



TWO DEGREES, ONE PATH

TRANSFER PATHWAY GUIDE 2024-2025

Associate in Science to Bachelor of Science in Biological Sciences
(Cellular/Molecular/Genetics Track)

Recommended for: Pre-Dental, Pre-Medical, or Pre-Physician Assistant

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 (Cellular/Molecular/Genetics Track) 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. In addition, 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.

Students who wish to pursue careers in medicine, including osteopathic medicine, and students who wish to become a physician's assistant may fulfill their admission requirements with any degree provided they fulfill the specific course requirements of those professional programs. Students interested in medicine should work closely with their advisors who will help ensure they complete the specific requirements for their desired programs and their NKU bachelor's degrees. Departments such as Biological Sciences have professional advisors and pre-Med/pre-Physician Assistant faculty mentors. Read more about Pre-Med or Pre-PA requirements in our catalog.

Students who wish to pursue careers in dentistry often choose majors in the natural sciences and mathematics, but they may fulfill their dental school admission requirements with any degree, provided they fulfill the specific dental school course requirements. Students interested in dentistry should work closely with an advisor who will help ensure they complete the specific requirements for their desired programs and their NKU bachelor's degrees. The Biological Sciences department has professional advisors and pre-Dental faculty mentors. Read more about Pre-Dental requirements in our catalog.

Even though the biological sciences major does not require a secondary area of study (e.g. minor or focus), students completing the CMG track will complete a chemistry minor as the requirement for this minor are incorporated into the track.

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
(CELLULAR/MOLECULAR/GENETICS TRACK) 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 (PHI 110 - Medical Ethics recommended)	3	TBD XXX (PHI 220)	
TBS XXX	Social/Behavioral Science (SB)	3	TBD XXX	
TBS XXX	Social/Behavioral Science (SB)	3	TBD XXX	
BIO 114/115	Biology I with Lab (NS)	4	BIO 150/150L	
BIO 116/117	Biology II with Lab (SL)	4	BIO 151/151L	
MAT 150	College Algebra (QR)	3	(MAT 102 or MAT 103) + MAT 100T	
STA 220	Statistics (QR)	3	STA 205	
	Subtotal General Education Core Courses	35		

TBS XXX means to be selected by GCTC student.

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

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

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.

Category 2: GCTC AS Requirements

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

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
PHY 201/202	General College Physics I / Lab	5	PHY 211	
PHY 203/204	General College Physics II and Laboratory	5	PHY 213	
	Subtotal Elective Courses	16		
	Total Associate Degree Hours	61		

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

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

Northern Kentucky University

Category 4: NKU Major Requirements for the BS in Biological Sciences (Cellular/Molecular/Genetics Track)

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
BIO 150/150L	Introduction to Biology I and Lab	4	BIO 114/115	x
BIO 151/151L	Introduction to Biology II and Lab	4	BIO 116/117	x
BIO 155	Orientation to Biology	1		
BIO 291W	Advanced Writing in Biology	3	Taken at NKU	x
BIO 302/302L	General Microbiology with Lab	4		
BIO 304/304L	General Ecology	4	EST 150	
BIO 349/349L	Genetics and Laboratory	4		
BIO 436	Advanced Biology of the Cell	3		
BIO 458	Evolution of Organisms	3		
BIO 491	Comprehensive Examination	0		
TBS XXX	Select 1 course from the Cellular/Molecular/Genetics group (see NKU catalog for choices)	3-4		
TBS XXX	Select 1 course from the CMG, EEO or general electives group (see NKU catalog for choices)	3-4		
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
CHE 310/310L	Organic Chemistry I / Lab	4	CHE 270/275	
CHE 311/311L	Organic Chemistry II / Lab	4	CHE 280/285	
CHE 482	Biochemistry I	3		
CHE 483	Biochemistry II	3		
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	x
MAT 112 or MAT 128 or MAT 129	Applied Calculus or Calculus A or Calculus I	3-4	MAT 170 or MAT 175	
STA 205	Statistical Methods	3	STA 220	x

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
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	SPA 101 & SPA 102 or FRE 101 & FRE 102, or GER 101 & GER 102 or RAE 101 and RAE 102 or JPN 101 and JPN 102 or SED 101 and SED 102	
	Subtotal Major Credit Hours at NKU	42-51		
	Subtotal Major Credit Hours at GCTC	30		
	Total Major Credit Hours	72-81		

Category 5: Additional Requirements at NKU

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	Subtotal Elective (300/400 level) Hours	8-17		
	Total Baccalaureate Degree Credit Hours	120		

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