

**Iowa Valley Community College (Marshalltown) to ISU transfer guide for Microbiology BS**  
**Courses to be completed at IA Valley** **Courses to be completed at ISU for 2018-2019 catalog**

<p><b><u>Strongly recommended</u></b></p> <p>ENG 105 &amp; 106            BIO 112 &amp; 113            CHM 165, 165 Lab &amp; 175 <sup>1</sup>            CHM 261, 261 Lab &amp; 271 <sup>1</sup>            MAT 156            MAT 210 &amp; 216 <sup>1</sup>            PHYS 162 &amp; 172            SPC 112</p> <p><b><u>General Education</u></b>  <i>Humanities</i> – Pick 1            ART 203            HIS 112            HIS 113            LIT 101            MUS 100            PHI 101            REL 101</p> <p><i>Ethics</i>            PHI 105</p> <p><i>Social Science</i> – Pick 1            ANT 105 <sup>2</sup>            ECN 120            ECN 130            POL 111            PSY 251            SOC 110            SOC 115            SOC 120</p> <p><b><u>Recommended Preparation</u></b>            Bio 186 <sup>3</sup></p>	<p><b><u>English, Math &amp; Science Courses</u></b></p> <p>Composition 1 &amp; 2            6            General Biology 1 &amp; 2        8            General Chemistry 1 &amp; 2      7            Organic Chemistry 1 &amp; 2      7            Statistics                        3            Calculus 1 &amp; 2                4 each            College Physics 1 &amp; 2        8            Public Speaking                3</p> <p><b>Requirements</b></p> <p>Art History 1                    3            Western Civilization: Ancient to EM   3            Western Civilization: EM to Present   3            Introduction to Literature        3            Music Appreciation            3            Introduction to Philosophy       3            Survey of World Religions       3</p> <p>Introduction to Ethics            3</p> <p>Cultural Anthropology            3            Principles of Macroeconomics      3            Principles of Microeconomics      3            American National Government    3            Social Psychology                3            Introduction to Sociology        3            Social Problems                 3            Marriage and Family             3</p> <p><b>65 cr. Limit that can apply to BS</b></p> <p>Microbiology (Includes lab)      4</p>	<p><b><u>Microbiology</u></b></p> <p>Micro 110                        Orientation in Micro            1            Micro 302, 302L <sup>3</sup>            Biology of Microorganisms with Lab   4            Micro 310, L                    Medical Micro with Lab            4            Micro 320                        Molecular and Cellular Bacteriology   4                Micro 430 or                Micro Diversity &amp; Ecology                Micro 456 or                Mycology                            3                Micro 477                     Bacterial-Plant Interactions            Micro 440                        Microbial Physiology, Div., &amp; Genetics Lab   4            Micro 450                        Microbiology Seminar            2            Micro 451                        Microbiology Junior Survey        R            Micro                              Micro Choice                        3            Micro                              Micro Choice                        3            Micro                              Micro Choice                        3</p> <p><b><u>Physical Sciences</u></b></p> <p>BBMB 301 or                      Survey Biochemistry                3            BBMB 336 or                      Principles of Biochemistry        3            BBMB 404 or 405                Biochemistry 1 &amp; 2                3 each</p> <p><b><u>Biological Sciences</u></b></p> <p>Bio 313, L                        Genetics with Lab                4            Bio 314 or 328                    Cell Biology                        3</p> <p><b><u>English</u></b> – Pick 1 course</p> <p>Engl 302                          Business Communications            3            Engl 309                          Proposal and Report Writing        3            Engl 312                          Biological Communications        3            Engl 314                          Technical Communications        3</p> <p><b><u>Personal Development</u></b></p> <p>Int'l Perspective                3            US Diversity                      3            Lib 160                            1            Electives</p> <p style="text-align: right;"><b>To reach 128 total credits</b></p>
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<sup>1</sup> Students intending to double major in Micro/Biochemistry or Micro/Genetics should take Mat 210 and Mat 216 and CHM 176 Lab and CHM 271 Lab at Iowa Valley

<sup>2</sup> ANT 105 (Cultural Anthropology) will fulfill BOTH the Social Sciences and International Perspective requirements

<sup>3</sup> Bio 186 also counts as Micro 302Lab credit

The Course numbers may vary somewhat from school to school. Double check the ISU Course Equivalency guides

(<http://www.admissions.iastate.edu/equiv/index.php?state=iowa>)