Ferris State University did not respond to the survey, as these surveys were returned without reply.

To address this issue, the authors later contacted all 19 schools by telephone and obtained the name of the specific advisor who would most benefit from the information. The guides were then sent directly to these 19 people.

Regardless of flaws in the design of this project, it is the author’s hope that this guide will address the needs of college advisors in Michigan and therefore be utilized. Ideally, this will result in an increase in the awareness Michigan’s premier students have in optometry and increased quality of the Optometry applicant pool, and ultimately, and increase in the quality of optometry practiced in Michigan.
The Advisor’s Guide to Pre-Optometry
The Advisor's Guide to Pre-Optometry

As academic advisors, you have the unique opportunity to help your undergraduate students pick a career path that makes sense academically and will also provide them with a lifetime of fulfillment. One of the health professions currently enjoying a lot of growth is optometry. However, in a 1998 survey of college advisors in Michigan, it was indicated that while advisors have a number of pre-health profession students, very few of these students are aware of, and thus interested in, the unique opportunities that optometry has to offer.

To offset the lack of awareness, this informational guide has been designed to assist you, the advisor, in presenting optometry as an option to your students. It can also serve as a resource for your students who are going through the optometry school application process. We, the authors, hope that you find this guide helpful and informative. Please feel free to make as many copies as needed. Also, please feel free to send any comments / feedback / suggestions to:

Cynthia Easley and/or Bita Khalifian
Michigan College of Optometry
1310 Cramer Circle
Big Rapids, MI 49307
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What is Optometry?

Optometry Defined

"Doctors of optometry are independent primary health care providers who examine, diagnose, treat and manage diseases and disorders of the visual system, the eye and associated structures as well as diagnose related systemic conditions."


This means that optometrists, as primary health care providers, are the "eye-doctor" that the majority of people seek care from first. Ophthalmologists, however, are medical doctors and specialize in eye surgery and other secondary care.

Optometry History

Since ancient times, people have used quartz and other crystalline rocks as lenses by placing them directly upon the object that they needed to see. The earliest known painting of a person actually wearing glasses is a portrait of Ugo di Provenza, a cardinal who died in 1262.\(^{37}\) Initially glasses were very expensive and only available to people who could read and write – the educated rich or clergy. In fact, glasses were so valued that if you were fortunate enough to have a pair, you often passed them on to family members in your wills. Obviously, there was no science to vision correction at this point – you just took whatever glasses were available. In later years, glasses became more available, but they were still not custom made – you just picked out which pair you could see through the best.

Eventually, the profession of optometry evolved from opticians who wanted to not only manufacture the glasses, but also prescribe them. The term "optometrist" was first used in 1886, and in 1901 the profession of optometry officially began in the U.S. when Minnesota passed the first optometry licensure law.\(^{31}\) Since that time, the profession has changed dramatically and now involves a great deal more than simply prescribing glasses.

What Does an Optometrist Do?

Optometrists perform comprehensive examinations of the eye (both internally and externally), evaluate the visual system, diagnose any problems, and then prescribe an appropriate treatment. The treatment can consist of glasses, contact lenses, vision therapy exercises, or, in all 50 states and the District of Columbia, prescription drugs as regulated by state law. Also, optometrists can use diagnostic pharmaceuticals to aid in the diagnosis of systemic diseases such as diabetes and high blood pressure. Because of this, optometrists are important primary health care providers, as well as the only eye care providers thoroughly trained in all aspects of optics and vision science.

While all optometrists provide general eye and vision care, some optometrists specialize in certain areas of optometry. The areas of specialization include contact lenses,
vision therapy, sports vision, ocular disease, geriatrics, pediatrics, low vision (working with visually impaired patients), occupational vision, education, and research.

Optometrists can work in many different types of settings. Some have private practices, either working alone or with a partner or group. Others work with other health care professionals, such as ophthalmologists, in a multi-disciplinary practice. Many optometrists also work in large commercial chains, such as Lens Crafters or Pearle Vision, while others work for the military, public health service, hospitals, teaching institutions, or the ophthalmic industry.

Regardless of the type of practice, optometry is counted as one of the top ten income-earning professions in the country. In 1998, the average net income for all optometrists was $108,262.\(^\text{34}\) The income of private practice ODs was slightly higher than average, at $113,985, and the income of corporate practice ODs was a little lower than average, at $94,010.\(^\text{34}\) In addition to the monetary rewards, optometry also is a very satisfying profession because by treating a patient’s vision problems, one can improve the quality of the patient’s life. There is great job security too, because of the need for vision care in America will only continue to grow as the population ages.

Who Should Become an Optometrist?

Optometry is an excellent career for people of many backgrounds and personalities. While most optometrists have traditionally been male, in recent years the number of female and minority optometrists has been on the rise. Half of all new graduates from optometry school are now women, and almost 13% of the ODs under age 40 are now minorities.\(^\text{34}\)

While many different types of people are successful optometrists and find their career rewarding, when optometry schools are interviewing prospective students, these are the qualities they look for:\(^\text{4,18}\)

- Independence
- Initiative
- Intelligence
- Reliability
- Sense of humor
- Trustworthiness
- Maturity
- Integrity
- Motivation
- Responsibility
- Self-confidence
- Oral Communication skills
- Leadership skills
- Written Communication skills
- Ability to work under stress
- Concern for others/Empathy
- Good judgement
- Good hand-eye coordination
How do I Prepare for Optometry School?

Pre-Requisite Classes

Many colleges and universities have a Pre-Optometry program that outlines the specific classes needed in the suggested order. These programs have been designed to meet the admissions requirements of optometry schools within three or four years. Most students go the full four years and get a bachelor’s degree, but that is not required for admissions at all optometry schools. The schools that accept students after only three years of undergraduate work usually offer a Bachelor of Science degree after completing some of the optometry coursework.

If your college has a specific Pre-Optometry program, you should follow those guidelines. If your college does not have a specific Pre-Optometry program, the following is a sample undergraduate curriculum designed by the Association of Schools and Colleges of Optometry (ASCO), but remember, these are general guidelines and you should always check that you meet the requirements of each specific optometry school you are interested in attending.

<table>
<thead>
<tr>
<th>Freshman Year:</th>
<th>Sophomore Year:</th>
<th>Junior Year:</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry</td>
<td>Organic Chemistry</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Biology</td>
<td>Microbiology or Bacteriology</td>
<td>Anatomy</td>
</tr>
<tr>
<td>College Algebra</td>
<td>Calculus</td>
<td>Intro to Business</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>Physics</td>
<td>History</td>
</tr>
<tr>
<td>English</td>
<td>Psychology</td>
<td>Sociology</td>
</tr>
<tr>
<td></td>
<td>Statistics</td>
<td>Speech</td>
</tr>
</tbody>
</table>

The OAT (Optometry Admission Test)

The Association of Schools and Colleges of Optometry (ASCO) requires the OAT, which is a multiple-choice test used by Optometry Schools to assess general academic ability and comprehension of scientific information. This test is required for application to all optometry schools and is offered twice a year. The best time to take the OAT is the February of the year before you want to apply. This gives you enough time to have taken all the required courses and still allows enough time for a re-take if your score needs improvement.

For more information on the OAT and an application packet, contact your college advisor or write:

Optometry Admission Testing Program
211 East Chicago Avenue, Suite 1846
Chicago, Illinois 60611-2678
(312) 440-2693
Suggested Extra-Curricular Activities

Academics are a very important part of being accepted into an optometry school, but the schools are not just looking for 4.0 students—they prefer to see well-rounded applicants who are involved in various extracurricular activities and still do well academically. Following is a list of some suggested extra-curricular activities, but keep in mind this is not an all-inclusive list. You should select the activities that fit your personality and interests. Also, if you have extenuating circumstances (such as a job or family), and cannot be as involved as you would like, the optometry school tends to understand that.

- Sports
- Volunteering
- Debate/Forensics
- Student Government
- Campus Religious Groups
- Tutoring
- Pre-Optometry Club
- Service Organizations
- Fraternities/Sororities

** One activity that is highly recommended is observing an optometrist. Not only does this provide a first-hand idea of what an optometrist does—it also provides a good person to write a letter of recommendation for your optometry school application. Most optometrists are more than happy to let you observe them for the day and answer your questions. Just remember to dress and act professionally and send a thank-you note the next day.

How to Set Up a Pre-Optometry Club

If your school does not yet have a Pre-Optometry Club, it is a good idea to start one. Not only would it be impressive on your application to be a founding member of a Pre-Optometry Club, but it would be a service to future students at your school to have a club already established.

In Appendix A, you will find a packet created by James Miller, O.D. that explains how to set up a Pre-Optometry Club. It also provides examples of sample topics for meetings and a sample constitution.
How do I Apply to Optometry School?

The Application Process

The process of applying to optometry school is somewhat lengthy and should be started in the fall of the year before you want to be enrolled. (For example, September 2000 is when you should start applying for a seat in the 2001 entering class.) Application requirements vary from school to school, but most require: an official copy of your transcript showing successful completion of pre-requisite courses, a completed application form with payment of application fee, one or more letters of recommendation, Optometry Admission Test (OAT) scores, an application letter, and a personal interview.

Each school has a different deadline for applications, but in general, you should apply early because this gives ample time to have all your letters of recommendation turned in and complete all the required coursework. Also, it is recommended that you narrow your choice of schools to the top three or four and apply early, so if you are turned down at your top choices, you still have time to apply to other schools.

Importance of Grades and OAT Scores

Good grades and OAT scores are important, but are not everything. The Admission Committee is looking for good students who will also be good doctors – you need to be well-rounded and have good interpersonal skills.

Grades and OAT scores are important, because they are both good predictors of success in Optometry School. In 1997, the range of average grade point averages (GPAs) for the entering class at all sixteen optometry schools was 3.10 to 3.59 with actual ranges of 2.50 to 4.0. The average OAT scores for all sixteen schools ranged from 320 to 364.28

In general, your GPA and OAT scores should be about the same if you disregard the decimal point in your GPA. For example, if your GPA is 3.35 and your OAT score is 330 – you are doing fine. If, however, your GPA is 3.55 and your OAT is 270, you might want to retake the OAT. Similarly, if your GPA is 2.90 and your OAT score is 370 – you will probably be questioned at the interview as to why your grade point is so low.

The Interview

The interview is usually the last step of the admissions process. Unfortunately, not everyone is offered an interview at every school they apply to, and getting an interview does not guarantee admission. The point of the interview is to allow the school and the applicant to learn more about each other. This is the opportunity to ask any questions that you may have, and it allows the school’s admissions committee to assess your personal qualities, such as communication skills and motivation.
Where Can I Attend Optometry School?

There are sixteen schools and colleges of Optometry in the United States, one in Puerto Rico, and two in Canada. There are, however, some restrictions on admission to certain schools. For example, to attend the Inter American University of Puerto Rico – you must be fluent in Spanish and English. Similarly, you need to be a Canadian resident to attend the School of Optometry at either the University of Montreal or the University of Waterloo. (Canadian students, though, can attend American optometry schools, in certain cases.)

In addition, some Optometry Schools have contractual agreements with certain states. This means that applicants must live in these states in order to be accepted. (For example, Northeastern State University can only accept students from Oklahoma, Arkansas, and Kansas). For the most accurate and up-to-date information on admissions requirements, you should contact the school directly.

Addresses, Phone Numbers, and Web Addresses

1. **Alabama:**
   University of Alabama at Birmingham
   School of Optometry
   1716 University Blvd.
   Birmingham, AL 35294
   (205) 934-6150
   http://icare.opt.uab.edu

2. **California:**
   Southern California College of Optometry
   2575 Yorba Linda Boulevard
   Fullerton, CA 92831-1699
   (714) 449-7444 or 1-800-829-9949
   http://www.scco.edu

3. **California:**
   University of California, Berkeley
   School of Optometry
   390 Minor Hall
   Berkeley, CA 94720-2020
   (510) 642-9537
   http://spectacle.berkeley.edu

4. **Florida:**
   Nova Southeastern University
   Health Professions Division
   College of Optometry
   3200 South University Drive
   Ft. Lauderdale, FL 33328
   (954) 262-1101 or 1-800-356-0026 ext. 1101
   http://nova.edu/cwis/centers/hpd/optometry

5. **Illinois:**
   Illinois College of Optometry
   3241 South Michigan Avenue
   Chicago, IL 60616
   (312) 949-7400 or 1-800-397-2424
   http://www.ico.edu

6. **Indiana:**
   Indiana University
   School of Optometry
   800 E. Atwater Avenue
   Bloomington, IN 47405-3680
   (812) 855-1917
   http://www.opt.indiana.edu

7. **Massachusetts:**
   The New England College of Optometry
   424 Beacon Street
   Boston, MA 02115
   (617) 236-6204 or 1-800-824-5526
   http://www.ne-optometry.edu

8. **Michigan:**
   Michigan College of Optometry at Ferris State University
   1310 Cramer Circle
   Big Rapids, MI 49307
   (231) 591-2100
   http://www.ferris.edu/htmls/colleges/optometry
9. **Missouri:**
University of Missouri-St. Louis
School of Optometry
8001 Natural Bridge Road
St. Louis, MO 63121
(314) 516-6263
http://www.umsl.edu/divisions/optometry

10. **New York:**
State University of New York
State College of Optometry
33 W. 42nd St.
New York, NY 10036
(212) 780-5100 or 1-800-291-3937
http://www.sunyopt.edu

11. **Ohio:**
The Ohio State University
College of Optometry
338 West 10th Avenue
Columbus, OH 43210-1240
(614) 292-2647
http://www.optometry.ohio-state.edu

12. **Oklahoma:**
Northeastern State University
College of Optometry
1001 North Grand Avenue
Tahlequah, OK 74464
(918) 456-5511 ext. 2000
http://arapaho.nsuok.edu/~optometry

13. **Oregon:**
Pacific University
College of Optometry
2043 College Way
Forest Grove, OR 97116
(503) 359-2202 or 1-800-933-9308
http://www.opt.pacificu.edu/opt/index.shtml

14. **Pennsylvania:**
Pennsylvania College of Optometry
Elkins Park Campus
8360 Old York Road
Elkins Park, PA 19027
(215) 780-1300 or 1-800-824-6262
http://www.pco.edu

15. **Tennessee:**
Southern College of Optometry
1245 Madison Avenue
Memphis, TN 38104
(901) 722-3224 or 1-800-238-0180
http://www.sco.edu

16. **Texas:**
University of Houston
College of Optometry
4800 Calhoun Road
Houston, TX 77204-6052
(713) 743-2040
http://www.opt.uh.edu

17. **Puerto Rico:**
Inter American University of Puerto Rico
School of Optometry
118 Eleanor Roosevelt
P.O. Box 1293
Hato Rey, PR 00919
(787) 765-1915 ext. 2511
http://www.optonet/inter.edu

18. **Canada:**
University of Montreal
School of Optometry
3744 Jean-Brillant
Local 110
Montreal, Quebec H3T 1P1 Canada
(514) 343-6471
http://www.opto.umontreal.ca

19. **Canada:**
University of Waterloo
School of Optometry
Faculty of Sciences
Waterloo, Ontario N2L 3G1 Canada
(519) 885-1211 ext. 5378
http://optometry.uwaterloo.ca
Optometry School Costs

Tuition

Tuition costs vary from school to school and tend to increase every year. As a general rule, private schools cost more than public, and out-of-state tuition is usually higher than in-state. As an example, the tuition at the Michigan College of Optometry for the 1999-2000 academic year was $8,480 for residents and $17,362 for non-residents.¹¹ Most optometry students receive financial aid of some sort. Contact the school’s Office of Scholarships and Financial Aid for details on current tuition rates and Financial Aid Information.

Books and Equipment

Books and equipment are two important expenses that cannot be overlooked. They are also important investments. The books you buy now will form your reference library, and the equipment you purchase now (at substantially lower than retail prices) will be the equipment you will use in your office for years to come. Because these items are so important, you need to include them in your budget, just as you would tuition.

To give you a rough estimate, here is the 1999-2000 estimated expenses for the Michigan College of Optometry.¹¹ (Note: all figures are approximations and have been rounded.)

<table>
<thead>
<tr>
<th>First Year</th>
<th>Third Year</th>
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<tr>
<td>Equipment $2720</td>
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<td>Books $836</td>
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<td>National Boards $585</td>
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<table>
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<th>Second Year</th>
<th>Fourth Year</th>
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<td>Equipment $1777</td>
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<td>Books $784</td>
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</tr>
<tr>
<td>National Boards $585</td>
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</table>

What are National Boards?

The National Board of Examiners in Optometry administer a set of examinations ("National Boards") that "assess the cognitive, psychomotor, affective, and communication skills that are essential for entry-level optometric practice."¹² All 50 states require the passing of National Boards before you can obtain a license to practice optometry. Part I is taken the summer after the second year, Part II is taken December of the third year, and Part III (optional in some states, required in others) is taken just prior to graduation. States differ on exactly which portions of National Boards need to be passed, and some states also require an additional state board exam or state law exam.

For more information on National Boards, visit them at [http://www.optometry.org](http://www.optometry.org)

For more information on what each state requires for licensing and licensing fees, look up [http://www.opt.indiana.edu/Schroeder/OD](http://www.opt.indiana.edu/Schroeder/OD)
For More Information...

For more information on optometry careers and optometry school, you can also contact:

The American Optometric Association or Association of Schools and Colleges of Optometry
243 N. Lindbergh Boulevard 6110 Executive Boulevard, Suite 510
St. Louis, MO 63141 Rockville, MD 20852
(314) 991-4100 (301) 231-5944
Appendix A

How to Start a Pre-Optometry Club on Your Campus

James Miller, O.D.
How to Start a Pre-Optometry Club on Your Campus

- Find a motivated Pre-Optometry student (or two) on campus.
- Have them get the packet of information necessary for recognized club status.
- Find a Faculty Advisor.
- Post fliers and a student newspaper notice announcing the first meeting of the club and a membership drive.
- Have the first meeting and elect officers.
- Assign and address all tasks necessary to complete club recognition.
- Finalize by-laws.
- Pick the best day and time for meetings (hold meetings at least monthly).
- Have a membership drive at least once a semester.
- Plan a calendar of activities for the academic year.
- In the spring, elect new officers for the next year and also set up the first meeting for fall and audit financial records.

If you have any questions, problems, or need further advice, please contact Dr. Jim Miller at the Michigan College of Optometry at Ferris State University. Phone: (231) 591-2191. E-Mail: millerjr@ferris.edu
SAMPLE POSTER

INTRODUCING...
SCHOOL'S NAME'S
FIRST EVER

Pre-Optometry Club

ALL STUDENTS INTERESTED IN OPTOMETRY ARE INVITED TO JOIN AN ORGANIZATION THAT CAN PUT YOU ON THE RIGHT TRACK & KEEP YOU ON THE EDGE IN PLANNING FOR A FUTURE IN THIS EXCITING, CHALLENGING, AND EVER-CHANGING PROFESSION.

OFFICERS WILL BE ELECTED AT OUR FIRST MEETING ON:

DATE TIME LOCATION

(THOSE INTERESTED BUT UNABLE TO ATTEND, PLEASE CONTACT: ____________)
Sample Pre-Optometry Club Meeting Topics

- Have local optometrists come in for question/answer session.
- Have an optician, ophthalmologist, and optometrist come in for a question/answer session.
- Have a faculty member from a college of optometry come in and speak.
- Have a present optometry student come in and speak -- perhaps an alum of your college.
- Plan field trips to various colleges of optometry.
- Have O.A.T. study sessions and groups.
- Have optometrists come in to speak about different sub-specialties: pediatrics, contact lenses, ocular disease, etc.
- Have a membership drive to stimulate younger students about the opportunities the profession offers.
- Request information from each college of optometry and the American Optometric Association. Review all information and keep and information resource file.
- Visit various eye care practices: private practice, group practice, commercial practice, H.M.O., etc.

This is just a sample of the events/topics for meetings. If you cannot get some of the above professionals to come visit you, go visit them and have a member report on their experience. There are also social and volunteer activities that would certainly be exciting.
Sample Constitution of Pre-Optometry Club

Preamble:

In the best interest of the Pre-Optometry Students and its advisors and supporters, in the promotion, guidance, and sponsorship of a more wholesome environment, and for the purpose of cooperation with the NAME OF SCHOOL’s Office of Student Life do we ordain, and establish this constitution.

Article I -- Name

Section 1: The name of this organization shall be the Pre-Optometry Club.

Article II -- Purpose

The purpose of the Club shall be to support the pre-optometry students, assist those involved, promote, and increase attendance, and help provide a more enjoyable atmosphere throughout all aspects of their educational experience.

Article III -- Membership

Section 1: Membership of the club shall consist of Pre-Optometry students as well as any student at NAME OF SCHOOL who is interested in optometry.

Section 2: Membership in the Pre-Optometry Club shall not be denied because of religion, race, color, national origin, age, sex, marital status, veteran status, handicap, sexual orientation or other irrelevant criteria.

Section 3: Membership of the Club Council shall consist of the President, Vice-President, Secretary, and Treasurer.

Section 4: Membership Fees is a fixed price with the ability to vote for its change every new academic year. A fee of $10.00 will be due at the beginning of every new semester for students. This fee will help cover the cost of speakers, trips, etc. that the organization will have. All fees are non-refundable and must be paid in full.

Section 5: Terms of Office--

A: The term of office for all Club Officers shall run from point of election and continue for one academic year.
B: If a Club Council member has more than two (2) unexcused absences from meetings, a new member can be elected.

**Article IV -- Social Fees (if any)**

Section 1: Social fees (if any) shall be reserved for Club Council, and members to be voted on at meetings.
A: All accounts shall be handled by the Club treasurer.
B: Any expenditures by the Club Council shall require an affirmative vote of the club.
C: If any portion of the Club Council funds are unused at the end of the year, they shall remain in the Club Council account for the following year.
D: The Club Council treasurer is expected to handle, and keep detailed records, for all money transactions, and actions.

**Article V -- Elections**

Section 1: Candidates and Qualifications
A: All candidates for Club Council must maintain at least a 3.00 GPA.
B: Candidates for, or members of the Club Council must not be under any disciplinary, or college-wide academic probation.
C: All officers must be NAME OF SCHOOL students for their entire term of office.

Section 2: Filing for Candidacy
A: Elections for Club Officers will be at the last meeting of the spring semester. They will be responsible to take care of Club business in preparation for the new school year.
B: At this time, the permanent officials will be elected for the following fall semester.
C: The acting Club President shall in the event there is no valid petitions for a given office, declare nominations for the office to be open from the floor, at the regular meeting proceeding the election.
Section 3: Election Rules

A: The Vice-President from the previous year will automatically take office as President, unless the reigning president will remain at NAME OF SCHOOL the following year. At this time an election will be conducted in the same manner as all other Club Officers.

B: All elections for Club Council members must be made secret ballot.

C: The election shall be determined by simple majority vote of all Club members.

D: Election ballots must be turned into acting Club Council immediately following the election.

E: Ballots shall be counted by acting Club Council members not running for office.

F: The Club Council has 1 week to make a final decision that is binding and final on any election protests.

Article VI -- Duties and Responsibilities

Section 1: President

A: The president of the Club Council shall conduct general meetings and those of the Club Council. It will be his/her obligation to carry out any business that is necessary to ensure effective Club Council.

Section 2: Vice-President

A: The Vice-President shall be the presiding officer in the absence of the President. He/she shall be assigned by the President any duties to ensure effective Club government.

Section 3: Secretary

A: The Secretary shall keep minutes of all meetings. The minutes shall be read at the beginning of all meetings and then submitted to the Club files.

Section 4: Treasurer

A: The Treasurer shall keep an accurate account of all funds received and disbursed by the Club.
Article VII -- Replacement and Removal

Section 1: Any Club Council Officer may be removed with a 75% affirmative vote of the Club members.

Section 2: Any Club Member may be removed by a 66% majority vote of the members of the Club Council upon their unexcused absences of two (2) club meetings per year.

Section 3: Upon resignation or removal of the President, the Vice-President shall become President. Upon vacancy of the office of Vice-President, a new election will be held to replace the Vice-President and shall run under Article V.

Article VIII -- Meetings

Section 1: Meetings of the Club Council shall be held regularly at a time and place designated by them.

Section 2: Special meetings may be called by the President with forty-eight (48) hours notice.

Section 3: A quorum of Club Council shall be over one half of the members of the Club Council.

Section 4: Votes shall be cast by all members of the Club Council.

Section 5: All Club meetings shall be open to the public. Anyone in attendance may obtain the floor, but only Club members may vote.

Section 6: Parliamentary procedure shall be followed according to Robert’s Rules of Order to the extent determined by the President.

Article IX -- Amendments

Section 1: Amendments may be of two different types:
A: An amendment affecting this document to all clubs using it, or
B: An amendment particular to an individual club under its own jurisdiction.

Section 2: An amendment affecting all clubs under this document must first have a majority vote of approval by Club Council. (The association will then follow-up, if favorable, according to its own constitution.)
Section 3: An amendment adopting this document to a Club's particular purpose must be submitted to the Club Council for approval. The Club Council will then review the proposed change and make a decision.
Bibliography


3. **Admissions Information**, **Southern College of Optometry**, Catalog. Memphis: Southern College of Optometry.


8. **College of Optometry at The Ohio State University**, Catalog. Columbus: The Ohio State University College of Optometry.


31. Southern California College of Optometry. Catalog. Fullerton: Southern California College of Optometry Office of Student Affairs.


