

Students should check admissions requirements and recommendations of individual professional programs to assure completion of prerequisites.

**Strongly recommended and recommended courses are more likely to vary amongst individual programs in each profession.**

*This document is provided as an advising resource only. Official curriculum requirements are listed in the JMU Undergraduate Catalog. In the case of discrepancies, the University Catalog is the official curriculum students must follow. Updated 8/14/2024.*

	Doctoral						Doctoral & Masters	Masters	
	DENTISTRY (DMD, DDS)	MEDICINE (MD, DO, DPM, DC, ND)	OPTOMETRY (OD)	PHARMACY (PHARM D)	PHYSICAL THERAPY (DPT)	VETERINARY MEDICINE (DVM)	OCCUPATIONAL THERAPY (OTD/MSOT)	PHYSICIAN ASSISTANT (MPAS)	ATHLETIC TRAINING (MAT)
BIOLOGY	Foundations I-II BIO 140 & 140L BIO 150 & 150L  ≥ 16 BIO credits <u>Strongly Recommended</u> Microbiology (245 & 245L) <sup>FSp</sup> Human Anatomy (290 & 290L) Animal Physiology (370) <sup>FSp</sup>  <u>Recommended</u> Genetics (240 & 240L) <sup>FSp</sup> Cell & Molec Bio (304) <sup>Sp</sup> Histology (482) <sup>Sp</sup>	Foundations I-II BIO 140 & 140L BIO 150 & 150L  ≥ 12 BIO credits <u>Strongly Recommended</u> Genetics (240 & 240L) <sup>FSp</sup> Microbiology (245 & 245L) <sup>FSp</sup> Cell & Molec Bio (304) <sup>Sp</sup> Animal Physiology (370) <sup>FSp</sup>	Foundations I-II BIO 140 & 140L BIO 150 & 150L  Human Physiology and Anatomy BIO 270 & 270L BIO 290 & 290L  Microbiology BIO 245 & 245L  ≥ 4 BIO credits <u>Strongly Recommended</u> Genetics (240 & 240L) <sup>FSp</sup> Cell & Molec Bio (304) <sup>Sp</sup> Immunology (343) <sup>FSp</sup> Histology (482) <sup>Sp</sup>	Foundations I-II BIO 140 & 140L BIO 150 & 150L  Human Physiology and Anatomy BIO 270 & 270L BIO 290 & 290L  Microbiology BIO 245 & 245L  ≥ 4 BIO credits <u>Strongly Recommended</u> Genetics (240 & 240L) <sup>FSp</sup> Cell & Molec Bio (304) <sup>Sp</sup> Immunology (343) <sup>FSp</sup> Molec Biology (480) <sup>FSp</sup>	Foundations I-II BIO 140 & 140L BIO 150 & 150L  Human Physiology and Anatomy BIO 270 & 270L *** BIO 290 & 290L ***  Human Physiology and Anatomy BIO 270 & 270L *** BIO 290 & 290L ***  Microbiology BIO 245 & 245L  ≥ 13 BIO credits <u>Strongly Recommended</u> Cell & Molec Bio (304) <sup>Sp</sup> Comp Anatomy (320) <sup>Sp</sup> Animal Physiology (370) <sup>FSp</sup>  <u>Recommended</u> Immunology (343) <sup>FSp</sup> Med Parasitology (420) <sup>FSp</sup> Molec Biology (480) <sup>FSp</sup> Animal Welfare (312) <sup>F</sup>	Foundations I-II BIO 140 & 140L BIO 150 & 150L  Human Physiology and Anatomy BIO 270 & 270L *** BIO 290 & 290L ***  <u>Recommended</u> ≥ 3 credits of Introductory Biology (BIO 140 & 140L or BIO 103)	Foundations I-II BIO 140 & 140L BIO 150 & 150L  Human Physiology and Anatomy BIO 270 & 270L *** BIO 290 & 290L ***  Microbiology BIO 245 & 245L  ≥ 4 BIO credits <u>Strongly Recommended</u> Genetics (240 & 240L) <sup>FSp</sup>  <u>Recommended</u> Cell & Molec Bio (304) <sup>Sp</sup> Immunology (343) <sup>FSp</sup> Histology (482) <sup>Sp</sup>	Foundations I BIO 140 & 140L  Human Physiology and Anatomy BIO 270 & 270L BIO 290 & 290L	
	CHEMISTRY	General Chem I-II CHEM 131 & 131L CHEM 132 & 132L  Organic Chem I-II CHEM 241 <sup>Fsu</sup> CHEM 242 & 242L <sup>SpSu</sup>  Biochemistry CHEM 361 <sup>FSp</sup>	General Chem I-II CHEM 131 & 131L CHEM 132 & 132L  Organic Chem I-II CHEM 241 <sup>Fsu</sup> CHEM 242 & 242L <sup>SpSu</sup>  Biochemistry CHEM 361 <sup>FSp</sup>	General Chem I-II CHEM 131 & 131L CHEM 132 & 132L  Organic Chem I-II CHEM 241 <sup>Fsu</sup> CHEM 242 & 242L <sup>SpSu</sup>  Biochemistry CHEM 361 <sup>FSp</sup>	General Chem I-II CHEM 131 & 131L CHEM 132 & 132L  Organic Chem I-II CHEM 241 <sup>Fsu</sup> CHEM 242 & 242L <sup>SpSu</sup>  Biochemistry CHEM 361 <sup>FSp</sup> (366L <sup>Sp</sup> recommended)	General Chem I-II CHEM 131 & 131L CHEM 132 & 132L  Organic Chem I-II CHEM 241 <sup>Fsu</sup> CHEM 242 & 242L <sup>SpSu</sup>  Biochemistry CHEM 361 <sup>FSp</sup> (366L <sup>Sp</sup> recommended)	General Chem I-II CHEM 131 & 131L CHEM 132 & 132L  Organic Chem I-II CHEM 241 <sup>Fsu</sup> CHEM 242 & 242L <sup>SpSu</sup>  Biochemistry CHEM 361 <sup>FSp</sup> (366L <sup>Sp</sup> recommended)	Chemistry prerequisite for Human Physiology: CHEM 120 or CHEM 131 & 131L	General Chem I-II CHEM 131 & 131L CHEM 132 & 132L  Organic Chem I CHEM 241 <sup>Fsu</sup> , and 241L <sup>Fsu</sup> or 242L <sup>SpSu</sup>  Biochemistry CHEM 260 <sup>Sp</sup> & 260L <sup>Sp</sup> , or CHEM 361 <sup>FSp</sup>
PHYSICS	College Physics I-II PHYS 140 & 140L PHYS 150 & 150L <sup>SpSu</sup>	College Physics I-II PHYS 140 & 140L PHYS 150 & 150L <sup>SpSu</sup>	College Physics I-II PHYS 140 & 140L PHYS 150 & 150L <sup>SpSu</sup>	College Physics I PHYS 140 & 140L	College Physics I-II PHYS 140 & 140L PHYS 150 & 150L <sup>SpSu</sup>	College Physics I-II PHYS 140 & 140L PHYS 150 & 150L <sup>SpSu</sup>	College Physics I PHYS 140 & 140L or Biomechanics KIN 306 & 306L**		College Physics I PHYS 140 & 140L
MATH	Mathematics 6 credits <u>Strongly Recommended</u> 3 credits of Statistics 3-4 credits of Calculus	Statistics MATH 220 or MATH 229  Calculus 3-4 credits: MATH 205, 231, 233, or 235	Statistics MATH 220 or MATH 229  Calculus 3-4 credits: MATH 205, 231, 233, or 235	Statistics MATH 220 or MATH 229  Calculus 3-4 credits: MATH 205, 231, 233, or 235	Statistics MATH 220 or MATH 229  <u>Recommended</u> Calculus: MATH 205, 231, 233, or 235	Statistics MATH 220 or MATH 229  Calculus 3-4 credits: MATH 205, 231, 233, or 235	Statistics MATH 220 or MATH 229  Calculus 3-4 credits: MATH 205, 231, 233, or 235	Statistics MATH 220 or MATH 229  <u>Recommended</u> 3 additional credits of Mathematics	Statistics MATH 220 or MATH 229

	DENTISTRY	MEDICINE	OPTOMETRY	PHARMACY	PHYSICAL THERAPY	VETERINARY MEDICINE	OCCUPATIONAL THERAPY	PHYSICIAN ASSISTANT	ATHLETIC TRAINING
<b>SOCIAL &amp; BEHAVIORAL SCIENCES</b>	<p>≥ 3 credits Psychology or Sociology</p>	<p><b>Psychology</b> 3 credits of PSYC <u>Sociocultural Gen Ed Recommendation:</u> Gen Psychology (101) or Life Span Human Development (160)</p> <p><b>Sociology</b> 3 credits of any SOCI or <u>Global Experience Gen Ed Recommendation:</u> SOCI 110</p> <p><b>3 credits</b> of ANTH or PSYC or SOCI <u>Recommended:</u> Health Psychology (PSYC 308), Med Sociology (SOCI 375), Mental Health &amp; Illness, (SOCI 385), Med Anthropology (ANTH360)</p>	<p><b>Psychology</b> Gen Psychology (101)</p>	<p><b>Psychology</b> 3 credits of PSYC <u>Recommended:</u> Gen Psychology (101) <u>Additional Option:</u> Life Span Human Development (160)</p> <p><b>Sociology</b> 3 credits of SOCI <u>Recommended:</u> Global Context (SOCI 110) Microsociology (SOCI 140)</p> <p><b>Economics</b> 3 credits of ECON <u>Recommended:</u> Microeconomics (201) <u>Optional:</u> Macroeconomics (200)</p>	<p><b>Psychology</b> ≥ 6 credits of PSYC Gen Psychology (101) Life Span Human Development (160) Abnormal Psychology (250 or 335**)</p> <p><u>Global Experience Gen Ed Recommendation:</u> SOCI 110</p>	<p><u>Sociocultural GenEd Recommendation</u> Gen Psychology (PSYC 101)</p>	<p><b>Psychology</b> 9 credits of PSYC: Gen Psychology (101) Life Span Human Development (160) Abnormal Psychology (250 or 335**)</p> <p><b>Sociology</b> 3 credits of any SOCI or <u>Global Experience Gen Ed Recommendation:</u> SOCI 110</p> <p><b>Anthropology</b> Cultural Anthropology (ANTH 195)</p>	<p><b>Psychology</b> ≥ 6 credits of PSYC <u>Recommended:</u> Gen Psychology (101) Life Span Human Development (160) Abnormal Psychology (250 or 335**)</p> <p>Check individual PA program requirements.</p>	<p><b>Psychology</b> Gen Psychology (101)</p>
<b>COMMUNICATION</b>	<p><b>Writing</b> WRTC 103</p> <p><b>Literature</b> Any Literature GenEd or Great Works (HUM 200)</p>	<p><b>Writing</b> WRTC 103</p> <p><b>Literature</b> Any Literature GenEd or Great Works (HUM 200)</p>	<p><b>Writing</b> WRTC 103</p> <p><b>Literature</b> Any Literature GenEd or Great Works (HUM 200)</p>	<p><b>Writing</b> WRTC 103</p> <p><b>Literature</b> Any Literature GenEd or Great Works (HUM 200)</p> <p><b>Communication</b> SCOM 121/122/123</p>	<p><b>Writing</b> WRTC 103</p> <p><b>Literature</b> Any Literature GenEd or Great Works (HUM 200)</p>	<p><b>Writing</b> WRTC 103</p> <p><b>Literature</b> Any Literature GenEd or Great Works (HUM 200)</p> <p><b>Communication</b> SCOM 121/122/123</p>	<p><b>Writing</b> WRTC 103</p> <p><b>Literature</b> Any Literature GenEd or Great Works (HUM 200)</p>		<p><b>Writing</b> WRTC 103</p> <p><b>Literature</b> Any Literature GenEd or Great Works (HUM 200)</p>
<b>HEALTH &amp;</b>					<p>≥ 3 credits Exercise Physiology (KIN 302+302L**) Medical Terminology (HTH 210*)</p> <p><u>Recommended</u> Biomechanics KIN 306+306L**</p>	<p><u>Recommended</u> Medical Terminology HTH 210*</p>	<p><b>Med Terminology</b> HTH 210*</p>	<p><b>Med Terminology</b> HTH 210*</p>	<p><b>Med Terminology</b> HTH 210*</p> <p><b>Exercise Physiology</b> KIN 302+302L**</p> <p><b>Nutrition</b> NTR 280</p> <p><b>Biomechanics</b> KIN 306+306L**</p>
<b>OPTIONAL</b>		<p><u>Recommended for MCAT prep:</u> Critical Thinking GenEd: Critical Thinking (PHIL 120)</p>					<p><u>Recommended</u> Critical Thinking GenEd: Ethical Reasoning (PHIL 150)</p>		<p><u>Recommended:</u> Career Exploration: Introduction to Athletic Training (ATEP 205)</p>

\* Declaration of PPH minor does not give enrollment access for class during advanced registration; PPH minor given enrollment access during open enrollment.

\*\* Declaration of PPH minor does not give access to course; declaration in select major programs required.

\*\*\* Admissions committees place heavy emphasis on these Biology courses. Students are encouraged to take math and 100-level Biology courses first. Students are *strongly* encouraged to take at a 4-year institution.

<sup>F</sup> Course offered in Fall Semester

<sup>Sp</sup> Course offered in Spring Semester

<sup>Su</sup> Course offered in Summer Session