BIO-OPTOMETRY

DEPARTMENT OF BIOLOGICAL SCIENCES
AT EASTERN ILLINOIS UNIVERSITY

NAME	
E NUMBER	
CATALOG	

F17

Clear Form

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		
	3		
	3		

** One course must meet Cultural Diversity requirement.*

SENIOR SEMINAR: 3 HRS

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.

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.

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

To prepare for a career in optometry, a student must complete 4 years of education to obtain a Doctor of Optometry (O.D.) degree at a professional college of optometry. 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.
• Diversification of practice is advantageous, if possible: private practice, hospital, surgeon, etc.

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/~optomety/students/prospstudpag.html

Ohio College of Optometry
optometry.osu.edu/futureStudents/requirements.cfm

Indiana College of Optometry *www.opt.indiana.edu/programs/od/prereqs.htm*