The following is a generic two-year Pre-Optometry course schedule applicable to a student planning to major in the sciences.

### Sample Schedule

<table>
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<tr>
<th>Semester</th>
<th>Courses</th>
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| **Freshman Year 1st Semester** | GEP 101  
BMS 110 or BIO 121  
CHM 160, 161  
ENG 110 |
| **Freshman Year 2nd Semester** | CHM 170, 171  
COM 115  
BIO 122 or BMS 230 or BIO 235  
MTH 138 |
| **Sophomore Year 1st Semester** | CHM 342  
MTH 261  
BMS 307  
General Ed. Electives |
| **Sophomore Year 2nd Semester** | CHM 343  
PHY 123 or PHY 203  
PSY 121  
General Ed. Electives |

A student following the above schedule would take PHY 124 or 204 and BIO 310 during the first semester of the junior year. Specific schedules should be made in consultation with your advisor.
selecting appropriate electives, in communicating professional information and recommendations and in serving as the primary professional and academic reference in the optometry school admission process.

Courses
A typical Pre-Optometry curriculum requires one year of life sciences, one year of general chemistry, one year of organic chemistry, one semester of microbiology, one year of physics, one semester each of calculus and statistics and one course in psychology in addition to the usual general education requirements. Admission to optometry school also is dependent on the student completing significant additional elective coursework in the sciences. These electives are intended primarily to help prepare students for the intense coursework in chemistry, the life sciences and physics taken during the first two years of optometry school and secondarily to prepare the applicant for the Optometry Admissions Test (OAT), which is usually taken late in the junior year or early in the senior year. Please consult the Missouri State Catalog online at www.missouristate.edu/catalog for specific course information.

Career Preparation
Optometrists are members of the primary general health team who specialize in the examination, diagnosis and treatment of conditions or impairments in the vision system. They are non-medical doctors who study for four years in a college of optometry, the first two years of which emphasize classroom and laboratory work in the basic life sciences and physical sciences, while the remaining two years are composed primarily of supervised patient care in hospitals, private practices and clinics. This curriculum leads to the Doctor of Optometry (O.D.) degree. Optometrists must be licensed by the state. Since the optometrist is not a medical doctor, he or she cannot treat the eye surgically, with the exception of a few procedures currently sanctioned in a few states. However, an optometrist can be licensed to administer some diagnostic and therapeutic drugs relevant to vision care.

The optometrist prescribes corrective ophthalmic lenses, contact lenses or other optical aids, as well as other vision therapy to restore and preserve maximum efficiency of vision. Optometrists can practice in a variety of settings, including solo and group practice, hospitals and clinics, government and public health institutions, community health centers and the military. Within these settings, optometrists engage in primary care practice, or they can emphasize within their practice such areas as scientific research and teaching, pediatrics, contact lenses, sports vision therapy, geriatrics and occupational vision.

Academic Program
Undergraduate requirements for entry into one of the nation's 17 schools of optometry vary somewhat with the specific school considered but always consist of selected courses in the life sciences, chemistry, mathematics and physics in addition to general education courses. Most pre-optometry students major in one of the following departments: Biology, Biomedical Sciences, Chemistry, Psychology or Physics, Astronomy and Materials Science. There are a number of elective courses that help prepare the student for the profession regardless of the student's choice of a particular major. Students planning to apply to optometry school need to work closely with a Pre-Optometry advisor in addition to the advisor of their academic major. The roles of the Pre-Optometry advisor are to assist in recommending the sequence of coursework, in