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## TWO DEGREES, ONE PATH

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### TRANSFER PATHWAY GUIDE 2025-2026

Associate in Science to  
Bachelor of Science in Biological Sciences (General Biology Track, Forensic Science  
Track, and Medical Laboratory Sciences Track)

#### ***Overview***

Completion of the following curriculum will satisfy the requirements for the Associate in Science (AS) at a Kentucky Community and Technical College System (KCTCS) institution and leads to the Bachelor of Science (BS) in Biological Sciences (General Biology Track) at Northern Kentucky University (NKU).

#### ***Applying to the KCTCS2NKU 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 a KCTCS institution, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at their KCTCS institution.

#### ***Degree Requirements for KCTCS***

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) demonstration of digital literacy, and 5) 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.

Students pursuing a degree in the biological sciences may do so by choosing one of seven 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 biological science 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 the General Biology track 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 a KCTCS institution.

**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.

**KCTCS AS TO NKU BS IN BIOLOGICAL SCIENCES CHECKLIST**  
**Kentucky Community and Technical College System Institution**

**Category 1: KCTCS General Education Core Requirements**

KCTCS Course	Course or Category	Credits	NKU Course	Completed
ENG 101	Writing I (WC)	3	ENG 101	
ENG 102	Writing II (WC)	3	ENG 102	
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 or BIO 150/151 or BIO 148U/155U	Biology I with Lab (SL) or Principles of Biology I with Lab (SL) or Introductory Biology I with Lab	4-5	BIO 150/150L	
CHE 170/175*	General College Chemistry I with Lab (SL)	5	CHE 120/120L	
MAT 150	College Algebra (QR)	3	(MAT 102 or MAT 103) + MAT 100T	
STA 220	Statistics (QR)	3	STA 205	
	<b>Subtotal General Education Core Courses</b>	<b>36-37</b>		

\*Labs must be taken in person

TBS XXX means to be selected by KCTCS student.

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

A grade of A or B in MAT 150 equates to MAT 103 + MAT 100T. Grade of C or D in MAT 150 equates to MAT 102 + MAT 100T.

MAT 151 or STA 151 or MAT 161 in addition to STA 251 can be substituted for STA 220.

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

**Category 2: KCTCS AS Requirements**

KCTCS Course	Course or Category	Credits	NKU Course	Completed
BIO 116/117 or BIO 152/153	Biology II with Lab (SL)	4-5	BIO 151/151L	
CHE 180/185	General College Chemistry II with Lab (SL)	5	CHE 121/121L	
	<b>Subtotal AS Requirement Courses</b>	<b>9-10</b>		

### Category 3: KCTCS Electives

KCTCS Course	Course or Category	Credits	NKU Course	Completed
	Digital Literacy	0-3		
	First-Year College Success Course/Experience	0-3		
MAT 155 or MAT 160 or MAT 171	Trigonometry or Precalculus or Precalculus	3-5	MAT 100G MAT 119 MAT 103 + MAT 119	
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 with Lab	5	PHY 211	
TBS XXX	Elective (students can take PHY 203/204 and/or EST 150 to fulfill NKU requirement)	0-6	TBD XXX	
	<b>Subtotal Elective Courses</b>	<b>13-15</b>		
	<b>Total Associate Degree Hours</b>	<b>60</b>		

### Northern Kentucky University

#### Category 4: NKU Major Requirements for the BS in Biological Sciences (General Biology Track)

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
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	Taken at NKU	
BIO 304/304L	General Ecology and Laboratory	4	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)

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
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		
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 with Lab	4	CHE 270/275	
CHE 311/311L	Organic Chemistry II with Lab	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 174 or MAT 175	x
	<b>Subtotal Major Credit Hours at NKU</b>	<b>40-50</b>		
	<b>Subtotal Major Credit Hours at KCTCS</b>	<b>29-30</b>		
	<b>Total Major Credit Hours</b>	<b>69-80</b>		

#### Category 5: Additional Requirements at NKU

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	<b>Subtotal Elective (including 300/400 Level) Credit Hours</b>	<b>10-20</b>		
	<b>Total Baccalaureate Degree Credit Hours</b>	<b>120</b>		

#### Category 6: NKU Forensic Science Track

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
CHE 310/310L	Organic Chemistry I with Lab	4	CHE 230 & 231 or CHE 270 & CHE 275	
CHE 311/311L	Organic Chemistry II with Lab	4	CHE 232 & 233 or CHE 280 & CHE 285	
CHE 482/482L	Biochemistry I with Lab	4		
JUS 101	Introduction to Criminal Justice	3	JUS 101	
JUS 204	Criminal Investigation	3	CRJ 201	
MAT 112 or MAT 129	Applied Calculus Calculus I	3-4	MAT 170 or	

			MAT 174 or MAT 175	
Choose 2:  BIO 302/302L BIO 320/320L BIO 342 BIO 380L BIO 400/400L BIO 425/425L  BIO 426/426L  BIO 430/430L BIO 436 BIO 455L BIO 470 CHE 340/340L CHE 350/350L JUS 320  ENV 350	Choose two from the following (1 must contain a lab): General Microbiology with Lab (4) Entomology with Lab (4) Biometry (3) Human Cadaver Dissection (2) Adv. Molecular Biology with Lab (4) Adv. Human Anatomy & Physiology I with Lab (4) Adv. Human Anatomy & Physiology II with Lab (4) Immunology with Lab (4) Advanced Biology of a Cell (3) Scanning Electron Microscopy (3) Medical Microbiology (4) Analytical Chemistry with Lab (5) Instrumental Analysis with Lab (4) Adv. Crime Scene Technology and Criminalistics (3) Environmental Toxicology (3)	10-13	CHE 220	
	<b>Subtotal Forensic Science Track Additional Credit Hours</b>	<b>29-36</b>		

### Category 7: NKU Medical Laboratory Sciences Track

This track comprises a 3+1 schedule with 3 years of core science courses at NKU and 1 year of experiential courses at St. Elizabeth Healthcare facilities. Students will take 12 credits (beyond the Biology core) at NKU and 34 credits at St. Elizabeth Healthcare.

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	<b>Students will take the following at NKU:</b> BIO 302 General Microbiology (3) BIO 302L General Microbiology Laboratory (1) CHE 310 Organic Chemistry I (3) CHE 310L Organic Chemistry I Laboratory (1) CHE 311 Organic Chemistry II (3) CHE 311L Organic Chemistry II Laboratory (1)	12	CHE 270 CHE 275 CHE 280 CHE 285	
	<b>Students will take the following through St. Elizabeth:</b> Immunohematology (5) Clinical Chemistry (5) Clinical Microbiology, Mycology, Parasitology, & Molecular (10) Hematology & Coagulation (7) Urinalysis (3)	34		

	Immunology (3) Laboratory Operations (1)			
	<b>Subtotal Medical Laboratory Sciences Track Additional Credit Hours</b>	<b>46</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, or Pharmaceutical Sciences Track. Category 4 above outlines the courses for the General Biology Track. Category 6 above outlines the courses for the Forensic Science Track. Category 7 above outlines the courses for the Medical Laboratory Sciences Track. Students interested in another track should see the course catalog and work with an NKU advisor.

Additionally, students interested in pre-professional pathways (e.g. pre-med, pre-PA, pre-vet, pre-dental, pre-PT) should work closely with an advisor to ensure they are completing the necessary pre-admission requirements.

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