BIO-DENTISTRY
AT EASTERN ILLINOIS UNIVERSITY

NAME	
E NUMBER	
CATALOG	

2024-2025

CLEAR FORM

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		

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		
	3		
	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.

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 dental schools
^Recommended by some dental schools
&Biological Sciences Major Requirement - Not necessarily required by dental schools
Departmental Exit Interview is also required prior to leaving EIU.

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 I	4		
BIO 3210^ Immunology	4		
BIO 3624^ Histology	3		
CHM 2840# Organic Chemistry II	3		
CHM 2845# Organic Chemistry II Lab	1		
CHM 3450# Biochemistry	3		

BIO 2210 (4) Anatomy and Physiology I
BIO 3035 (3) Economic Botany
BIO 3210 (4) Immunology
BIO 3312 (3) Horticulture
BIO 3322 (3) Dendrology
BIO 3330 (4) Introduction to Botany
BIO 3340 (4) Zoology
BIO 3450 (1-3) Independent Study
BIO 3451 (1-3) Undergraduate Research
BIO 3460 (4) Clinical Rotation
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 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 (4) Neurobiology
BIO 4835 (4) 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 4958 (4) Parasitology
BIO 4960 (3) Wetland & Aqua. Vasc. Plants
BIO 4984 (3) Evolutionary Biology

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:

❑	120 Hours
❑	40 SH of upper division courses (3000+)
❑	30 SH in residence at EIU
❑	30 SH junior-senior residency
❑	12 SH senior residency
❑	2.00 Cumulative GPA

❑	2.00 Major GPA
❑	Cultural Diversity
❑	Application for Graduation (First semester junior year)
❑	Electronic Writing Portfolio 1❑ 2❑ *See www.eiu.edu/~assess/ for requirements*

BIO-DENTISTRY

A dentist is a doctor, scientist and clinician dedicated to the highest standards of health through prevention, diagnosis and treatment of oral diseases and conditions. Dentistry is a highly competitive four-year graduate program. Students should maintain a grade point average near 3.50/4.00, acquire leadership skills and exposure to the world of dentistry, and score an 18 or higher on the Dental Admission Test (DAT). Three letters of recommendation are required, typically 2 from science professors and 1 letter from a dentist.

Typically, the DAT is taken during the Spring Semester of the junior year and application through the centralized application service, Associated American Dental Schools Application Services (AADSAS), is submitted in June between the junior and senior years.

Dental schools are seeking individuals who are well rounded in their educational background. In selecting a major, identify one that will prepare you best for dental practice or a backup plan. English, biology, chemistry, psychology or sociology or health promotion with a business minor are a few majors to consider. Because of the hands-on nature of the profession, courses in art and sculpting are also useful.

WHAT MAKES YOU UNIQUE FROM OTHER APPLICANTS?

HEALTHCARE EXPERIENCE

- Volunteer or work in hospitals, clinics, nursinghomes, assisted living centers, crisis nursery, and rehab centers is beneficial.
- Shadow a specialist. Ask to volunteer or work in thier practice; seek opportunity to shadow.

LEADERSHIP EXPERIENCE

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

RESOURCES:

American Dental Education Association
www.adea.org

American Dental Association
www.ada.org/en

DAT (Dental Admissions Test)
www.ada.org/dat.aspx

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
DAT Prep		*DAT Exam/Apply to Dental 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
Dental 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 assumes that the foreign language requirement has been completed.

NOTES, QUESTIONS, MINOR REQUIREMENTS:

The above information is designed for advising purposes only and is not intended to serve as the final or official determination of program requirements. Please consult the EIU undergraduate catalog for additional program information and/or requirements.