

Transfer Guide

Virginia Community College – Associate of Science Degree in Science *or* in Biology to James Madison University Bachelor of Arts *or* Bachelor of Science in Biology

NOTE: As a biology major at JMU, you will choose between pursuing a Bachelor of Arts (B.A.) or a Bachelor of Science (B.S.) degree. The B.A. includes coursework (or demonstrated proficiency) through the intermediate level and a course in philosophy. The B.S. degree includes at least two math courses along with the science courses already embedded in the degree requirements. Choose the degree type that best aligns with your educational goals. Your preferred degree type—B.A. or B.S.—will impact your choices for community college coursework shown below.

Courses to be completed at your Virginia community college

Total credits before transfer: 60

VCCS Course	Credits	JMU Equivalent	Notes
SDV 100 College Success Skills or 101 Orientation to Education	1	UNST 000	
ENG 111 College Comp I	3	WRTC 000	
ENG 112 College Comp II	3	WRTC 103	ENG 111 + 112 both required to satisfy WRTC 103.
UCGS Art, Humanities or Literature - Any	3	Varies	Choose PHIL 101 if you plan to pursue a B.A. degree at JMU.
UCGS Art, Humanities or Literature- Any, but different group than above	3	Varies	
UCGS Social Science - Any	3	Varies	
UCGS History - Any	3	Varies	
Math prerequisites if needed	Varies	Varies	Ex: MTH 154, 161, 162, 167
MTH 245 Statistics	3	MATH 220	
MTH 263 Calculus I	4	MATH 235	Recommended before transfer
BIO 101 General Biology I	4	BIO 140+140L	
BIO 102 General Biology II	4	BIO 150+150L	
CHM 111 General Chemistry I	4	CHEM 131+131L	
CHM 112 General Chemistry II	4	CHEM 132 + 132L	
Additional biology courses if available and/or required for your associate degree. Options: <ul style="list-style-type: none"> BIO 205 Gen. Microbiology BIO 256 Genetics BIO 270 Ecology 	Varies	BIO 205 = BIO 245+245L BIO 256 = BIO 240+240L BIO 270 = BIO 250+250L	Completing one or two of these classes before transfer is helpful but not required.
Additional science courses for students planning to pursue a B.S. degree at JMU. Options: <ul style="list-style-type: none"> PHY 201-202 or 241-242 Physics I-II CHM 241 + 245 and 242 + 246 Organic Chemistry I-II 	Varies	PHY 201 = PHYS 140 + 140L PHY 202 = PHYS 150 + 150L PHY 241 = PHYS 240 +240L PHY 242 = PHYS 250 + 250L CHM 241+242 = CHEM 241+242 CHM 245 + CHM 246 = CHEM 242L + CHEM 280	Completing a two-course physics sequence before transfer can be beneficial. Taking organic chemistry before transfer may not be advised in some situations. Talk to a JMU Next advisor to learn more. <i>Note: You must take both CHM 241 + 242 to receive transfer credit for organic chemistry at JMU.</i>

Other coursework or electives	Varies	Varies	<p>Students pursuing the B.A. are required to complete world language or demonstrate proficiency through the intermediate level (202 at VCCS; 232 at JMU) - finish before transfer if possible.</p> <p>CST 100 or 110 recommended (= SCOM 121 or 122).</p> <p>Otherwise, complete transfer electives to reach 60 total credits for your A.S. degree.</p>
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Note: If a course *required* by JMU based on this guide is not offered at your community college, contact an advisor at your community college to ask about options and/or meet with A JMU Next Transfer Advisor (www.jmu.edu/transfer/advisors), who can help you understand how your JMU progress may be impacted.

Courses to be completed at James Madison University

Total credits at JMU: 60

JMU Courses	Credits	Notes
Math	3-4	Biology B.A. and B.S. students: Complete 3 credits of math in addition to statistics: Calculus I (MATH 231 or 235, can be completed before transfer) or an additional statistics class from MATH 268, 309, 321, 322, 324, 325, 327, 354, 368, BIO 454, BIO 456, or DATA 200.
Biology electives, primarily at the BIO 300-400 level	20-24	Biology B.S. students must complete 24 credits of BIO electives, (up to 8 at 200 level, at least 16 at 300-400 level). Biology B.A. students must complete 20 credits of BIO electives (up to 6 at 200 level, at least 14 at 300-400 level). 200-level electives may be completed before transfer.
Additional Requirements for the B.S. Degree in Biology at JMU		
CHEM 241	3	Organic Chemistry I, if not taken before transfer
Chemistry elective	3	CHEM 242 (Organic Chemistry II), CHEM 353 or 354 (Environmental Chemistry), CHEM 355 (Geochemistry of Natural Waters) or CHEM 361 (Biochemistry I)
Physics	4-8	Biology B.S. students complete a physics cognate with PHYS 125-125L (Physics for the Biological Sciences, 4 credits) or an 8-credit Physics I-II sequence (PHYS 140-140L-150-150L or 240-240L-250-250L).
Additional Requirements for the B.A. Degree in Biology at JMU		
ANTH / ISAT trans-disciplinary cognates	6	Complete ANTH 195 Cultural Anthropology (can be taken before transfer) and ISAT 231 Political Economy of Technology and Science
Elective trans-disciplinary cognates	6	Complete 6 credits of elective transdisciplinary cognates from a list of 20+ options in the JMU course catalog
Philosophy and World Language	Varies	An approved philosophy course and world language through the intermediate level, if not completed prior to transfer
Electives as needed	Varies	Minimum 120 credits to graduate, 60 credits from a 4-year institution. Can be used for a second major, minor (including pre-professional health) or electives.

Total credit hours for the bachelor's degree: 120

Transfer Guidance for the JMU Bachelor of Arts or Bachelor of Science in Biology

Admission into the Biology major at JMU

Students who meet the requirements for guaranteed admission to JMU are guaranteed admission to the Biology major. Students must complete an approved transferable associate degree from their Virginia community college with a minimum GPA of 3.0 for guaranteed admission to JMU. Students who do not qualify for guaranteed admission are encouraged to apply to JMU through the regular admission process. For additional details about requirements for guaranteed admission, please see the JMU letter of intent for your community college:

www.jmu.edu/admissions/apply/transfer-gaa.shtml.

Advising guidance

Students interested in pursuing one of the pre-professional health (PPH) minors at JMU sometimes choose to major in biology. Pre-professional health minors include pre-athletic training, pre-dentistry, pre-medicine, pre-occupational therapy, pre-optometry, pre-pharmacy, pre-physical therapy, pre-physician assistant, and pre-veterinary medicine. If you are considering a PPH minor, you are encouraged to also review information from the Office of Pre-Professional Health Advising at: <https://www.jmu.edu/pph/index.shtml>. Note that in some cases, graduate schools prefer you take certain science courses at a 4-year university rather than community college, such as Anatomy & Physiology and Organic Chemistry. Physics 201-202 can be a good choice to take at your community college before transfer if needed in your pre-professional health area. If you take Anatomy & Physiology prior to transfer, note that **both** BIO 141 + 142 need to be taken at the same institution prior to transfer to be awarded credit for BIO 270 + 270L and BIO 290 + 290L.

If you decided midway through your community college experience that this is the right JMU major for you, but you haven't completed all coursework showing on the transfer guide, you may still apply to JMU as a transfer student. You will need to complete more requirements at JMU than students who completed all the above coursework, which could impact your time to graduation.

To learn more about transferring to JMU in your preferred major, connect with an advisor at your community college and James Madison University within your first year. You can make an appointment directly with a JMU Next Transfer Advisor: www.jmu.edu/transfer/next.



Program successes and highlights

The JMU biology department has gained national recognition for their success at delivering course-based undergraduate research experiences (CUREs) to a large number of students every semester through the 1st year curriculum. Undergraduate Biology majors also gain inquiry-based research experience through faculty mentored research experiences. Biology students present their research at professional symposia and research conferences, and they are co-authors on peer reviewed research articles. In 2021, the Department was awarded an NSF funded Research Experiences for Undergraduate Students (REU) Site grant, specifically targeted to students at community colleges. The Department has maintained its excellent rate of completion for Biology majors with an average 4-yr completion rate of 79.3%.

Is this degree right for me?

Biology is a 65 - 71 cr. major, including BIO (36-40 cr.), MATH (6-7 cr.), CHEM (8-14 cr.) and PHYS (8 cr. for the B.S.). The biology major focuses on core grounding in biology, chemistry, math (calculus and/or statistics), and physics. The major covers everything from molecules to ecosystems in its four introductory BIO courses, and this broad exposure allows students to determine the area of biology of most interest to them for their upper-level BIO electives. The biology major

is suited for any student interested in science, lab or field work, hands-on exploratory investigations, and future careers that look for a strong foundation in biology and other sciences.

Do more with your degree!

The Department of Biology offers majors in Biology and in Biotechnology, as well as a minor in Biology and an accelerated dual degree program (B.S. + M.S.) in Forest Biology. Within the Biology major, students may choose a concentration, if desired, in Ecology and Environmental Biology, Microbiology, Anatomy and Physiology, or Neuroscience. The program comprises a four-semester core and the opportunity to tailor your upper division curriculum based on interest area, particularly within the 20-24 cr. of BIO 300-400 level electives within the major.

Transferring to JMU

Important links and dates

- **University Transfer Center:** www.jmu.edu/transfer
- **Register Intent to Transfer:** Transfer applicants from a VCCS institution intending to apply through the Guaranteed Admission Agreement (GAA) must review requirements and submit a Letter of Intent prior to applying: www.jmu.edu/admissions/apply/transfer-GAA.shtml
- **Admission Application:** By February 1 for Summer, March 1 for Fall, or October 15 for Spring at www.jmu.edu/admissions/apply/apply-online.shtml
- **Financial Aid:** www.jmu.edu/financialaid
- **FAFSA - Free Application for Federal Student Aid:** Deadline is March 1. Learn more at studentaid.gov.

Is this college right for me?

JMU is a mid- to large-size institution that behaves more like a smaller institution. Faculty and staff hold students as the top priority. JMU has a 96% satisfaction rate. 88% of classes have fewer than 50 students. JMU is the #1 most recommended public university in the US by the Wall Street Journal and Times Higher Education; JMU is the #1 Best College for Employment in Virginia according to U.S. Department of Education statistics compiled by Zippia. JMU has the highest post-graduation job levels of all Virginia colleges. Learn more about our college at www.jmu.edu.

What are my chances for getting accepted?

- Generally, two-thirds of transfer applicants are admitted to JMU. Competitive applicants will have mostly As & Bs and have completed at least one class in each of our four core areas (English, mathematics, lab science, and social science).
- JMU defines a transfer student as a student that has graduated from high school (or holds a GED equivalency) and has taken courses in college after high school graduation.
- Learn more about applying at www.jmu.edu/transfer/.

What is the impact on my degree of work I have already completed?

- **Associate Transfer Degree Completion:** An approved transferable associate degree from a Virginia Community College will waive general education requirements at JMU. The list of approved transferable associate degrees can be found at www.jmu.edu/transfer/vccs-transfer/asdegrees.
- **Dual Enrollment – Completion of Associate Degree in High School:** Students who complete a transferable associate degree from a Virginia Community College through Dual Enrollment (DE) will not be eligible for guaranteed admission but will receive the general education waiver at JMU. DE associate degree earners who want to make progress toward their intended major should follow the curriculum in this guide.

- **Credit for Prior Learning:** Credit for prior learning may be awarded differently at JMU than at your previous institution. JMU accepts and reviews AP, IB CIE, and CLEP examinations for all students with eligible scores. JMU will complete an independent review of the test score to apply credit to your JMU student record. Other credit for prior learning is awarded on a per case basis for the ADP and RN-BSN programs in consultation with the department of expertise. Credit for learning acquired in military service is awarded by the registrar's office using the ACE guide's credit recommendation for study/experience listed on the military transcript and in consultation with the department of expertise.
- **Catalog Year:** Catalog year determined by first semester of attendance at JMU

Did you know that...

- There is no limit to the number of credits you can transfer to JMU, but at least 50% of the credits required for graduation in your major must be taken at a 4-year college or university, and at least 25% must be taken at JMU. (Most JMU majors require 120 credits, so 60 must come from a 4-year and 30 must be taken at JMU.)
- Completing your Associate transfer degree post-high school satisfies all lower division general education requirements and increases the chance of completing your bachelor's degree.
- Exceeding 3 years or 90 credits at your community college means you may have exhausted your financial aid at that college and have limited your future financial aid at JMU.
- Students who may be eligible for Virginia's Two-Year College Transfer Grant should transfer in the fall or spring immediately following the completion of their associate degree. Learn more about the state transfer grant here: www.schev.edu/financial-aid/financial-aid/federal-state-financial-aid/two-year-college-transfer-grant.