

# TRANSFER PATHWAY GUIDE

# 2019-2020

Associate in Science to Bachelor of Science in Biological Sciences   
(Pre-Medical or Physician Assistant)

## Overview

Completion of the following curriculum will satisfy the requirements for the Associate in Science degree at Gateway Community and Technical College and leads to the Bachelor of Science in Biological Sciences (Pre-Medical or Physician Assistant) degree at Northern Kentucky University.

## 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 studies course, 5) demonstration of digital literacy, 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. Some departments, such as biological sciences and chemistry, have faculty who are dedicated pre-med advisors.

The two most common degrees sought by pre-med students at NKU are in biological sciences (cellular/molecular/genetics track) and chemistry & biochemistry (biochemistry track). However, regardless of the major a student chooses, the requirements for entry into medical school are met by completing the courses listed below. It is recommended that non-science majors complete several electives at the 300/400/500 level in biology, chemistry, or related disciplines. In addition, courses in mathematics, behavioral and social sciences, and the humanities, provide excellent preparation for medical study. Requirements for professional medical programs generally include:

* One year of biology with labs.
* One year of inorganic/general chemistry with labs.
* One year of organic chemistry with labs.
* One year of physics with labs.
* One year of English/composition courses (discipline-specific 291W/391W courses are accepted).
* Mathematics (varies with programs; usually two semesters of mathematics required).

Recommended for Medical College Admissions Test (MCAT)

* One semester of Introductory Psychology
* One semester of Introduction to Sociology
* One semester of Biochemistry
* One semester of Cell Biology
* One semester of Statistics

## 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

### (PRE-MEDICAL TO PHYSICIAN ASSISTANT) CHECKLIST

### Gateway Community and Technical College

#### Category 1: GCTC General Education Core Requirements (35-37 hours)

| **GCTC Course** | **Course or Category** | **Credits** | **NKU Course** | **Completed** |
| --- | --- | --- | --- | --- |
| ENG 101 | Writing I (WC) | 3 | ENG 101 |  |
| Gateway2NKU | 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 |  |
| PHI 110 or  TBS XXX | Medical Ethics (AH) or  Arts & Humanities Course – Humanities | 3 | PHI 220 or TBD XXX |  |
| SOC 101 | Introduction to Sociology (SB) | 3 | SOC 100 |  |
| PSY 110 | General Psychology (SB) | 3 | PSY 100 |  |
| 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 170 or MAT 175 | Brief Calculus with Applications (QR) or Calculus I (QR) | 3-5 | MAT 112 or  MAT 129 |  |
| STA 251 | Applied Statistics (QR) | 3 | STA 100G |  |
|  | **Subtotal General Education Core Courses** | **35-37** |  |  |

TBS XXX means to be selected by GCTC student.

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

One of these courses must be selected from the KCTCS identified Cultural Studies course list, indicate by placing (CS) next to the course name in Category 1 or 2 table.

STA 251 has a pre-requisite of MAT 151 or MAT 161. (MAT 151 or MAT 161) + STA 251 = STA 205.

#### Category 2: GCTCS AS Requirements (10 hours)

| **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: GCTCS Electives (21 hours)

| **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 |  |
| EST 150 | Introductory Ecology | 4 | BIO 304/304L |  |
| CHE 270/275 | Organic Chemistry I with Lab | 5 | CHE 310/310L |  |
|  | **Subtotal Elective Courses** | **15** |  |  |
|  | **Total Associate Degree Hours** | **60-62** |  |  |

### Northern Kentucky University

#### Category 4: Major Requirements for the BS in Biological Sciences (Pre-Medical or Physician Assistant)

| **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 302/302L | General Microbiology with Lab | 4 |  |  |
| BIO 304/304L | General Ecology and Laboratory | 3 | EST 150 | x |
| BIO 349/349L | Genetics and Laboratory | 4 |  |  |
| BIO 400/400L or BIO 436 | Advanced Molecular Biology with Lab or  Advanced Biology of the Cell | 3-4 |  |  |
| BIO 458 | Evolution of Organisms | 3 |  |  |
| BIO 491 | Comprehensive Examination | 0 |  |  |
| TBS XXX  TBS XXX | Choose 2 courses from the Cellular/  Molecular/Genetics Track (see catalog) | 6-8 |  |  |
| 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 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 | 8-10 | PHY 201/202  and  PHY 203/204 |  |
| MAT 112 or  MAT 128 or  MAT 129 | Applied Calculus or  Calculus A or  Calculus I | 3-4 | MAT 170 or MAT 175 | x |
| STA 205 | Statistical Methods | 3 | (MAT 151 or MAT 161) +  STA 251 | 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 |  |  |
|  | **Subtotal Major Credit Hours at NKU** | **43-54** |  |  |
|  | **Subtotal Major Credit Hours at GCTC** | **28-29** |  |  |
|  | **Total Major Credit Hours** | **71-83** |  |  |

**Category 5: Additional Requirements at NKU**

| **NKU Course** | **Course** | **Credits** | **KCTCS Course** | **Taken at KCTCS** |
| --- | --- | --- | --- | --- |
|  | **Subtotal Elective (300/400 level) Hours** | **6-17** |  |  |
|  | **Total Baccalaureate Degree Credit Hours** | **120** |  |  |

Updated September 2019