COURSE REQUIREMENTS FOR THE FUNCTIONAL BIOLOGY OF ANIMALS CONCENTRATION

INSTRUCTIONS: If you completed the course at TU, indicate grade received on/in the blank. Alternatively put “AP” if you received Advanced Placement credit, “TRANS” if you received transfer credit for the course, or “Waive” if the requirement was waived. If you are currently enrolled in the course, put “IP” for “in progress.”

Foundation Courses (13 units)
- BIOL 200+200L or 201 or 203 – Introduction to Cellular Biology and Genetics (4) ______
- BIOL 202 Introduction to Ecology and Evolution (4) ______
- BIOL 204 Educational and Career Planning for the Biologist (1) ______
- BIOL 309 Principles of Genetics (4) ______

Breadth Courses (11-20 credits)
Need:
- BIOL 208 Biodiversity (3) or both BIOL 205 Gen Botany (4) and BIOL 207 Gen Zoology (4) ______ or _____ & ______
- Need: BIOL 221/221L and 222/222L Human Anat-Phys I, II (4, 4) or BIOL 325 Anim Physiol (4) ______/____ & _____/____ or ______

Need one of the following (BIOL 408 recommended):
- BIOL 405 Molecular Ecology and Evolution (4) ______
- BIOL 408 Cell Biology (4) ______
- BIOL 409 Molecular Biology (4) ______

Physiology Elective (4 credits):
- BIOL 470 Advanced Physiology (4) ______

Focused Elective: Take one of the following if BIOL 221 & 222 taken or, if BIOL 325 taken, take two of the following:
- BIOL 318 Microbiology (4) ______
- BIOL 355 Parasitology (3) ______
- BIOL 360 Histology (4) ______
- BIOL 367 Endocrinology (3) ______
- BIOL 411 Cancer Biology (3) ______
- BIOL 420 Microbiol of Infectious Disease (3) ______
- BIOL 421 Immunology (4) ______
- BIOL 427 Neuromusc Mechanisms of the Upper Body (2) ______
- BIOL 428 Virology (3) ______
- BIOL 463 Developmental Biology (3) ______
- CHEM 351 Biochemistry (3) ______

Free Elective (3-4 credits)
Take BIOL 409 or any 300-400 level BIOL, CHEM, or MBBB course that fulfills requirements for this or any other concentration in Biology or complete Biol 491 (Ind Study) or Biol 499 (Thesis). Pre-vet students may also transfer in an online Animal Nutrition course with permission.

Course taken: ____________________________________ ______

Note – BIOL 389 and BIOL 483 are special topics course numbers. Please consult with your advisor to determine if a particular offering can be applied to your concentration.

Ancillary courses (24-30 credits)
Chemistry (13-18 credits)
- CHEM 131/131L and 132/132L Gen Chemistry I, II (4, 4) _____/____, _____/____
- Also take CHEM 330 Essentials of Organic Chemistry (5) ______
- or both CHEM 331 and 332 Organic Chemistry I, II (5, 5) ______, ______

Physics (8 credits)
- PHYS 211 and 212 General Physics I, II (4, 4) ______, ______
- or PHYS 241 and 242 Gen Physics I, II Calculus-based (4, 4) ______, ______

Math (3-4 credits) Need one of the following:
- MATH 237 Elementary Biostatistics (4) ______
- PSYC 212 Behavioral Statistics (4) ______
- MATH 273 Calculus I (4) ______
- MATH 211 Calculus for Applications (3) ______

Some notes about math: Students transferring in MATH 231 Basic Statistics from a community college, other university, or a previous major at TU may substitute it for MATH 237. Honors college students may substitute MATH 233 for this requirement.

PSYC212 will not satisfy CORE 3 requirement. An additional MATH course will need to be taken to fulfill the requirement.