



BIO-OPTOMETRY

AT EASTERN ILLINOIS UNIVERSITY

NAME	
E NUMBER	
CATALOG	

2023-2024

GENERAL REQUIREMENTS: 40 HRS

LANGUAGE: 9 HRS

Grade of "C" or better is required.

COURSE	HOURS	GRADE	SEMESTER
ENG 1001G Composition & Language	3		
ENG 1002G Composition & Language II	3		
CMN 1310G Intro. to Speech Comm.	3		

HUMANITIES/FINE ARTS: 9 HRS

COURSE	HOURS	GRADE	SEMESTER
Humanities _____	3		
Fine Arts _____	3		
Humanities or Fine Arts _____	3		

SENIOR SEMINAR: 3 HRS

Senior topic must be outside the major area. See Undergraduate Catalog for Senior Seminars outside of Biological Sciences.

COURSE	HOURS	GRADE	SEMESTER
EIU _____	3		

SCIENCE CORE: 56 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 & Evolution	4		
BIO 3300 * General Microbiology	4		
PHYSICS COURSES	HOURS	GRADE	SEMESTER
PHY 1151G * Principles Physics I	3		
PHY 1152G * Principles Physics I Lab	1		
PHY 1161 * Principles Physics II	3		
PHY 1162 * Principles Physics II Lab	1		
MATH COURSES	HOURS	GRADE	SEMESTER
MAT 2110G * Brief Calculus	3		
BIO 4750 * Statistic Anly of Sci Data OR MAT 2250G * Elementry 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.

SOCIAL/BEHAVIORAL SCIENCE: 9 HRS

Must be from two different disciplines. One course must meet Cultural & Diversity requirement

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		

FOREIGN LANGUAGE: 0-8 HRS

Exempt if 2 yrs in high school with "C" average.

COURSE	HOURS	GRADE	SEMESTER
WL _____ G	4		
WL _____ G	4		

SCIENCE AWARENESS: 7 HRS

Complete in major.

MATHEMATICS: 3 HRS

Complete in major.

MAJOR ELECTIVES: 21HRS

21 semester hours of elective course work in Biological Sciences (with the exception of **BIO 3400**, **BIO 4275**, workshops, and courses designed for General Education with the exception of **BIO 3888G**) or Mathematics or Physical Sciences courses above 2000 (with the exception of general education and **CHM 2310**). A minimum of 14 semester hours must be taken in the Biological Sciences.

COURSE	HOURS	GRADE	SEMESTER
BIO 2210 Anatomy & Physiology	4		
CHM 2840 # Organic Chemistry II	3		
CHM 3450 # Biochemistry	3		

BIO 2210 (4) Anatomy and Physiology I	BIO 4810 (4) Plant Ecology
BIO 3035 (3) Economic Botany	BIO 4812 (3) Fisheries Ecology & Mgmt
BIO 3210 (4) Immunology	BIO 4814 (3) Conservation Biology
BIO 3312 (3) Horticulture	BIO 4816 (3) Biotic Communities
BIO 3322 (3) Dendrology	BIO 4818 (4) Environmental Microbiology
BIO 3330 (4) Introduction to Botany	BIO 4820 (4) Spatial Analysis for Environmental Sciences
BIO 3340 (4) Zoology	BIO 4830 (3) Comp. Vertebrate Physiology
BIO 3450 (1-3) Independent Study	BIO 4832 (4) Animal Behavior
BIO 3451 (1-3) Undergraduate Research	BIO 4833 (4) Neurobiology of Diseases
BIO 3460 (4) Clinical Rotation	BIO 4834 (4) Neurobiology
BIO 3610 (3) Survey of Algae & Fungi	BIO 4835 (4) Advanced Neurobiology
BIO 3612 (3) Plant Evolution & Diversity	BIO 4836 (4) Pathogenic Microbiology
BIO 3620 (4) Funct. Comp. Anatomy	BIO 4892 (4) Intro. Paleobotany
BIO 3622 (4) Embryology	BIO 4914 (3) Plant Anatomy
BIO 3624 (3) Histology	BIO 4920 (3) Medicinal Plants
BIO 3628 (4) Evolutionary Medicine	BIO 4940 (3) Phycology
BIO 3710 (3) Plant-Animal Interactions	BIO 4942 (3) Mycology
BIO 3720 (4) Entomology	BIO 4944 (3) Lichens
BIO 3740 (3) Clinical Mycology	BIO 4946 (3) Bryology
BIO 3810 (3) Freshwater Ecology	BIO 4948 (3) Plant Taxonomy
BIO 3850 (3) Environmental Biology	BIO 4950 (3) Ichthyology
BIO 3888G (3) Tropical/Marine Ecology	BIO 4952 (3) Herpetology
BIO 3950 (3) Vertebrate Natural History	BIO 4954 (3) Ornithology
BIO 3952 (3) Invertebrate Natural History	BIO 4956 (3) Mammalogy
BIO 3960 (1-4) Special Topics	BIO 4958 (4) Parasitology
BIO 4400 (1) Teaching in the Lab	BIO 4960 (3) Wetland & Aqua. Vasc. Plants
BIO 4751 (3) Adv. Molec. & Cell Biol.	BIO 4984 (3) Evolutionary Biology
BIO 4800 (2) Research Techniques	

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.

GRADUATION REQUIREMENTS:

<input type="checkbox"/> 120 Hours
<input type="checkbox"/> 40 SH of upper division courses (3000+)
<input type="checkbox"/> 30 SH in residence at EIU
<input type="checkbox"/> 30 SH junior-senior residency
<input type="checkbox"/> 12 SH senior residency
<input type="checkbox"/> 2.00 Cumulative GPA

<input type="checkbox"/> 2.00 Major GPA
<input type="checkbox"/> Cultural Diversity
<input type="checkbox"/> Application for Graduation (First semester junior year)
<input type="checkbox"/> Electronic Writing Portfolio 1 <input type="checkbox"/> 2 <input type="checkbox"/>
See www.eiu.edu/~assess/ for requirements

BIO-OPTOMETRY

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 prerequisites 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

NOTES, QUESTIONS, MINOR REQUIREMENTS:

SUGGESTED 4-YEAR SEQUENCE

YEAR 1 MUST EARN 30+ SH FOR SOPHOMORE STATUS				
FALL		SPRING		
ENG 1001G	3	ENG 1002G	3	
BIO 1500	4	BIO 1550G	4	
CHM 1310G/1315G	4	CHM 1410/1415	4	
BIO 1150	1	¹ Gen Ed Elective	3	
¹ Gen Ed Elective	3	² MAT Prereq	3	
Total		15	Total 17	
YEAR 2 MUST EARN 60+ SH FOR JUNIOR STATUS				
FALL		SPRING		
BIO 3120	4	BIO 3200	4	
CHM 2440/2445	4	CHM 2840/2845	4	
MAT 2110G	3	BIO 2210	4	
¹ Gen Ed Elective	3	¹ Gen Ed Elective	3	
Total		14	Total 15	
YEAR 3 MUST EARN 90+ SH FOR SENIOR STATUS				
FALL		SPRING		
PHY 1151G/1152G (FA ONLY)	4	PHY 1161/1162 (SP ONLY)	4	
BIO 2220	4	CMN 1310G	3	
BIO 4750 OR MAT 2250G	4	BIO 3300	4	
CHM 3450 (FA ONLY)	3	BIO Elective >3000	3	
OAT Prep		OAT Exam/Apply to Optometry School		
Total		15	Total 14	
YEAR 4 MUST EARN 120 SH TO GRADUATE				
FALL		SPRING		
EIU 4XXXG	3	BIO 3180	4	
BIO Elective >3000	3	BIO Elective >3000	3	
¹ Gen Ed Elective	3	¹ Gen Ed Elective	3	
³ Free Elective	3	³ Free Elective	3	
Optometry School Admission Interviews		Exit Interview		
Total		12	Total 13	

¹ General Education Elective

² See Math Placement

³ Take course that was not previously taken

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