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| **COURSE CHECKLIST FOR PRE-VETERINARY SCIENCE MAJOR**  **Students must complete a minimum of 120 credits (150 for double degree) and have a minimum 2.0 cumulative GPA and a minimum 2.0 major GPA to fulfill university graduation requirements.** | | | |
| **University Gen Ed Requirements** | | | |
|  | College Writing (Fall or Spring) if AP or test waiver, may need to take a literature class with at least 50% of grade from writing | | ENGLWRIT 112 or test waiver |
|  | Arts/Literature (AL or AT) - must be 4 credits | | 4 credit course |
|  | Historical Studies (HS) - must be 4 credits | | 4 credit course |
|  | Social/Behavioral Sciences (SB) - must be 4 credits | | 4 credit course |
|  | Plus one additional course in (AL, AT, HS, SB, SI or I) | | ANIMLSCI 260 fulfills SI |
|  | Diversity "DU"- can be combined with (AL/AT,HS,SB) | | DU or DG |
|  | Diversity "DG"- can be combined with (AL/AT,HS,SB) | |
|  | First Year Seminar, 1 credit (not enforced in SPIRE) | | Can be fulfilled by Animal Science  Residential Academic Program- RAP |
|  | Integrative Experience - IE, must be taken in VASCI dept. at UMass, for alternatives, refer to telfer@vasci.umass.edu  Good Intentions  Problem-Based Learning in Advanced Animal Health (Prereq  ANIMLSCI 103, 200, 220, 311, and 472 or 572)  Honors Thesis + Integrating Learning and Research | | ANIMLSCI 494GI (spring)  ANIMLSCI 494PI (fall)  ANIMLSCI 499Y+499T+  ANIMLSCI 494TI (spring) |
| **Basic Science & Math Requirements** | | | |
|  | Introductory Biology I | BIOLOGY 151\* | |
|  | Introductory Biology II (prereq. minimum C in BIOLOGY 151) | BIOLOGY 152\* | |
|  | Biology Lab | BIOLOGY 153\* | |
|  | General Chemistry I | CHEM 111\* | |
|  | General Chemistry II (prereq. Chem 111, minimum C-) | CHEM 112\* | |
|  | Organic Chemistry (prereq. Chem 112, minimum C-) | CHEM 261\* | |
|  | Organic Chemistry (prereq. Chem 261, minimum C-) | CHEM 262 | |
|  | Organic Chemistry lab (prereq concurrent enrollment in Chem 262 or previous C- or better in Chem 262) | CHEM 269 | |
|  | Biochemistry (prereq. Chem 250 or 261 or 265, minimum C-)  Biochem 423 (fall) & 424 (spring) are recommended for some vet schools | BIOCHEM 420 or BIOCHEM 423 | |
|  | Statistics (Math R2 requirement) | STATISTC 111, STATISTC 240 or RESECON 212 | |
|  | Calculus | MATH 127\* | |
|  | Microbiology (prereq. CHEM 261 or 250 or current enrollment) | MICROBIO 310 | |
|  | Veterinary Microbiology (prereq. BIOLOGY 152 & 153 with a grade of C or better, MICROBIO 310 or concurrent enrollment) **OR**  MICROBIO 265 (prereq. MICROBIO 310, dept. consent required) | ANIMLSCI 366  or  MICROBIO 265 | |
|  | Introductory Physics I and Lab | PHYSIC 131 | |
|  | Introductory Physics II and Lab | PHYSIC 132 | |
| **Animal Science Core** | | | |
|  | Introduction to Animal Science (Fall), external or internal transfer students may substitute higher-level elective | ANIMLSCI 101 (lab) | |
|  | Introduction to Animal Management (Spring)  prereq. ANIMLSCI 101, C or better | ANIMLSCI 103\* (lab) | |
|  | Cellular and Molecular Bio (Spring)  prereq. BIOLOGY 151 C or better, CHEM 111 C- or better | ANIMLSCI 285 (former 200)\* or BIOLOGY 285 or BIOCHEM 285 | |
|  | Anatomy/Physiology (Fall) prereq. BIOLOGY 151 minimum C | ANIMLSCI 220\* (lab) | |
|  | Animal Care & Welfare (Fall) Gen Ed SI | ANIMLSCI 260 | |
|  | Genetics (Fall) prereq. Biology 151 or 161H, minimum C; Biology 152 or 162H, minimum C. | ANIMLSCI 311 | |
|  | Animal Nutrition & Feeding (Spring) prereq. ANSCI 220 | ANIMLSCI 332 (lab) | |
|  | Molecular Immunology (Spring) OR Infection and Immunity (Fall) prereq. ANSCI 285 (former 200) or BIOL 285 or BIOCHEM 285 | ANIMLSCI 572  ANIMLSCI 472 | |
|  | Reproductive Physiology (Spring) prereq. AnSci 220 | ANIMLSCI 521 (lab) | |
|  | Junior Writing (Fall or Spring) | NATSCI 387 | |

NOTE: \*Ten science courses used to calculate Pre-Vet major eligibility. Credit-weighted GPA must be greater than or

equal to 2.700 (=B-) in order to graduate as a Pre-Veterinary Science major. Students with 10-course GPAs less than 2.700

may graduate as Animal Science majors. 3/21/20