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## TWO DEGREES, ONE PATH

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### TRANSFER PATHWAY GUIDE 2024-2025

Associate of 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 of Science (AS) degree at Cincinnati State (CState) and leads to the Bachelor of Science (BS) in Biological Sciences degree at Northern Kentucky University (NKU).

#### ***Applying to the CState2NKU 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 Cincinnati State, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at Cincinnati State.

#### ***Degree Requirements for Cincinnati State***

1) Completion of minimum 62 credit hours, 36 of which from approved Ohio Transfer 36 courses, 2) minimum cumulative GPA 2.0, 3) completion of an FYE course as part of the first 12 credit hours taken at Cincinnati State, and 4) completion of Cooperative Education.

#### ***Admission Requirements for 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.

A biological sciences major does not require a secondary area of study (e.g. minor or focus).

### ***Advising Note***

Students in the CState2NKU program should work closely with their advisors when choosing courses. This document serves as a guide but does not replace academic advising. When choosing Cincinnati State courses, student may also consult the Associate of Arts advising brochure or the catalog for A and B list courses in Arts and Humanities or Social and Behavioral Sciences. Some courses in this document may have prerequisites that are not reflected in the grid. Students should work with their advisor to ensure that all prerequisites are met.

**CINCINNATI STATE AS TO NKU BS IN BIOLOGICAL SCIENCES  
(CELLULAR/MOLECULAR/GENETICS TRACK) CHECKLIST**

**Cincinnati State**

**Category 1: Ohio Transfer 36 Requirements**

<b>CState Course</b>	<b>Course or Category</b>	<b>Credits</b>	<b>NKU Course</b>	<b>Completed</b>
ENG 101	English Composition 1	3	ENG 101	
ENG 102 or ENG 103 or ENG 104 or ENG 105	English Composition 2: Contemporary Issues English Composition 2: Writing about Literature English Composition 2: Technical Communication English Composition 2: Business Communication	3	ENG 102 or (GWR 200G)	
COMM 110	Public Speaking	3	CMST 101	
TBS XXX	Arts/Humanities List A Elective	3	TBD XXX	
TBS XXX	Arts/Humanities List B Elective	3	TBD XXX	
TBS XXX	Social/Behavioral Science List A Elective	3	TBD XXX	
TBS XXX	Social/Behavioral Science List B Elective	3	TBD XXX	
MAT 215 or MAT 251	Business Calculus or Calculus I	5-6	MAT 112 MAT 129	
BIO 131	Biology 1	5	BIO 150/150L	
BIO 132	Biology 2	5	BIO 151/151L	
MAT 131	Statistics 1	3	MAT 131 + MAT 132 = STA 113 + STA 205	
MAT 132	Statistics 2	3	MAT 131 + MAT 132 = STA 113 + STA 205	
<b>Subtotal General Education Core</b>		<b>42-43</b>		

TBS XXX means to be selected by Cincinnati student.

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

**Category 2: CState Degree Requirements for the AS and NKU Recommendations**

<b>CState Course</b>	<b>Course or Category</b>	<b>Credits</b>	<b>NKU Course</b>	<b>Completed</b>
FYE 1XX	First Year Experience Elective	1	UNV 100T	
HUM 190	Career Exploration Seminar: AA/AS	2	CEP 101	
HUM XXX	Co-op/Internship Elective 1 and Elective 2	2	CEP 300	
CHE 121/131	General Chemistry 1 with Lab	5	CHE 120/120L	
CHE 122/132	General Chemistry 2 with Lab	5	CHE 121/121L	

CState Course	Course or Category	Credits	NKU Course	Completed
PHY 151 and PHY 152 or PHY 201 and PHY 202	Physics 1: Algebra and Trigonometry-Based Physics 2: Algebra and Trigonometry-Based or Physics 1: Calculus-Based Physics 2: Calculus-Based	8-10	PHY 211 PHY 213  PHY 220 PHY 224	
	<b>Total Associate Degree Credit Hours</b>	<b>65-68</b>		

### Northern Kentucky University

#### Category 3: NKU Major Requirements for the BS in Biology - Cellular/Molecular/Genetics Track

NKU Course	Course	Credits	CState Course	Taken at CState
BIO 150/150L	Introduction to Biology I with Lab	4	BIO 131	x
BIO 151/151L	Introduction to Biology II with Lab	4	BIO 132	x
BIO 155	Orientation to Biology	1		
BIO 291W	Advanced Writing in Biology	3		
BIO 302/302L	General Microbiology with Lab	4		
BIO 304/304L	General Ecology with Lab	4		
BIO 349/349L	Genetics with Lab	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 121/ CHE 131	x
CHE 121/121L	General Chemistry II and Laboratory	4	CHE 122/ CHE 132	x
CHE 310/310L	Organic Chemistry I / Lab	4		
CHE 311/311L	Organic Chemistry II / Lab	4		
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 (Students may substitute PHY 224 for PHY 222)	8	PHY 151/ PHY 152 or PHY 201/ PHY 202	x

NKU Course	Course	Credits	CState Course	Taken at CState
MAT 112 or MAT 128 or MAT 129	Applied Calculus or Calculus A or Calculus I	3-4	MAT 215 or MAT 251	x
STA 205	Statistical Methods	3	MAT 131 + MAT 132	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		
	<b>Subtotal Major Credit Hours at NKU</b>	<b>42-50</b>		
	<b>Subtotal Major Credit Hours at CState</b>	<b>30</b>		
	<b>Total Major Credit Hours</b>	<b>71-80</b>		

**Category 4: Additional Requirements at NKU**

	Category	Credits		
	<b>Subtotal Elective Credit Hours ( may need 300+ level courses)</b>	<b>2-13</b>		
	<b>Total Baccalaureate Degree Credit Hours</b>	<b>120</b>		

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