HOW TO GET INTO OPTOMETRY SCHOOL (SOS)

By: Kiran Badial and Samin Tavakoli

*Presentation will be available online: [http://bethune.yorku.ca/events/](http://bethune.yorku.ca/events/)
INTRODUCTION

1. Who are we?

- Kiran Badial: 4th year Biomedical Science student
- Samin Tavakoli: 4th year Biochemistry Science student
AGENDA

- About Optometry
- Available Schools
- Application Process
- After Graduation
ABOUT OPTOMETRY

A Doctor of Optometry (OD)

• Primary health care provider

• Provincially licensed, independent

• Specializes in the examination, diagnosis, treatment, management and prevention of diseases and disorders of the human visual system, the eye, and the associated structures
WHAT THEY DO...

1. Prescribe glasses and contact lenses

2. Rehabilitate the visually impaired

3. Diagnose and treat ocular diseases

4. Perform comprehensive examinations of both the internal and external structures of the eye
WHAT THEY DO...

5. Evaluate patients’ vision and determine appropriate treatments

6. Treat clarity problems or eye diseases such as glaucoma and ulcers

7. Diagnose complications due to the aging process, accidents, or malfunction
WHERE CAN I STUDY OPTOMETRY?

- **In Ontario**  
  University of Waterloo - School of Optometry

- **In Quebec**  
  Université de Montréal – L’École d’optométrie

- **In the U.S.**  
  23 Schools in the USA
<table>
<thead>
<tr>
<th></th>
<th>List of Schools in the U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ferris State College – Michigan College of Optometry</td>
</tr>
<tr>
<td>2.</td>
<td>Illinois College</td>
</tr>
<tr>
<td>3.</td>
<td>Indiana University</td>
</tr>
<tr>
<td>4.</td>
<td>InterAmerican University of Puerto Rico</td>
</tr>
<tr>
<td>5.</td>
<td>Midwestern University, Arizona College of Optometry, Glendale, AZ</td>
</tr>
<tr>
<td>6.</td>
<td>New England College of Optometry</td>
</tr>
<tr>
<td>7.</td>
<td>Northeastern State University – College of Optometry Tahlequah, OK</td>
</tr>
<tr>
<td>8.</td>
<td>NOVA Southeastern University, Ft. Lauderdale--Davie, FL</td>
</tr>
<tr>
<td>9.</td>
<td>Ohio State University</td>
</tr>
<tr>
<td>10.</td>
<td>Pennsylvania College of Optometry at Salus University</td>
</tr>
<tr>
<td>11.</td>
<td>Pacific University Forest Grove, OR</td>
</tr>
<tr>
<td>12.</td>
<td>Southern California College of Optometry</td>
</tr>
<tr>
<td>13.</td>
<td>Southern College Memphis, TN</td>
</tr>
<tr>
<td>14.</td>
<td>State University of New York College of Optometry</td>
</tr>
<tr>
<td>15.</td>
<td>University of Alabama at Birmingham</td>
</tr>
<tr>
<td>16.</td>
<td>University of California – Berkeley Optometry</td>
</tr>
<tr>
<td>17.</td>
<td>University of Houston – Optometry</td>
</tr>
<tr>
<td>18.</td>
<td>University of the Incarnate Word – Rosenberg School of Optometry, San Antonio, TX</td>
</tr>
<tr>
<td>19.</td>
<td>University of Missouri--St. Louis</td>
</tr>
</tbody>
</table>
We will only be focusing on the University of Waterloo School of Optometry in this seminar.
OPTOMETRY AT WATERLOO

- Four year program
- First year class size: 90 students
- However ~300 applicants/year
- **They have no preference for undergraduate universities**
OPTOMETRY AT WATERLOO

- **First & Second Years:** Visual optics, visual neurophysiology, cell and molecular biology, pharmacology, genetics, epidemiology, and ethics

- **Third Year:** Clinical internship,

- **Fourth Year:** Consists of 3 clinical terms □ one will be on campus, other 2 will be outside
For September 2022 Admissions

- Applications available: **mid July**

- **Deadline to write OAT (Optometry Admission Test):**
  - **October 15, 2022**
  - **NEW: Must take CASPer Snapshot, slots are available August-October**

- **Online application and payment deadline:**
  - **October 1, 2022**

- **Deadline for Admission Information Form (AIF) and interim transcripts:**
  - **October 21st, 2022**
Deadline for both (2) confidential assessment forms = November 30th, 2021

**Interview selection will have finished by December 15th 2021**
Interviews will be held the week of January 15th, 2022

Deadline for final fall 2021 transcripts = January 31st, 2022

Admission Decision letters mailed: End of March 2022

All winter courses must be completed by May 7th, 2022

Deadline for final winter 2022 transcripts: June 25th, 2022
ADMISSION REQUIREMENTS

- **Academic:**
  - 3 or more years BSc
  - With a full course load

- **Overall GPA**
  - Maintain a minimum overall average
  - Recent acceptance averages ranged 75%-92%
# PREREQUISITE COURSES

1 term = 3 credit-courses  
2 terms = 6 credit-courses

## Arts

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Length (terms)</th>
<th>Non-Waterloo equivalents</th>
<th>York equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>1</td>
<td>Any English (ENGL, e.g. ENGL XXXX) or any writing (WRIT, e.g. WRIT XXX) course</td>
<td>Any one ENGL course</td>
</tr>
<tr>
<td>Introductory Ethics</td>
<td>1</td>
<td>Any introductory ethics or biomedical ethics course</td>
<td>PHIL 2070 OR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For example:</td>
<td>PHIL 2075</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Biomedical Ethics</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- Contemporary Moral Issues</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>- Introduction to Ethics and Values</td>
<td></td>
</tr>
<tr>
<td>Introductory Psychology</td>
<td>1</td>
<td>Any year 1 introductory psychology course</td>
<td>PSYCH 1010</td>
</tr>
</tbody>
</table>

Other humanities courses will not satisfy the English prerequisite.
# PREREQUISITE COURSES

## Biology

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Length (terms)</th>
<th>Non-Waterloo equivalents</th>
<th>York equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Biology with lab</td>
<td>2</td>
<td>Any two terms of year 1 biology with labs</td>
<td>BIOL 1000 &amp; 1001</td>
</tr>
<tr>
<td>Introductory Microbiology</td>
<td>1</td>
<td>Any one term introductory microbiology</td>
<td>BIOL 3150</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For example:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fundamentals of Microbiology</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Basic and Medical Microbiology</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Biology of Prokaryotes</td>
<td></td>
</tr>
<tr>
<td>Physiology (human or mammalian)</td>
<td>2</td>
<td>Only physiology will satisfy the two terms</td>
<td>BIOL 3060 &amp; 3070 OR KINE 2011 &amp; 3012</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For example:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Principles of Human Physiology 1 and Principles of Human Physiology 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Human Physiology</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Human Anatomy and Physiology</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mammalian Physiology</td>
<td></td>
</tr>
</tbody>
</table>

Anatomy courses will not satisfy the prerequisite, unless the course is called **Human Anatomy and Physiology**.
## PREREQUISITE COURSES

### Chemistry

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Length (terms)</th>
<th>Non-Waterloo equivalents</th>
<th>York equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Chemistry with lab</td>
<td>1</td>
<td>Any year 1 intro chemistry course with lab</td>
<td>CHEM 1000 OR 1001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For example:</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- General Chemistry</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- Intro chemistry</td>
<td></td>
</tr>
<tr>
<td>Introductory Biochemistry</td>
<td>1</td>
<td>Any one term introductory biochemistry</td>
<td>BIOL 2020</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For example:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Introduction to Biochemistry</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Principles of Biochemistry</td>
<td></td>
</tr>
<tr>
<td>Introductory Organic Chemistry</td>
<td>1</td>
<td>Any one term introductory organic chemistry</td>
<td>CHEM 2020 OR 2021</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For example:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Introductory Organic Chemistry</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Organic Chemistry 1</td>
<td></td>
</tr>
</tbody>
</table>
## Mathematics

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Length (terms)</th>
<th>Non-Waterloo equivalents</th>
<th>York equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus</td>
<td>1</td>
<td>Any one term calculus</td>
<td>MATH 1013 OR MATH 1300 (not 1505)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For example:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Calculus</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Calculus 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Calculus for Science Students</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Calculus for Biology Students</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Introductory Calculus</td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>1</td>
<td>Any one term statistics</td>
<td>MATH 1131 OR BIOL 2060 OR PSYCH 2020 OR KINE 2050</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For Example</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Statistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Statistics 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Statistics for Science Students</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Statistics for Biology Students</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Introductory Statistics</td>
<td></td>
</tr>
</tbody>
</table>
## PREREQUISITE COURSES

### Physics

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Length (terms)</th>
<th>Non-Waterloo equivalents</th>
<th>York equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Physics with lab</td>
<td>2</td>
<td>Any two terms of year 1 physics with labs</td>
<td>PHYS 1410 OR 1420</td>
</tr>
</tbody>
</table>
If you are still uncertain, first contact an undergraduate advisor at York. Subsequently, help can be obtained by sending an e-mail to

opt--admissions@uwaterloo.ca
COURSE ELIGIBILITY

- Your full name
- Your e-mail address
- The prerequisite in question
- The university name
- The name of the BSc program
- The course name & number
- A full course description
- A web reference to the course description (usually found in the undergraduate calendar)
ADMISSION REQUIREMENTS (NON ACADEMIC)

- **Optometry Admissions Test (OAT)**
  - Minimum score = 300
  - Avg for 2020 = 380

- **Confidential Assessment Forms**
  - An optometrist CAF; expected that you spend a minimum of 8 hours of job shadowing with an optometrist
  - A character CAF. (For example, the character CAF can be from an employer, supervisor, professor, minister.) It should be from someone who knows you well.

- [https://uwaterloo.ca/optometry-vision-science/future-optometry-students/admission-requirements/non-academic-requirements](https://uwaterloo.ca/optometry-vision-science/future-optometry-students/admission-requirements/non-academic-requirements)
Admission Requirements (Non Academic)

-- Canadian Citizenship
-- Or living in Canada for the last 12 months prior to first day of registration

-- English Language Requirements
  - Test of English as a Foreign Language (TOEFL):
    - Paper-based: 580 or Computer-based: 237 and
    - Essay Rating: 4.5 and
    - Test of Spoken English: 45
  - The International English Language Testing System (IELTS): 7.0
  - The Michigan English Language Assessment Battery (MELAB): 85
ADMISSION REQUIREMENTS (NON ACADEMIC)

**Autobiographical sketch:**
- Academic awards
- Non-academic awards
- Work experience
- Volunteer experience
- Job shadowing or working with an optometrist
ADMISSION REQUIREMENTS

- Police check (Criminal Record Check)

- The CASPer Test: Computer-Based Assessment for Sampling Personal Characteristics
  - Implemented in September 2017
  - You will need access to a computer with audio capabilities, a webcam and reliable internet connection on your selected test date
  - Consists of 12 sections of video and written scenarios
  - Answer a set of questions under a time limit
  - Go to takeCASPer.com for an example of the test structure and more information!
APPLICATION PROCESS

- **OUAC (Ontario University Application Center) Application**
  - Program choice: September 2022 entry in Optometry
  - Personal information (Basic ID, citizenship, OAT status, etc.)
  - Postal code and email address
  - Post-secondary Academic Background
  - Transcripts (often require an extra fee)
  - Fee: $215
APPLICATION PROCESS

- Must submit OUAC application before taking CASPER

- After submitting online:
  - Confirmation email sent within 1 week
  - PDF file: Optometry Instructions 2016
  - Includes instructions for filling out the Admission Information Form (AIF)
1) Read the OAT guide eligibility requirements

2) Apply to Take the Test
   - non-refundable fee of $490
   - Optional 45$ fee to obtain test results

3) Schedule the test appointment at a Prometric Test centre [https://www.prometric.com/test-takers/search/oat](https://www.prometric.com/test-takers/search/oat)

   - More info: [https://www.ada.org/oat/](https://www.ada.org/oat/)
# OAT

<table>
<thead>
<tr>
<th>Optometry Admission Test</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional Tutorial</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Survey of Natural Sciences</td>
<td>90 minutes</td>
</tr>
<tr>
<td>Reading Comprehension Test</td>
<td>50 minutes</td>
</tr>
<tr>
<td>Optional Break</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Physics Test</td>
<td>50 minutes</td>
</tr>
<tr>
<td>Quantitative Reasoning Test</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Optional Post Test Survey</td>
<td>15 minutes</td>
</tr>
<tr>
<td>Total Time</td>
<td>4 hours 40 minutes</td>
</tr>
</tbody>
</table>

[https://www.ada.org/oat/oat_examinee_guide.pdf](https://www.ada.org/oat/oat_examinee_guide.pdf)
NATURAL SCIENCES

- Covers
- Biology (40 questions)
- General chemistry (30 questions)
- Organic chemistry (30 questions)

You have 90 minutes to complete 100 questions.
Which of the following are typically autotrophic?

A. Protozoa
B. Plants
C. Animals
D. Fungi
E. Bacteria

Which one of the following processes is accompanied by a decrease in entropy?

A. Freezing of water
B. Evaporation of water
C. Sublimation of carbon dioxide
D. Shuffling a deck of cards
E. Heating a balloon filled with a gas
Questions, based on three reading passages (between 1,200 and 1,500 words each) related to basic or clinical science. You do not need prior scientific knowledge to complete this section.

Includes 40 questions to be completed in 50 minutes.

Optional break after this section*
PHYSICS TEST

- Measures your knowledge of
  - Vectors
  - Energy and momentum
  - Waves
  - Thermodynamics
  - Magnetism
  - Optics

- Includes 40 questions covered in 50 minutes.
Sample Questions

A vector quantity is BEST described as having

A. A direction only
B. A magnitude only
C. Units only
D. A magnitude and a direction
E. Significant figures
A magnifying glass is constructed when the lens is

A. Converging and the object is located at twice the focal length

B. Converging and the object is between the lens and the focal point

C. Diverging and the object is at twice the focal length

D. Diverging and the object is between the lens and the focal point
QUANTITATIVE REASONING

This section measures
Mastery of arithmetic
Algebra
Geometry
Trigonometry

Consists of 40 questions answered in 45 minutes.
A tank can be filled by a pipe in 30 minutes and emptied by another pipe in 50 minutes. How many minutes will it take to fill the tank if both pipes are open?

A. 45
B. 60
C. 75
D. 80
E. 75
AN UNSCORED SECTION

- Can include science, math, or physics questions.
- They are experimental questions to see if the questions are appropriate before they are included among the scored items.
- Will not affect your score report.
The OAT is scored on a scale from 200 to 400.

Separate sub-scores for the different sections: biology, general chemistry, organic chemistry, reading comprehension, and quantitative reasoning.
OAT – WATERLOO REQUIREMENTS

- Minimum score of 300, no total section score below 300

- Average OAT score for 2015 Waterloo Optometry applicants: 370
# Profile of Past 1st Year Students

<table>
<thead>
<tr>
<th>Applicants</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>245</td>
<td>250</td>
<td>260</td>
<td>265</td>
</tr>
<tr>
<td>Enrolled Students</td>
<td>2020</td>
<td>2019</td>
<td>2018</td>
<td>2017</td>
</tr>
<tr>
<td>First year class size</td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>57</td>
<td>62</td>
<td>63</td>
<td>67</td>
</tr>
<tr>
<td>Men</td>
<td>24</td>
<td>23</td>
<td>24</td>
<td>23</td>
</tr>
<tr>
<td>Undeclared</td>
<td>9</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Overall Average</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>86</td>
<td>88</td>
<td>88</td>
<td>85</td>
</tr>
<tr>
<td>Range</td>
<td>80-95</td>
<td>79-95</td>
<td>81-95</td>
<td>79-94</td>
</tr>
<tr>
<td><strong>Optometry Admission Test (OAT) Scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>380</td>
<td>381</td>
<td>370</td>
<td>370</td>
</tr>
</tbody>
</table>

[https://uwaterloo.ca/optometry-vision-science/future-optometry-students/admission-requirements/selection-process](https://uwaterloo.ca/optometry-vision-science/future-optometry-students/admission-requirements/selection-process)
INTERVIEW

- If you pass the first cut, you will get an interview
- If selected, you will be contacted in late November
- As of now, the interviews will be conducted at the School in January, 2022 and will consist of:
  - Multi Mini interviews with faculty and optometrists
  - A round table discussion with our current OD students
  - Tour of the facility

https://uwaterloo.ca/optometry-vision-science/future-optometry-students/interview
APPLYING TO SCHOOLS OTHER THAN WATERLOO

- Apply online on a school-by-school basis. Usually an Application for Admission to the School of Optometry form will be emailed to you from each school.

- Each school may have its own requirements, common ones are:
  - Referral letters
  - Autobiographical sketch
  - University transcripts and OAT scores to be sent to each Optometry school by the deadline
  - Interview
POST GRADUATION

- Write and pass the professional board & jurisprudence exams for the geographic regions you wish to practice
- Find a place to practice, be a resident, or enter grad studies
INTERESTING FACTS...

- The average Canadian optometrist in practice earns
  Approximately $100,000 per year, excluding benefits

- How long does an optometrist stay in the career? Typically life-long, until retirement

- There are approximately 3,000 practicing optometrists in Canada
The School of Optometry and Vision Science at uWaterloo offers the only English language optometry program in Canada.

The École d'Optométrie at the Université de Montréal offers the only French language optometry program in Canada.

Each year, approximately 90 optometrists graduate from Waterloo and about 40 graduate from the Université de Montréal.
IMPORTANT LINKS!

- ASCO (Association of Schools and Colleges of Optometry):
  http://www.opted.org

- University of Waterloo Optometry -- FAQs:
  https://uwaterloo.ca/optometry--vision--science/future--optometry--students/frequently--asked--questions

- ADA for OAT application:
  https://www.ada.org/oat/index.html

- Ask a Doctor of Optometry:
  https://www.facebook.com/AskaDoctorofOptometry

Our Guest Speaker

Toby Wercberger

First year optometry student

New England College of Optometry
For more information, check out:

https://uwaterloo.ca/optometry-vision-science/

Or email us!

Kiran: kiranb46@my.yorku.ca

Samin: samtsm@my.yorku.ca

Toby: tobyraq@gmail.com
Thank you for joining us today!