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## TWO DEGREES, ONE PATH

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### **TRANSFER PATHWAY GUIDE 2024-2025**

Associate in Science to  
Bachelor of Science in Biological Sciences (General Biology Track)

#### ***Overview***

Completion of the following curriculum will satisfy the requirements for the Associate in Science (AS) degree at Gateway Community and Technical College (GCTC) and leads to the Bachelor of Science (BS) in Biological Sciences degree at Northern Kentucky University (NKU).

#### ***Applying to the Gateway2NKU Program***

Students can apply to participate in the pathway program by completing the online application on the NKU transfer webpage. Students must be enrolled in at least six credit hours at Gateway, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at Gateway.

#### ***Degree Requirements for GCTC***

1) Completion of minimum 60 credit hours, 2) minimum cumulative GPA 2.0, 3) minimum of 15 credit hours earned at the institution awarding the degree, 4) cultural competence course, 5) demonstration of digital literacy, and 6) college success requirement.

#### ***Admission Requirements to NKU***

Students completing an associate degree with a cumulative GPA of 2.0 or higher will be accepted into NKU.

#### ***Degree Requirements for NKU***

To earn a bachelor's degree at NKU, students must complete a minimum of 120 credit hours with at least 45 credit hours numbered 300 and above. In addition, at least 25% of the credit hours required for the degree and the last 30 credit hours must be completed at NKU. Students must have an overall GPA of 2.0 and meet all prerequisites for courses and requirements for the major. No minor is required for this major.

Students pursuing a degree in the biological sciences may do so by choosing one of six different tracks. These tracks allow the individual student to place an emphasis on areas of biology that he or she finds of interest. However, the faculty of the department feel very strongly that each student completing a degree in biology must have a solid foundation in the discipline. Therefore, there is a core of courses

required of all majors. A grade of C- or better must be earned in all biology courses that count toward completion of major requirements. The department has also identified a common core of support courses that must be completed with a C- or better by all biological science majors. Details concerning the biology core, support core, and each of the tracks follow. A biological sciences major does not require a secondary area of study (e.g. minor or focus).

Students wishing to be certified to teach biology at the secondary level should complete the B.A. General Biology Track in conjunction with a B.A. Secondary Education. Students should review the section of the catalog describing the B.A. Secondary Education track within the Department of Teacher Education.

Prior to graduation, all students majoring in biology are required to pass a comprehensive exam. This examination is designed to verify that the graduating student has at least a basic knowledge of the broad area of the biological sciences. Students will complete this requirement by registering for "BIO 491 Comprehensive Examination (0 credits)" during the senior year. Those who fail the exam will not be allowed to graduate until the exam is passed.

### ***General Transfer Information***

Students must complete the online application to NKU. There is no application fee for students who are transferring from GCTC.

**KCTCS Scholars Award:** Students who are KY residents transferring directly from a KCTCS institution with at least 36 hours from that institution and minimum GPA of 3.0, were never enrolled as a degree-seeking student at NKU, and will be enrolled in at least 12 credit hours both fall and spring semester are eligible for a limited number of \$2,500 annual scholarships (\$1,250 per fall and spring). Students must gain admission to NKU by June 15 for fall and November 1 for spring to be eligible for a possible scholarship. Online accelerated programs are not eligible for the KCTCS Scholars Award.

## GCTC AS TO NKU BS IN BIOLOGICAL SCIENCES CHECKLIST

### Gateway Community and Technical College

#### Category 1: GCTC General Education Core Requirements

GCTC Course	Course or Category	Credits	NKU Course	Completed
ENG 101	Writing I (WC)	3	ENG 101	
Taken at NKU	Advanced Writing in Biology (WC)	3	BIO 291W	
TBS XXX	Oral Communication (OC)	3	TBD XXX	
TBS XXX	Arts & Humanities Course (AH) – Heritage	3	TBD XXX	
TBS XXX	Arts & Humanities Course (AH) – Humanities	3	TBD XXX	
TBS XXX	Social & Behavioral Sciences Course (SB)	3	TBD XXX	
TBS XXX	Social & Behavioral Sciences Course (SB)	3	TBD XXX	
BIO 114/115	Biology I / Lab (NS)	4	BIO 150/150L	
BIO 116/117	Biology II / Lab (SL)	4	BIO 151/151L	
MAT 150 or  MAT 171	College Algebra (QR) or  Precalculus (QR) (for students wanting to take MAT 175 Calculus I)	3-5	(MAT 102 or MAT 103) + MAT 100T MAT 119	
STA 220	Statistics (QR)	3	STA 205	
	<b>Subtotal General Education Core Courses</b>	<b>35-37</b>		

TBS XXX means to be selected by GCTC student.

TBD XXX means to be determined by NKU based on course selected.

MAT 150 is a prerequisite for science and mathematics courses. A grade of A or B in MAT 150 equates to MAT 103 + MAT 100T at NKU. A grade of C or D in MAT 150 equates to MAT 102 + MAT 100T.

For Social and Behavioral Sciences courses, two disciplines must be represented and different from those in the Arts and Humanities category.

#### Category 2: GCTC AS Requirements

GCTC Course	Course or Category	Credits	NKU Course	Completed
CHE 170/175	General College Chemistry I / Lab	5	CHE 120/120L	
CHE 180/185	General College Chemistry II / Lab	5	CHE 121/121L	
	<b>Subtotal AS Requirement Courses</b>	<b>10</b>		

#### Category 3: GCTC Electives

GCTC Course	Course or Category	Credits	NKU Course	Completed
FYE 105	Achieving Academic Success	3	UNV 100T	
CIT 105 or OST 105	Introduction to Computers or Intro to Information Systems	3	BIS 101	

GCTC Course	Course or Category	Credits	NKU Course	Completed
MAT 170 or MAT 175	Brief Calculus with Applications or Calculus I	3-5	MAT 112 or MAT 129	
PHY 201/202	College Physics I / Lab	5	PHY 211	
TBS XXX	Elective (if degree hour requirements not yet met, students can take GW PHY 203/204 or EST 150 to fulfill final elective)	0-5	TBD XXX	
	<b>Subtotal Elective Courses</b>	<b>14-17</b>		
	<b>Total Associate Degree Hours</b>	<b>61-64</b>		

If completing digital literacy by other means, additional credits will be required to fulfill elective requirements.

Degree Requirement: One course must be selected from the KCTCS identified Cultural Competence course list in the KCTCS catalog.

All tracks of the BS Biological Sciences degree at NKU require either MAT 112 (Gateway's MAT 170) or MAT 129 (Gateway's MAT 175).

### Northern Kentucky University

#### Category 4: NKU Major Core Requirements for the BS in Biological Sciences

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
BIO 150/150L	Introduction to Biology I and Laboratory	4	BIO 114/115	x
BIO 151/151L	Introduction to Biology II and Laboratory	4	BIO 116/117	x
BIO 155	Orientation to Biology	1		
BIO 291W	Advanced Writing in Biology	3	At NKU	x
BIO 304/304L	General Ecology	3	EST 150	
BIO 349/349L	Genetics and Laboratory	4		
BIO 458	Evolution of Organisms	3		
BIO 491	Comprehensive Examination	0		
CHE 120/120L	General Chemistry I and Laboratory	4	CHE 170/175	x
CHE 121/121L	General Chemistry II and Laboratory	4	CHE 180/185	x
PHY 211/213 or PHY 220/222	General Physics with Laboratory I and II or University Physics with Laboratory I and II	8-10	PHY 201/202 and PHY 203/204 or PHY 231/241 and PHY 232/242	x (still need PHY 213 if didn't take PHY 203/204)
STA 205	Statistical Methods	3	STA 220	x
TBS XXX	Foreign language at the 102 or higher level. Can be met by a two-course sequence, CLEP or AP exam equivalency.	0-6		

**Category 5: NKU Major Track Requirements for the BS in Biological Sciences – General Biology Track**

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
TBS XXX	Select one course from the cellular/molecular/genetics group (see NKU catalog for choices)	3-4		
TBS XXX	Select one course from the ecology/evolution/organismal group (see NKU catalog for choices)	3-4		
TBS XXX	Select 3 courses from the CMG, EEO, or general elective groups. Students may take electives from across these different groups. At least one of the 5 total electives must be a course with an associated lab component.	9-12		
CHE 310/310L	Organic Chemistry I and Laboratory	4	CHE 270/275	
CHE 311/311L	Organic Chemistry II and Laboratory	4	CHE 280/285	
MAT 112 or MAT 128 or MAT 129	Applied Calculus or Calculus A or Calculus I	3-4	MAT 170 or MAT 175	x
	<b>Subtotal Major Credit Hours at NKU</b>	<b>38-46</b>		
	<b>Subtotal Major Credit Hours at GCTC</b>	<b>29-30</b>		
	<b>Total Major Credit Hours</b>	<b>67-76</b>		

Note: Students majoring in BS Biological Sciences may choose from the following tracks: General Biology Track, Cellular/Molecular/Genetics Track, Ecology/Evolution/Organismal Track, Forensic Science Track, or Pharmaceutical Sciences Track. Category 5 above outlines the courses for the General Biology Track. Students interested in another track should see the course catalog and work with an NKU advisor. Additionally, students interested in Pre-Med, Pre-Physician Assistant, or Pre-Dental coursework should see the Biological Sciences (Cellular/Molecular/Genetics Track) pathway.

**Category 6: Additional Requirements at NKU**

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	<b>Subtotal Elective (including 300/400 Level) Credit Hours</b>	<b>10-21</b>		
	<b>Total Baccalaureate Degree Credit Hours</b>	<b>120</b>		

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