

Revised 5/07

**MAJOR: BIOLOGICAL SCIENCES
OPTION: BIOLOGY
EFFECTIVE FALL 2007**

BE PREPARED: Before meeting with your advisor, utilize the checklist at the Biological Sciences website:
<http://www.eiu.edu/~biology/>

NAME _____ SOC. SEC. # _____ CATALOG _____
ASSOCIATES DEGREE FROM _____ TRANSFER HOURS _____

I. CHECKLIST OF GRADUATION REQUIREMENTS

- | | |
|---|---|
| <input type="checkbox"/> 120 Semester Hours (SH) | <input type="checkbox"/> 42 SH in residence at EIU |
| <input type="checkbox"/> 2.00 Cumulative GPA | <input type="checkbox"/> 32 SH junior-senior residency |
| <input type="checkbox"/> 2.00 Major GPA | <input type="checkbox"/> 12 SH senior residency |
| <input type="checkbox"/> 40 SH of upper division courses (3000+) | <input type="checkbox"/> 56 SH at senior institution (transfer students) |
| <input type="checkbox"/> Senior Seminar (after completion of 75 SH) | <input type="checkbox"/> Cultural Diversity (designated with an * in catalog) |
| | <input type="checkbox"/> Application for degree. Review requirements by first semester of junior year |

II. ELECTRONIC WRITING PORTFOLIO (EWP)

New freshmen entering in Fall 2006 must successfully complete the Electronic Writing Portfolio by creating and submitting a portfolio of four writing samples written under guidance of faculty members in writing-centered or writing-intensive courses. Students following earlier catalogs must pass the Writing Competency Examination (after 45 SH and prior to completion of 75 SH plus completion of English requirement). See EWP website for information: <http://www.eiu.edu/~assess/ewpmain.php>

III. GENERAL EDUCATION REQUIREMENTS

Students transferring to EIU who have received an AA or AS degree in a baccalaureate-oriented program from an Illinois public community college, Lincoln College or Springfield College in Illinois or who completed the IAI General Education Core Curriculum are considered as having met lower division general education requirements. *EXCEPT*, they must complete a Senior Seminar and must meet the Foreign Language Requirement, either by exemption or with course work.

<u>Grade</u>	<u>Semester</u>	<u>Course #</u>	<u>SH</u>	<u>Title</u>	<u>Component</u>
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HUMANITIES AND FINE ARTS (9 SH; at least one course in fine arts and one in humanities; courses must represent at least two different disciplines)

_____	_____	_____	_____	_____	Fine Arts
_____	_____	_____	_____	_____	Humanities
_____	_____	_____	_____	_____	Fine Arts or Humanities

FOREIGN LANGUAGE (0 – 8 SH) Exempt? Yes No

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Exemption? Two years in a single foreign language in high school with an average grade of C or better.

SOCIAL AND BEHAVIORAL SCIENCES (9 SH; courses must represent two different disciplines)

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

LANGUAGE (9 SH; grade of C or better required)

_____	_____	ENG 1001G	3 SH	Composition and Language
_____	_____	ENG 1002G	3 SH	Composition and Literature
_____	_____	CMN 1310G	3 SH	Introduction to Speech Communication

MATHEMATICS (3 SH; completed in the major)

SCIENTIFIC AWARENESS (7 SH; completed in the major)

SENIOR SEMINAR (3 SH, except EIU 4101G, 4111G, 4118G, 4131G, 4169G, 4290G)

_____ EIU _____ 3 SH _____

To be taken after the student has completed 75 semester hours

TAKE COURSES IN A LOGICAL SEQUENCE WITH THE PROPER PREREQUISITES COMPLETED. LOOK CAREFULLY AT DEPARTMENTAL WEBSITE FOR SEMESTERS IN WHICH COURSES ARE TAUGHT SO DEGREE REQUIREMENTS CAN BE COMPLETED ON SCHEDULE.

I. COMMON CORE (60-61 SH)

_____	_____	BIO 1100	(4 SH)	GENERAL BIOLOGY
_____	_____	BIO 1150	(1 SH)	BIOLOGY FORUM
_____	_____	BIO 1200G	(4 SH)	GENERAL BOTANY
_____	_____	BIO 1300G	(4 SH)	ANIMAL DIVERSITY
_____	_____	BIO 3100	(3 SH)	CELL/MOLECULAR BIOLOGY
_____	_____	BIO 3101	(1 SH)	CELL/MOLECULAR BIOLOGY LAB
_____	_____	BIO 3200	(4 SH)	GENETICS
_____	_____	BIO 3800	(4 SH)	ECOLOGY
_____	_____	BIO 4984	(3 SH)	ORGANIC EVOLUTION
_____	_____	CHM 1310G	(3 SH)	GENERAL CHEMISTRY I
_____	_____	CHM 1315G	(1 SH)	GENERAL CHEMISTRY LAB I
_____	_____	CHM 1410	(3 SH)	GENERAL CHEMISTRY II
_____	_____	CHM 1415	(1 SH)	GENERAL CHEMISTRY LAB II
_____	_____	CHM 2430*	(3 SH)	SURVEY OF ORGANIC CHEMISTRY*
_____	_____	CHM 2435*	(1 SH)	SURVEY OF ORGANIC CHEMISTRY LAB*
_____	_____	MAT 1441G	(5 SH)	CALCULUS & ANALYTIC GEOMETRY I
_____	_____	PHY 1151G	(3 SH)	PRINCIPLES OF PHYSICS I
_____	_____	PHY 1152G	(1 SH)	PRINCIPLES OF PHYSICS I LAB
_____	_____	PHY 1161	(3 SH)	PRINCIPLES OF PHYSICS II
_____	_____	PHY 1162	(1 SH)	PRINCIPLES OF PHYSICS II LAB
_____	_____	BIO 4750	(3 SH)	BIOMETRICS
		or		
_____	_____	MAT 2250G	(4 SH)	ELEMENTARY STATISTICS
_____	_____	BIO 3510	(4 SH)	PLANT PHYSIOLOGY
		or		
_____	_____	BIO 3520	(4 SH)	ANIMAL PHYSIOLOGY

*CHM 2440 (Organic Chemistry 1), CHM 2445 (Organic Chemistry Lab I), CHM 2840 (Organic Chemistry II), CHM 2845 (Organic Chemistry Lab II) sequence recommended for students interested in Pre-Health or Graduate programs. Prerequisite for Biochemistry.

Elective Courses for Biology Majors

BIO 2200	HUMAN ANATOMY (4)
BIO 2320	ECONOMIC BOTANY (3)
BIO 2322	SURVEY OF LOCAL FLORA (2)
BIO 3210	IMMUNOLOGY (3)
BIO 3300	GENERAL MICROBIOLOGY (4)
BIO 3312	HORTICULTURE (3)
BIO 3322	DENDROLOGY (3)
BIO 3450	INDEPENDENT STUDY (1-3)
BIO 3451	UNDERGRADUATE RESEARCH (1-3)
BIO 3610	SURVEY OF ALGAE AND FUNGI (3)
BIO 3612	PLANT MORPHOLOGY (3)
BIO 3614	PLANT ANATOMY (3)
BIO 3620	FUNCTIONAL COMPARATIVE ANATOMY (4)
BIO 3622	EMBRYOLOGY (4)
BIO 3624	HISTOLOGY (3)
BIO 3700	PARASITOLOGY (3)
BIO 3710	PLANT-ANIMAL INTERACTIONS (3)
BIO 3720	ENTOMOLOGY (4)
BIO 3810	FRESHWATER ECOLOGY (3)
BIO 3850	ENVIRONMENTAL BIOLOGY (3)
BIO 3888G	TROPICAL AND MARINE ECOLOGY (3)
BIO 3950	VERTEBRATE NATURAL HISTORY (3)
BIO 3952	INVERTEBRATE NATURAL HISTORY (3)
BIO 3960	SPECIAL TOPICS (1-4)
BIO 4400	TEACHING IN THE LAB (1)
BIO 4751	ADVANCED MOLECULAR AND CELL BIOLOGY (3)
BIO 4800	RESEARCH TECHNIQUES (2)
BIO 4810	PLANT ECOLOGY (3)
BIO 4812	FISHERIES ECOLOGY AND MANAGEMENT (3)
BIO 4814	CONSERVATION BIOLOGY (3)
BIO 4816	STUDY OF BIOTIC COMMUNITIES (3)
BIO 4818	ENVIRONMENTAL MICROBIOLOGY (4)
BIO 4820	SPATIAL ANALYSIS FOR ENVIRONMENTAL SCI (3)
BIO 4830	COMPARATIVE VERTEBRATE PHYSIOLOGY (3)
BIO 4832	ANIMAL BEHAVIOR (4)
BIO 4834	NEUROBIOLOGY (3)
BIO 4836	PATHOGENIC MICROBIOLOGY (4)
BIO 4892	INTRODUCTION TO PALEOBOTANY (4)
BIO 4940	PHYCOLOGY (3)
BIO 4942	MYCOLOGY (3)
BIO 4944	LICHENS (3)
BIO 4946	BRYOLOGY (3)
BIO 4948	PLANT TAXONOMY (3)
BIO 4950	ICHTHYOLOGY (3)
BIO 4952	HERPETOLOGY (3)
BIO 4954	ORNITHOLOGY (3)
BIO 4960	WETLAND AND AQUATIC VASCULAR PLANTS (3)
BIO 4956	MAMMALOLOGY (3)
BIO 4984	ORGANIC EVOLUTION (3)

* 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.

SUGGESTED COURSE SEQUENCE BIOLOGICAL SCIENCE MAJOR – *BIOLOGY OPTION*

PREREQUISITE(S) MAY BE REQUIRED FOR MAT 1441G. CONSULT WITH ADVISOR.

FIRST YEAR

First Semester (13-16 SH)

ENG 1001G (3 SH) COMP & LANGUAGE
 BIO 1100 (4 SH) GENERAL BIOLOGY
 CHM 1310G (3 SH) GENERAL CHEMISTRY I
 CHM 1315G (1 SH) GENERAL CHEMISTRY I LAB
 BIO 1150 (1 SH) BIOLOGY FORUM
¹GEN ED ELECTIVE (3 SH)
²MAT PREREQ (2-3 SH) **OR** CALCULUS (4-5 SH)

Second Semester (16-18 SH)

ENG 1002G (3 SH) COMPOSITION & LITERATURE
 MAT PREREQ (2-3 SH) **or** CALCULUS (4-5 SH)
 CHM 1410G (3 SH) GENERAL CHEMISTRY II
and CHM 1415G (1 SH) GENERAL CHEMISTRY II LAB
 BIO 1200G (4 SH) GENERAL BOTANY
OR
 BIO 1300G (4 SH) ANIMAL DIVERSITY
 GEN.ED. ELECTIVE (3 SH) IF NEEDED TO FILL SCHEDULE

¹ GENERAL EDUCATION ELECTIVE

² SEE ACT MATH PLACEMENT SCORE ABOVE

MUST EARN 30+ SH FOR SOPHOMORE STATUS

SECOND YEAR

First Semester (16-17 SH)

CMN 1310G (3 SH) INTRO TO SPEECH COMMUNICATION
 CHM 2430 (3 SH) ORGANIC CHEMISTRY
 CHM 2435 (1 SH) ORGANIC CHEMISTRY LAB
 CALCULUS (4-5 SH) IF NECESSARY
³BIO 1200G (4 SH) GENERAL BOTANY
OR
³BIO 1300G (4 SH) ANIMAL DIVERSITY

Second Semester (14-15 SH)

BIO 3100 (3 SH) CELL/MOLECULAR BIOLOGY
 BIO 3101 (1 SH) CELL/MOLECULAR BIO LAB
 PHY 1151G (3 SH) PRINCIPLES OF PHYSICS I
 PHY 1152 G (1 SH) PRINCIPLES OF PHYSICS I LAB
 ELECTIVE (3-4 SH)
 GEN.ED.ELECTIVE (3 SH)

³ TAKE COURSE THAT WAS NOT PREVIOUSLY TAKEN

MUST EARN 60+ SH FOR JUNIOR STATUS

THIRD YEAR

First Semester (14-15 SH)

BIO 3200 (4 SH) GENETICS
 BIO 3510 (4 SH) PLANT PHYSIOLOGY
OR
 BIO 3520 (4 SH) ANIMAL PHYSIOLOGY
 PHY 1161 (3 SH) PRINCIPLES OF PHYSICS II
 PHY 1162 (1 SH) PRIN OF PHYSICS II LAB
 GEN. ED. ELECTIVE (3 SH)

MUST EARN 90+ SH FOR SENIOR STATUS

Second Semester (16-17 SH)

BIO 3800 (4 SH) ECOLOGY
 BIO 4750 (3 SH) BIOMETRICS
OR
 MAT 2250G (4 SH) ELEMENTARY STATISTICS
 ELECTIVE (3-4 SH)
 GEN.ED. ELECTIVE (3 SH)
 GEN. ED. ELECTIVE (3 SH)

FOURTH YEAR

First Semester (14-18 SH)

EIU ____ (3 SH) SENIOR SEMINAR
 FREE ELECTIVE (3-4 SH)
 FREE ELECTIVE (3-4 SH)
 FREE ELECTIVE (3-4 SH)
 GEN. ED. ELECTIVE (3 SH)

Second Semester (15-18 SH)

BIO 4984 (3 SH) EVOLUTION
 FREE ELECTIVE (3-4 SH)
 FREE ELECTIVE (3-4 SH)
 FREE ELECTIVE (3-4 SH)
 FREE ELECTIVE (3 SH)

**** SCHEDULE ASSUMES THAT THE FOREIGN LANGUAGE REQUIREMENT HAS BEEN COMPLETED**

EARN AT LEAST 120 SH TO GRADUATE