



BIO-OPTOMETRY

DEPARTMENT OF BIOLOGICAL SCIENCES
AT EASTERN ILLINOIS UNIVERSITY

NAME	
E NUMBER	
CATALOG	

SP21

GENERAL EDUCATION: 30-38 HRS

LANGUAGE: 9 HRS

Course	Hours	Grade	Semester
ENG 1001G Composition & Language	3		
ENG 1002G Composition & Literature	3		
CMN 1310G Intro to Speech	3		

Grade of "C" or better is required

SCIENCE AWARENESS: 7HRS

Completed in major.

MATHEMATICS: 3-5 HRS

Completed in major.

HUMANITIES/FINE ARTS*: 9 HRS

Course	Hours	Grade	Semester
Humanities	3		
Fine Arts	3		
Humanities / Fine Arts	3		

SOCIAL/BEHAVIORAL SCIENCES*: 9 HRS

Course	Hours	Grade	Semester
PSY 1879G Intro to Psychology	3		
ECN 2800G OR 2801G OR 2802G* Economics of Social Issues/Macro/Micro	3		
SOC 1838G* Intro to Sociology	3		

SENIOR SEMINAR: 3 HRS

Course	Hours	Grade	Semester
EIU _____	3		

Seminar topic must be outside the major area. See Undergraduate Catalog for Senior Seminars that exclude Biological Sciences majors.

FOREIGN LANGUAGE: 0-8 HRS

EXEMPT? YES NO

Exempt if 2yrs in high school of a single foreign language with average grade of "C" or better.

Course	Hours	Grade	Semester

* One course must meet Cultural Diversity requirement.

SCIENCE CORE: 51-53 HRS

Biology Courses	Hours	Grade	Semester
BIO 1150 Biology Forum	1		
BIO 1500 General Biology I	4		
BIO 1550G* General Biology II	4		
BIO 3120* Molecular & Cell Biology	4		
BIO 3200* Genetics	4		
BIO 2220* Anatomy & Physiology II	4		
BIO 3180* Ecology and Evolution	4		
Physics Courses	Hours	Grade	Semester
PHY 1151G* Principles Physics I	3		
PHY 1152G* Principles Physics I Lab	1		
PHY 1161G* Principles Physics II	3		
PHY 1162G* Principles Physics II Lab	1		

Math Courses	Hours	Grade	Semester
MAT 2110G* Brief Calculus	3		
MAT 2250G* Elementary Statistics	4		
Chemistry Courses	Hours	Grade	Semester
CHM 1310G General Chemistry I	3		
CHM 1315G General Chemistry I Lab	1		
CHM 1410* General Chemistry II	3		
CHM 1415* General Chemistry II Lab	1		
CHM 2440* Organic Chemistry I	3		
CHM 2445* Organic Chemistry I Lab	1		

*Additional prerequisite classes may be required. See Undergraduate Catalog

*BIO 2210 (Anatomy and Physiology I) prerequisite. BIO 2210 counts as BIO elective credit.

*Required by some optometry schools

*Recommended by some optometry schools

Departmental Exit Interview is also required prior to leaving EIU.

MAJOR ELECTIVES: 21 HRS

21 hours of course work in Biological Sciences (with the exception of BIO 3400, workshops, and courses designed for General Education) or Mathematics or Physical Sciences courses above 2000 (with the exception of general education and CHM 2310). A minimum of 15 hrs must be taken in Biological Sciences.

Course	Hours	Grade	Semester
BIO 2210 Anatomy and Physiology I	4		
BIO 3300# General Microbiology	4		
CHM 2840 Organic Chemistry II	4		
CHM 3450* Biochemistry	4		

BIO 2210 (4) Anatomy and Physiology I
 BIO 3210 (4) Immunology
 BIO 3300 (4) General Microbiology
 BIO 3312 (3) Horticulture
 BIO 3322 (3) Dendrology
 BIO 3450 (1-3) Independent Study
 BIO 3451 (1-3) Undergraduate Research
 BIO 3610 (3) Survey of Algae & Fungi
 BIO 3612 (3) Plant Evolution & Diversity
 BIO 3620 (4) Funct. Comp. Anatomy
 BIO 3622 (4) Embryology
 BIO 3624 (3) Histology
 BIO 3628 (4) Evolutionary Medicine
 BIO 3690 (4) Clinical Rotation
 BIO 3700 (4) Parasitology
 BIO 3710 (3) Plant-Animal Interactions
 BIO 3720 (4) Entomology
 BIO 3740 (3) Clinical Mycology
 BIO 3810 (3) Freshwater Ecology
 BIO 3850 (3) Environmental Biology
 BIO 3888G (3) Tropical/Marine Ecology

BIO 3950 (3) Vertebrate Natural History
 BIO 3952 (3) Invertebrate Natural History
 BIO 3960 (1-4) Special Topics
 BIO 4400 (1) Teaching in the Lab
 BIO 4751 (3) Adv. Molec. & Cell Biol.
 BIO 4800 (2) Research Techniques
 BIO 4810 (4) Plant Ecology
 BIO 4812 (3) Fisheries Ecology & Mgmt
 BIO 4814 (3) Conservation Biology
 BIO 4816 (3) Biotic Communities
 BIO 4818 (4) Environmental Microbiology
 BIO 4820 (4) Spatial Analysis for Environmental Sciences
 BIO 4830 (3) Comp. Vertebrate Physiology
 BIO 4832 (4) Animal Behavior
 BIO 4833 (4) Neurobiology of Diseases
 BIO 4834 (3) Neurobiology
 BIO 4835 (3) Advanced Neurobiology
 BIO 4836 (4) Pathogenic Microbiology

BIO 4892 (4) Intro. Paleobotany
 BIO 4914 (3) Plant Anatomy
 BIO 4920 (3) Medicinal Plants
 BIO 4940 (3) Phycology
 BIO 4942 (3) Mycology
 BIO 4944 (3) Lichens
 BIO 4946 (3) Bryology
 BIO 4948 (3) Plant Taxonomy
 BIO 4950 (3) Ichthyology
 BIO 4952 (3) Herpetology
 BIO 4954 (3) Ornithology
 BIO 4956 (3) Mammalogy
 BIO 4960 (3) Wetland & Aqua. Vasc. Plants
 BIO 4984 (3) Organic Evolution

Courses numbered 5000-5499 inclusive, may be taken by a senior whose graduation requirements average 2.75 or higher, with the permission of the instructor and the Dean of the Graduate School.

BE PREPARED: UPDATE THIS FORM BEFORE MEETING WITH YOUR ADVISOR

Some people will tell you that doctors of optometry diagnose and treat disorders of the eye. What optometrists really do – each and every day – is make a real difference in real lives. Optometrists reveal new vistas, return lost joys, empower greater achievement, and preserve un-lived lives. That’s what optometrists do.

Doctors of Optometry complete a four-year doctoral program to earn the Doctor of Optometry (O.D.) degree.

Admission is very competitive and each optometry program has slightly different criteria. **It is important to review the pre-requisites for each school and identify which program you wish to apply and plan accordingly.** On average students should maintain a grade point average near 3.40/4.00 or higher, demonstrate leadership skills, expose yourself to the world of optometry, and perform well on the Optometry Admission Test (OAT).

WHAT MAKES YOU UNIQUE FROM OTHER APPLICANTS?

Optometric Experience

- *Volunteer or work experience with a specialist is beneficial.*

Leadership Experience

Optometrists are leaders in their communities and demonstrated leadership skills are a must. Campus, church, and community organizations provide excellent leadership opportunities.

RESOURCES:

Assoc. of Schools and Colleges of Optometry www.opted.org

OAT www.ada.org/oat/index.html

Southern College of Optometry (Memphis)

www.sco.edu/admissions/Pages/prerequisitecourses.aspx

Illinois College of Optometry

www.ico.edu/admissions/apply/preopt_requirements.html

St. Louis College of Optometry

www.umsl.edu/~optometry/students/prospstudpag.html

Ohio State College of Optometry

optometry.osu.edu/futureStudents/requirements.cfm

Indiana College of Optometry

www.opt.indiana.edu/programs/od/prereqs.htm

Chicago College of Optometry (Midwestern)

www.midwestern.edu/academics/our-colleges/chicago-college-of-optometry.xml

SAMPLE COURSE SEQUENCE:

The suggested sequence assumes that the foreign language requirement has been completed.

FRESHMAN	
FALL	SPRING
ENG 1001G BIO 1500 CHM 1310G/1315G BIO 1150 PSY 1879G	ENG 1002G BIO 1550G CHM 1410G/1415G SOC 1838G MAT Prereq or Stats
SOPHOMORE	
FALL	SPRING
BIO 3120 CHM 2440/2445 MAT 2110G Gen Ed Elective	BIO 3200 CHM 2840/2845 BIO 2210 Gen Ed Elective
JUNIOR	
FALL	SPRING
BIO 2220 PHY 1151G/1152G (Fall ONLY) CHM 3450 (Fall ONLY) BIO Elective >3000 <i>OAT Prep</i>	BIO 4750 OR MAT 2250G (if not taken in FRESHMAN SPR) PHY 1161/1162 (Spring ONLY) CMN 1310G BIO Elective >3000 <i>OAT Exam/Apply to Optometry School</i>
SENIOR	
FALL	SPRING
EIU 4***G BIO Elective >3000 Gen Ed Elective Free Elective <i>Optometry School Admission Interviews</i>	BIO 3180 BIO Elective >3000 Gen Ed Elective Free Elective <i>Exit Interview</i>