

SAMPLE 4-YEAR PLAN: BIOLOGY B.A. - B.S.

Northern Kentucky University

This is **one way** a student can complete this program in four years if the student enters NKU with a mathematics ACT score of 25 or higher.

MAJOR: Biology

TRACK: B.S. General Biology

FIRST YEAR	Fall Semester		Spring Semester	
	In addition to these courses for your major, you should be taking an appropriate mathematics course and consider taking a foreign language if you are continuing a language from high school.	BIO 150 Introduction to Biology and BIO 150L Introduction to Biology Lab	4	BIO 151 Introduction to Biology II and BIO 151L Introduction to Biology II Laboratory
CHE 120 General Chemistry I and CHE 120L General Chemistry Lab I Laboratory		4	CHE 121 General Chemistry II and CHE 121L General Chemistry II Laboratory	4
ENG 101 College Writing		3	STA 205 Introduction to Statistical Methods	3
BIO 155 Orientation to Biology		1	Oral Communication	3
Individual & Society I		3		
TOTAL		15	TOTAL	14
SECOND YEAR	Fall Semester		Spring Semester	
	Bio 304 General Ecology Bio 304L Gen Ecology Lab	4	BIO 349 Genetics Bio 349L Genetics Lab	4
	BIO 291W Advanced Writing in Biology	3	Cultural Pluralism	3
	CHE 310 Organic Chemistry and CHE 310L Organic Chemistry Laboratory	4	CHE 311 Organic Chemistry II and CHE 311L*Organic Chemistry II Laboratory	4
	Foreign Language I	3	Foreign Language 2	3
	Elective	3	Elective	3
	TOTAL	17	TOTAL	17
THIRD YEAR	Fall Semester		Spring Semester	
The electives chosen should be from the appropriate course groups to fulfill the requirements for this track.	EEO** elective	4	CMG** Elective	4
	MAT 112, 128 or 129	3	Culture and Creativity II	3
	PHY 211 General Physics with Laboratory	5	PHY 213 General Physics with Laboratory II	5
	Individual & Society II	3	Elective 300 level or above	3
	TOTAL	15	TOTAL	15
FOURTH YEAR	Fall Semester		Spring Semester	
The electives chosen should be from the appropriate course groups to fulfill the requirements for this track. In addition, you should make sure you have taken enough classes at the 300 level or above to satisfy the university requirement of 45 hours.	BIO elective	4	BIO elective	4
	BIO 458 Evolution	3	BIO 491 Comprehensive Examination	0
	Elective 300 level or above	3	Elective 300 level or above	3
	Global Viewpoints	3	Elective 300 level or above	3
	Elective	3	Elective	3
TOTAL	16	TOTAL	13	
GRAND TOTAL OF CREDITS			122	

Notes:

- ** Refer to the Biological Sciences Course Groups for lists of courses.

MAJOR: Biology
TRACK: B.S. Cell/Molecular/Genetics

FIRST YEAR	Fall Semester		Spring Semester	
	BIO 150 Introduction to Biology and BIO 150L Introduction to Biology I Laboratory	4	BIO 151 Introduction to Biology II and BIO 151L Introduction to Biology II Laboratory	4
CHE 120 General Chemistry I and CHE 120L General Chemistry I with Laboratory	4	CHE 121 General Chemistry II and CHE 121L General Chemistry II Laboratory	4	
ENG 101 College Writing	3	STA 205 Introduction to Statistical Methods	3	
Individual & Society I	3	Oral Communication	3	
BIO 155 Orientation to Biology	1			
TOTAL	15	TOTAL	14	
SECOND YEAR	Fall Semester		Spring Semester	
BIO 349 Genetics and BIO 349L Genetics Laboratory	4	BIO 302 General Microbiology Bio 302L General Micro Lab	4	
BIO 291W Advanced Writing in Biology	3	CHE 311 Organic Chemistry II and CHE 311L Organic Chemistry II Laboratory	4	
CHE 310 Organic Chemistry I and CHE 310L Organic Chemistry I with Laboratory	4	Mat 112, 128 or 129	3	
Foreign Language 101	3	Foreign Language 102	3	
TOTAL	14	TOTAL	14	
THIRD YEAR	Fall Semester		Spring Semester	
The electives chosen should be from the appropriate course groups to fulfill the requirements for this track.	Che 482 Biochemistry I	3	Che 483 Biochemistry II	3
	PHY 211 General Physics with Laboratory	5	PHY 213 General Physics with Laboratory II	5
	Cultural Pluralism	3	Bio 436 Advanced Biology of the Cell	3
	Elective	3	Individual and Society II	3
	Elective	3		
	TOTAL	17	TOTAL	14
FOURTH YEAR	Fall Semester		Spring Semester	
The electives chosen should be from the appropriate course groups to fulfill the requirements for this track. In addition, you should make sure you have taken enough classes at the 300 level or above to satisfy the university requirement of 45 hours.	CMG** elective	4	CMG** elective	4
	Bio 458 Evolution	3	Bio 304 General Ecology	3
	Culture and Creativity	3	Global Viewpoints	3
	Elective 300 level or above	3	Elective	3
	Elective	3	Elective	3
			BIO 491 Comprehensive Exam	0
	TOTAL	16	TOTAL	16
GRAND TOTAL OF CREDITS			120	
<ul style="list-style-type: none"> Notes: ** Refer to the Biological Sciences Course Groups for a list of courses. 				

MAJOR: Biology

TRACK: B. S. Ecology/Evolution/Organismal

FIRST YEAR	Fall Semester		Spring Semester	
	BIO 150 Introduction to Biology and BIO 150L Introduction to Biology I Laboratory	4	BIO 151 Introduction to Biology II and BIO 151L Introduction to Biology II Laboratory	4
CHE 120 General Chemistry I and CHE 120L General Chemistry I Laboratory	4	CHE 121 General Chemistry II and CHE 121L General Chemistry II Laboratory	4	
ENG 101 College Writing	3	STA 205 Introduction to Statistical Methods	3	
BIO 155 Orientation to Biology	1	Oral Communication	3	
Individual & Society I	3			
TOTAL	15	TOTAL	14	
SECOND YEAR	Fall Semester		Spring Semester	
	BIO 304 General Ecology and BIO 304L Ecology Laboratory	4	BIO 349 Genetics BIO 349L Genetics Lab	4
BIO 291W Advanced Writing in Biology	3	Mat 112, 128 or 129	3	
CHE 310 Organic Chemistry I and CHE 310L Organic Chemistry I Laboratory	4	CHE 311 Organic Chemistry II and CHE 311L Organic Chemistry II Laboratory	4	
Cultural Pluralism	3	Individual & Society II	3	
Elective	3	Elective	3	
TOTAL	17	TOTAL	17	
THIRD YEAR	Fall Semester		Spring Semester	
	Bio 458 Evolution	3	EEO** elective	4
Culture & Creativity	3	BIO 342 Biometry	3	
PHY 211 General Physics with Laboratory I	5	PHY 213 General Physics with Laboratory II	5	
EEO** Elective	4	Global Viewpoints	3	
TOTAL	15	TOTAL	15	
FOURTH YEAR	Fall Semester		Spring Semester	
	EEO** elective	4	EEO** elective	4
Foreign Language 101	3	Foreign Language 102	3	
Elective 300 level or above	3	BIO491 Comprehensive Exam	0	
Elective 300 level or above	3	Elective 300 level or above	3	
Elective	3	Elective	3	
TOTAL	16	TOTAL	13	
GRAND TOTAL OF CREDITS			122	
Notes:				
<ul style="list-style-type: none"> * Students in the Ecology, Evolution, Organismal track may elect to substitute GEO 418 for CHE 311 and CHE 311L ** Refer to the Biological Sciences Course Groups for lists of courses. 				

MAJOR: Biology

TRACK/OPTION: B.A. General Biology

FIRST YEAR	Fall Semester		Spring Semester	
	BIO 150 Introduction to Biology and BIO 150L Introduction to Biology Laboratory	4	BIO 151 Introduction to Biology II and BIO 151L Introduction to Biology II Laboratory	4
CHE 120 General Chemistry I and CHE 120L General Chemistry I Laboratory	4	CHE 121 General Chemistry II and CHE 121L General Chemistry II Laboratory	4	
ENG 101 College Writing	3	STA 205 Introduction to Statistical Methods	3	
BIO 155 Orientation to Biology	1	Oral Communication	3	
Individual & Society I	3			
TOTAL	15	TOTAL	14	
SECOND YEAR	Fall Semester		Spring Semester	
	BIO 304 General Ecology and BIO 304L Ecology	4	BIO 349 Genetics and BIO 349L Genetics Laboratory	4
BIO 291W Advanced Writing in Biology	3	EEO** Elective	4	
CHE 310 Organic Chemistry I and CHE 310L Organic Chemistry I Laboratory	4	Cultural Pluralism	3	
Foreign Language 101	3	Foreign Language 102	3	
		Elective	3	
TOTAL	14	TOTAL	17	
THIRD YEAR	Fall Semester		Spring Semester	
	CMG** elective	4	Biology Elective	4
Bio 458 Evolution	3	Elective 300 level or above	3	
PHY 211 General Physics with Laboratory I	5	PHY 213 General Physics with Laboratory II	5	
Individual & Society II	3	Culture and Creativity	3	
TOTAL	15	TOTAL	15	
FOURTH YEAR	Fall Semester		Spring Semester	
	Biology elective	4	Elective 300 level or above	3
Bio 491 Comprehensive Exam	0	Elective 300 level or above	3	
Elective 300 level or above	4	Elective	3	
Elective	4	Elective	3	
Global Viewpoints	3	Biology Elective	3	
TOTAL	15	TOTAL	15	
			GRAND TOTAL OF CREDITS	120
Notes:				
<ul style="list-style-type: none"> **Refer to the Biological Sciences Course Groups for lists of courses. 				

MAJOR: Biology
TRACK: B. S. Forensic Science

FIRST YEAR	Fall Semester		Spring Semester	
	BIO 150 Introduction to Biology and BIO 150L Introduction to Biology Laboratory	4	BIO 151 Introduction to Biology II and BIO 151L Introduction to Biology II Laboratory	4
	CHE 120 General Chemistry I and CHE 120L General Chemistry I Laboratory	4	CHE 121 General Chemistry II and CHE 121L General Chemistry II Laboratory	4
	ENG 101 College Writing	3	STA 205 Introduction to Statistical Methods	3
	BIO 155 Orientation to Biology	1	Oral Communication	3
	Individual & Society I	3		
	TOTAL	15	TOTAL	14
SECOND YEAR	Fall Semester		Spring Semester	
	BIO 349 Genetics and BIO 349L Genetics Laboratory	4	BIO 302 Gen Microbiology BIO 302L Gen Micro Lab	4
	BIO 291W Advanced Writing in Biology	3	BIO 342 Biometry	3
	CHE 310 Organic Chemistry I and CHE 310L Organic Chemistry I with Laboratory	4	CHE 311 Organic Chemistry II and CHE 311L Organic Chemistry II Laboratory	4
	Jus 101	3	Elective	3
			Global Viewpoints	3
	TOTAL	14	TOTAL	17
THIRD YEAR	Fall Semester		Spring Semester	
The electives chosen should be from the appropriate course groups to fulfill the requirements for this track.	BIO 400 Advanced Molecular Biology and BIO 400L Advanced Molecular Biology Lab	4	Mat 129	4
	PHY 211 General Physics with Laboratory I	5	Cultural Pluralism	3
	Che 482 Biochemistry I & Chem 482L Biochemistry I Lab	4	PHY 213 General Physics with Laboratory II	5
	Foreign Language 101	3	Foreign Language 102	3
	TOTAL	16	TOTAL	15
FOURTH YEAR	Fall Semester		Spring Semester	
The electives chosen should be from the appropriate course groups to fulfill the requirements for this track. In addition, you should make sure you have taken enough classes at the 300 level or above to satisfy the university requirement of 45 hours.	CHE 340 Analytical Chemistry & CHE 340L Analytical Chemistry Lab	5	Bio 304 General Ecology	3
	Bio 458 Evolution	3	BIO 491 Comprehensive Examination	0
	BIO 320 Entomology and BIO 320L Entomology Laboratory	4	Bio 455 Scanning Electron Microscopy	3
	Culture and Creativity	3	JUS 204 Criminal Investigation	3
			Elective	3
			Elective	3
	TOTAL	15	TOTAL	15
GRAND TOTAL OF CREDITS				121

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