**PRE-OPTOMETRY**

**Introduction**

Students interested in a career in Optometry have the option of pursuing any major along with completing specific prerequisites. Optometry schools typically require a minimum of 90 credit hours be completed at the undergraduate level and many prefer the bachelor degree be completed. Students must gain a thorough understanding of the profession through a range of shadowing experiences and earn a competitive score on the Optometry Admission Test (OAT). Students should work with the Pre-Med Advisor beginning in the first college year to select appropriate coursework based on their schools of interest, and co-curricular experiences. In addition to the information in this section, please check the general information at the pre-medical and pre-health section of the catalog (http://catalog.canisius.edu/undergraduate/academics/curricular-information/pre-professional-programs/pre-medical-pre-health-professions).

**Joint and Early Assurance Programs**

Canisius College maintains a relationship with SUNY College of Optometry which allows students to gain early acceptance into optometry school. Highly qualified students may be admitted into this 3+4 program upon enrolling at Canisius as freshmen or during the freshman or sophomore year. Students in this program complete the Core Curriculum or the All College Honors Program and three years of the Chemistry Health Track major or a Biology major.

**Recommended Pre-Optometry Courses**

Academic admission requirements vary by optometry school, but usually include the following courses:

**English**

One year of English composition (ENG 111 & ENG 112 or students who entered Canisius prior to fall 2018 may use FYS 101 and ENG 101) or the Honors Program equivalent (HON 101 and an Honors Literature course).

**Biology**

At least one year of general biology with laboratory:

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<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 111 &amp; 111L</td>
<td>Introductory Biology I and Introductory Biology Laboratory I</td>
<td>4</td>
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<tr>
<td>BIO 112 &amp; 112L</td>
<td>Introductory Biology II and Introductory Biology Laboratory II</td>
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**Chemistry**

One year of general chemistry and one year of organic chemistry with laboratories:

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<th>Credits</th>
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<tr>
<td>CHM 111 &amp; 111L</td>
<td>General Chemistry I and General Chemistry I Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHM 112 &amp; 112L</td>
<td>General Chemistry II and General Chemistry II Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHM 227 &amp; 227L</td>
<td>Organic Chemistry I and Organic Chemistry I Laboratory</td>
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**Physics**

One year of introductory physics with laboratory:

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<tr>
<td>PHY 201 &amp; 201L</td>
<td>College Physics I and College Physics I Laboratory</td>
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<tr>
<td>PHY 202 &amp; 202L</td>
<td>College Physics II and College Physics II Laboratory</td>
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**Option 2:**

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<tr>
<td>PHY 223 &amp; 223L</td>
<td>General Physics for Physical Science Majors I and General Physics for Physical Science Majors I Laboratory</td>
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<tr>
<td>PHY 224 &amp; 224L</td>
<td>General Physics for Physical Science Majors II and General Physics for Physical Science Majors II Laboratory</td>
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**Mathematics**

One semester of statistics (MAT 141 or PSY 201) and one semester of calculus (MAT 111). Chemistry majors must take MAT 141. Some optometry schools suggest one year of calculus (MAT 111-MAT 112).

**Psychology**

One semester of psychology (PSY 101 or PSY 102).

**Social Science and Humanities**

Two courses. Sociology (SOC 110) is recommended.

**Additional Pre-Optometry Course Suggestions**

**Biochemistry**

Students may take biochemistry in either the Biology Department (BIO 211-BIO 212, take both courses) or the Chemistry Department (BCH 301-BCH 302, take either one or both courses).

**Microbiology**

One semester of microbiology (BIO 307).

**Anatomy & Physiology**

One semester of anatomy and physiology (BIO 114).