

ISU Pre-Vet REQUIRED UNDERGRADUATE COURSEWORK & ISU MICROBIOLOGY Program

Course and Title	Required credits	ISU Course Equivalent
English Composition One year of composition or writing emphasis courses. May include business or technical writing. Bachelor's degree counts for one-half of this requirement.	6 cr	English 150, 250 and English 302, 309, 312, or 314
Oral Communication May include public speaking, interpersonal communication, group or speaking emphasis courses.	3 cr	Speech Comm 212
General Chemistry* One year series (2 semesters) for biological science majors with one semester lab.	7 cr	Chemistry 177, 177L, and 178
Organic Chemistry* One year series (2 semesters) with one semester of lab.	7 cr	Chemistry 331, 331L, and 332
Biochemistry* One semester (no lab required) Upper level course.	3 cr	BBMB 301 or BBMB 316 or Biol 314
Physics* First semester of a two-semester series with lab. Must include mechanics, fluids, heat and thermodynamics, vibrations, waves and sound.	4 cr	Physics 111
General Biology* One year series with lab each semester, both cellular and organismal biology.	8 cr	Biology 211, 211L, 212 and 212L
Genetics* Must include both Mendelian and molecular genetics. (no lab required) Most animal breeding or livestock improvement courses will not fulfill this requirement.	3 cr	Biology 313 or Genetics 320
Anatomy and/or Physiology* (no lab required) Upper level comparative anatomy or physiology or, upper level vertebrate anatomy or physiology is recommended over combined course.	3 cr	Biology 255, 256, Biology 335, 351, BMS 329, or Animal Science 214
Arts, Humanities and/or Social Sciences	8 cr	Social Sciences, Humanities & Ethics requirements
Electives	8 cr	

* Yellow highlight indicates courses that are part of the Micro BS program of study

*** Anatomy & Physiology is the only course not required for a BS in Microbiology

updated 3/12/18