

MD Program, MS Anesthesia, Physician Assistant

University of Missouri - Kansas City

Johnson County Community College Transfer Program to the University of Missouri - Kansas City	James Shackelford
School of Medicine	816-235-1870
Master of Medical Science - Physician Assistant; Master of Science in Anesthesia	medicine@umkc.edu
Academic Year 2025-2026	http://med.umkc.edu/

Program Description

The Associate of Arts, AA (<https://catalog.jccc.edu/archives/2025-26/degree/requirements/associate-arts/>) at JCCC is a general transfer degree and partners well with the first two years of most bachelor degree programs. Students pursuing the AA may select courses that satisfy both the AA degree requirements and lower division requirements for a bachelor's degree at four-year institutions. The elective hours within the AA allow students to complete additional general education and lower division courses required for specific majors. The AA degree requires completion of 60 credit hours. Meeting with a JCCC counselor (<https://www.jccc.edu/student-resources/counseling/academic-counseling/>) is strongly recommended for selection of appropriate courses.

NOTE: Completing an Associate of Arts degree or the Associate of Science in General Sciences at JCCC will satisfy all general education requirements at UMKC including the Missouri Constitution Course requirement. *It is highly recommended that students complete the associate's degree prior to transfer to UMKC whenever possible.*

General UMKC Transfer Admission Requirements:

- 2.0 or higher cumulative GPA.
- Credit/No-credit or Pass/Fail coursework may only be applied to elective coursework and will not apply towards UMKC's General Education Core or major requirements.
- Visit the Full transfer admission requirements (<https://www.umkc.edu/transfer/apply.html>) for more information.

Admission Requirements for UMKC MD Program

Coursework

- Have earned, or will soon earn, a baccalaureate, master's or doctoral degree awarded from a regionally- accredited college or university located in the United States.
- Earned a minimum cumulative GPA of 3.0 (graduate or undergraduate)
 - Out-of-state students are required to have a cumulative GPA of 3.5
- Earned a minimum GPA of 3.0 in the AMCAS BCPM (Biology, Chemistry, Physics, and Math coursework), graduate or undergraduate
 - Out-of-state students are required to have a GPA of 3.5 in the AMCAS BCPM
- Completed one semester each of these three prerequisites with a grade of "B" or better: biochemistry (upper level), genetics and cell biology. These courses must be completed with a grade of "B" or better at a regionally accredited college or university located in the United States.

MCAT Score

- The Medical College Admission Test is required with a minimum score of 495.
- MCAT scores must have been earned within three years of the application deadline.
- The latest MCAT score accepted for initial application review is the July MCAT. (Scores must be sent to AMCAS by August 1st.) If a student is selected for an interview, the latest MCAT score accepted for final review by the Council on Selection is the August MCAT.
- UMKC School of Medicine MCAT code: 808.

Admissions Eligibility

- Permanent resident status must be achieved by August 1 of the year before the spring term for which applicant is applying. A copy of the permanent resident card must accompany the general application for admission.
- International students are not eligible for admission to the M.D. program.
- Must not have been enrolled as a medical student at another medical school or at UMKC School of Medicine.
- Although out-of-state students are welcome to apply to the M.D. Program, preference and priority consideration is given to in-state students from the state of Missouri as well as to regional students from the states of Arkansas, Illinois, Kansas, Nebraska, and Oklahoma.

Visit the UMKC MD Program (<https://med.umkc.edu/academics/degree-and-certificate-programs/md/requirements.html>) for more information.

Admission Requirements for UMKC Master of Medical Science - Physician Assistant Program

Coursework

- Applicants for admission to the MMSPA program must have earned, or will soon earn, a baccalaureate, masters or doctoral degree from a regionally accredited college or university located in the United States or Canada.
- Applicants must earn a minimum cumulative GPA of 3.0.
- Applicants must complete the following pre-requisite coursework (science major level courses) prior to matriculation, with a pre-requisite GPA of 3.0 or higher. It is required that applicants earn a grade of "C" or better in all coursework:
 - One semester of general biology with lab
 - One semester of anatomy with lab (human anatomy preferred)
 - One semester of physiology with lab (One semester of anatomy and physiology with lab (4+ credit hour course) may be accepted for one semester of anatomy with lab and one semester of physiology with lab)
 - One semester of microbiology with lab
 - Two semesters of general chemistry (or equivalent) with lab
 - One semester of organic chemistry with lab
 - One semester of biochemistry (upper-level course)
 - One semester of statistics
 - One medical terminology course
 - One semester of genetics
 - One semester of psychology
- Pre-requisite coursework must be completed at a regionally accredited college or university located in the United States or Canada, preferably within seven years of the application deadline.

MCAT or GRE Score

The MCAT or GRE exam is no longer required.

Shadowing Experience

It is the STUDENT'S RESPONSIBILITY to check for updates to all transfer information. This transfer guide is provided as a service and is updated as needed. Degree requirements at the four-year colleges are subject to change by those institutions. To ensure you have the most accurate information about the program, you must meet with an advisor at the transfer institution.

Recommended Transfer Courses

Recommended Transfer Courses for MD Program Prerequisites:

Course Code Code	Course Title Title	Course Hours	Transfer Code Hours	Transfer Title	Transfer Hours
BIOL 135	Principles of Cell and Molecular Biology (Prerequisite for BIOLOGY 202)	4	BIOLOGY 108	General Biology I	3
BIOL 150	Biology of Organisms* (Prerequisite for BIOLOGY 202)	5	BIOLOGY 109	General Biology II	3
BIOL 205	General Genetics* (One semester of genetics)	4	BIOLOGY 206	Genetics	3
BIOL 135	Principles of Cell and Molecular Biology (One semester of cell biology)^	4	BIOLOGY 202	Cell Biology	3

LS-BIOC 341 Basic Biochemistry (One semester of biochemistry (Upper Division)): No Equivalent, but prerequisites for this upper-level course can be taken at JCCC.

BIOLOGY 202 Cell Biology (Prerequisite for LS-BIOC 341): No Equivalent, but prerequisites for this course can be taken at JCCC.

* JCCC course has a prerequisite or corequisite.

^ Not Equivalent to UMKC BIOLOGY 202, but meets the "cell biology" requirement.

Recommended Transfer Courses for Physician Assistant Program Prerequisites:

Course Code Code	Course Title Title	Course Hours	Transfer Code Hours	Transfer Title	Transfer Hours
One semester of general biology with lab					
Select one of the following:					
BIOL 135	Principles of Cell and Molecular Biology	4	BIOLOGY 108 & BIOLOGY 108L	General Biology I and General Biology I Lab	4
BIOL 150	Biology of Organisms*	5	BIOLOGY 109 & BIOLOGY 109L	General Biology II and General Biology II Lab	4
One semester of anatomy with lab (human anatomy preferred) AND one semester or physiology with lab OR One semester of anatomy and physiology with lab, 4 credit hours					
BIOL 140 & BIOL 225	Human Anatomy and Human Physiology*	4	BIOLOGY 218 & BIOLOGY 218L & LS-PHYS 217 & BIOLOGY 217L	Introductory Anatomy and Introductory Anatomy Lab and Human Physiology and Human Physiology Lab	9



BIOL 144 & BIOL 145	Human Anatomy and Physiology* and Human Anatomy and Physiology Dissection* +	5	Biology Elective		
One semester of microbiology with lab					
BIOL 230 & BIOL 231	Microbiology* and Microbiology Lab*	3	BIOLOGY 113 Introductory Microbiology AND BIOLOGY 114 Microbiology Disease Lab		
Two semesters of general chemistry with lab					
CHEM 124 & CHEM 125 & CHEM 131 & CHEM 132	General Chemistry I Lecture* and General Chemistry I Lab* and General Chemistry II Lecture* and General Chemistry II Lab*	4	CHEM 211 & CHEM 211L & CHEM 212R & CHEM 212LR	General Chemistry I and Experimental Gen Chemistry I and General Chemistry II and Experimental Gen Chemistry II	10
One semester of organic chemistry with lab					
Select one of the following:					
CHEM 140	Principles of Organic Biological Chemistry*	5	CHEM 320 Elementary Organic Chemistry AND CHEM 320L Elementary Organic Chemistry Lab		
CHEM 220	Organic Chemistry I*	5	CHEM 321 & CHEM 321L	Organic Chemistry I and Organic Chemistry Lab I	4
BIOL 135	Principles of Cell and Molecular Biology (Prerequisite for BIOLOGY 202)	4	BIOLOGY 108	General Biology I	3
BIOL 150	Biology of Organisms* (Prerequisite for BIOLOGY 202)	5	BIOLOGY 109	General Biology II	3
CHEM 124 & CHEM 125	General Chemistry I Lecture* and General Chemistry I Lab* (Prerequisite for CHEM 212R/LR)(Both with "C-" or better)	4	CHEM 211 & CHEM 211L	General Chemistry I and Experimental Gen Chemistry I	5
CHEM 131 & CHEM 132	General Chemistry II Lecture* and General Chemistry II Lab* (Prerequisite for BIOLOGY 202)	4	CHEM 212R & CHEM 212LR	General Chemistry II and Experimental Gen Chemistry II	5
One semester of statistics					
MATH 201	Statistics*	3	STAT 235	Elementary Statistics	3
One medical terminology course					
HC 130	Medical Terminology for Healthcare Professions	3	HLSC 125	Medical Terminology	1
One semester of genetics					
BIOL 205	General Genetics*	4	BIOLOGY 206 Genetics		
One semester of psychology					
PSYC 130	Introduction to Psychology	3	PSYCH 210	General Psychology	3

LS-BIOC 341 Basic Biochemistry (One semester of biochemistry (Upper Division)): No Equivalent, but prerequisites for this upper-level course can be taken at JCCC.

BIOLOGY 202 Cell Biology (Prerequisite for LS-BIOC 341): No Equivalent, but prerequisites for this course can be taken at JCCC.

* JCCC course has a prerequisite or corequisite.

+ Transfers into UMKC as Biology Elective but meets Anatomy/Physiology requirement.

Recommended Transfer Courses for Master of Science in Anesthesia Program Prerequisites:

Course Code Code	Course Title Title	Course Hours	Transfer Code Hours	Transfer Title	Transfer Hours
Two semesters of biology with lab					
BIOL 135 & BIOL 150	Principles of Cell and Molecular Biology and Biology of Organisms*	4	BIOLOGY 108 & BIOLOGY 108L & BIOLOGY 109 & BIOLOGY 109L	General Biology I and General Biology I Lab and General Biology II and General Biology II Lab	8
Two semesters of general chemistry with lab					
CHEM 124 & CHEM 125 & CHEM 131 & CHEM 132	General Chemistry I Lecture* and General Chemistry I Lab* and General Chemistry II Lecture* and General Chemistry II Lab*	4	CHEM 211 & CHEM 211L & CHEM 212R & CHEM 212LR	General Chemistry I and Experimental Gen Chemistry I and General Chemistry II and Experimental Gen Chemistry II	10
One semester of organic chemistry I with lab					
CHEM 220	Organic Chemistry I*	5	CHEM 321 & CHEM 321L	Organic Chemistry I and Organic Chemistry Lab I	4
One semester of organic chemistry II with lab					
CHEM 221	Organic Chemistry II*	5	CHEM 322R & CHEM 322L	Organic Chemistry II and Organic Chemistry Lab II	4
Two semesters of physics with lab (sophomore level)					
PHYS 130 & PHYS 131	College Physics I* and College Physics II*	5	PHYS 210 General Physics I AND PHYS 220 General Physics II		
BIOL 135	Principles of Cell and Molecular Biology (Prerequisite for BIOLOGY 202)	4	BIOL 108 & BIOLOGY 108	General Biology I and General Biology I	3
BIOL 150	Biology of Organisms* (Prerequisite for BIOLOGY 202)	5	BIOLOGY 109	General Biology II	3
CHEM 124 & CHEM 125	General Chemistry I Lecture* and General Chemistry I Lab* (Prerequisite for CHEM 212R/LR)(Both with "C-" or better)	4	CHEM 211 & CHEM 211L	General Chemistry I and Experimental Gen Chemistry I	5
CHEM 131 & CHEM 132	General Chemistry II Lecture* and General Chemistry II Lab* (Prerequisite for BIOLOGY 202)	4	CHEM 212R & CHEM 212LR	General Chemistry II and Experimental Gen Chemistry II	5

One semester of anatomy with lab (human anatomy preferred) AND one semester or physiology with lab OR One semester of anatomy and physiology with lab, 4 credit hours

BIOL 140 & BIOL 225	Human Anatomy and Human Physiology*	4	BIOLOGY 218 & BIOLOGY 218L & LS-PHYS 217 & BIOLOGY 217L	Introductory Anatomy and Introductory Anatomy Lab and Human Physiology and Human Physiology Lab	9
BIOL 144 & BIOL 145	Human Anatomy and Physiology* and Human Anatomy and Physiology Dissection* +	5	Biology Elective		

One semester of mathematics (calculus, precalculus, additional statistics, college algebra or trigonometry)

MATH 171	College Algebra*	3	MATH 110	"Math, Its Form and Impact"	3
MATH 172	Trigonometry*	3	MATH 125	Calculus I	4
MATH 173	Precalculus*	5	MATH 120	Precalculus	5
MATH 241	Calculus I*	5	MATH 210	Calculus I	4
MATH 242	Calculus II*	5	MATH 220	Analytic Geometry Calc I	4

One semester of statistics (quantitative-based)

MATH 201	Statistics*	3	STAT 235	Elementary Statistics	3
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One medical terminology course

HC 130	Medical Terminology for Healthcare Professions	3	HLSC 125	Medical Terminology	1
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LS-BIOC 341 Basic Biochemistry (One semester of biochemistry (Upper Division)): No Equivalent, but prerequisites for this upper-level course can be taken at JCCC.

BIOLOGY 202 Cell Biology (Prerequisite for LS-BIOC 341): No Equivalent, but prerequisites for this course can be taken at JCCC.

* JCCC course has a prerequisite or corequisite.

+ Transfers into UMKC as Biology Elective, but meets Anatomy/Physiology requirement.