New Mexico State University

Department of Animal and Range Sciences

Requirements for Ph.D. Degree in Animal Science

I. Admission

- A. GPA of 3.0 or greater.
- B. Three letters of recommendation.
- C. Completion of the form, "Application for Graduate Admission in Animal Science" including a brief letter (personal statement) outlining the student's background, career goals, and research interest.
- D. Resume
- E. Favorable evaluation for admission will be by consensus of the Animal Science Graduate Committee and will be contingent on availability of an advisor and research funding.
- F. A requirement for admission as a doctoral graduate student in the department is completion of a curriculum substantially equivalent to that required of undergraduate students. Therefore, deficiency courses may be required after admission to the program, as determined initially by the Animal Science Graduate Committee.
- G. Non- thesis MS degrees are not acceptable although some of the courses may be transferred if deemed appropriate by the student's Doctoral Committee.

II. General Requirements

- A. Graduate students must maintain at least a 3.0 grade point average.
- B. A minimum of 90 credit hours of graduate work is required of which:
 - 1. At least 30 credits must be in courses numbered 600 or above.
 - 2. At least 18 credits must be in AnSc 700 (Doctoral Dissertation).
- C. All graduate assistants must enroll as full-time students taking at least 9 graded graduate credits (courses numbered 450 and above). No audits can be taken as part of the 9 minimum credits. Only 3 of the 9 credits may be taken as an S/U option.
 - 1. A graduate assistant may not enroll for more than 15 credits each semester.
 - 2. If a student needs to take deficiency courses as part of the 9 credits, then a memo from the advisor or department head should be submitted to the Graduate School. If approved, the student can register for 3 undergraduate credits and a minimum of 6 graded graduate credits during their first semester at New Mexico State University.
 - 3. Enrollment during summer sessions is not required.
- D. Students admitted to the Doctoral program (passed qualifying exam) must continue to enroll in three credits of graduate work each semester (exclusive of summer sessions) until the dissertation is approved by the Graduate School.
- E. In certain instances, deficiency courses may be required.
- F. Two semesters of AnSc 515 (Graduate Seminar) are required and students are urged to attend seminar every semester that they are in residence.

- F. No more than 6 credits of AnSc 698 may apply toward graduation.
- G. The "Program of Study and Committee for Doctoral Students" form listing the graduate committee and courses to be taken, should be filed with the Graduate School after completion of 12 credits and after the qualifying exam, and before registering for additional courses.

II. Qualifying Examination

A. The Animal and Range Sciences Department may allow the M.S. Final examination to serve as a Ph.D. qualifying exam for students receiving an M.S. in Animal Science at NMSU. See "Guidelines for Graduate Studies" for further details.

B. Doctoral students must take a qualifying exam before completion of one semester of graduate work. The exam is scheduled by the student's advisor and administered by a provisional committee of at least 3 regular Animal Science faculty members in the student's area of concentration (reproductive physiology or ruminant nutrition). Its purpose is to evaluate the student's strengths and weaknesses, determine deficiency courses, and discuss a possible program of study (coursework).

C. After successful completion of this exam, a Doctoral Committee is appointed.

III. Doctoral Committee

A. The student's Doctoral Committee is selected by the student and the student's advisor, with approval of the Department Head and the Graduate Dean. The committee will consist of five or more members, as follows:

- 1. The committee chair (advisor) and at least two other members must be from the regular Animal Science faculty in the student's concentration area (reproductive physiology or ruminant nutrition).
- 2. One member must be from the Related Area.
- 3. One member from the Research Tool Area.
- 4. The member from the Related or Research Tool Area may serve as the Representative of the Graduate Dean.
- B. Duties of the Doctoral Committee
 - 1. Prepare and file a preliminary program of study with the Graduate Dean
 - 2. Provide counsel for the student during the program
 - 3. Attend the comprehensive oral examination and the final dissertation defense.

NOTE: Changes in committee membership must be approved by the Graduate Dean.

IV. Related Area

- A. Doctoral students are required to complete advanced coursework (at least nine hours) in a field of study closely allied with Animal Science.
- B. Courses to be completed will be determined by the Doctoral Committee.
- C. Possible areas of study include:
 - 1. Range Science
 - 2. Experimental Statistics
 - 3. Biology
 - 4. Biochemistry

V. Research Tool

- A. Doctoral students are also expected to demonstrate proficiency in an area of study that will promote their ability to conduct research.
- B. A minimum of three courses approved by the Doctoral Committee will usually meet this requirement.
- C. Courses completed in the Related Area may not be used toward the Research Tool.
- D. Possible study areas include:
 - 1. Experimental Statistics
 - 2. Foreign Language
 - 3. History of Science
 - 4. Philosophy of Science

VI. Comprehensive Examination

- A. The comprehensive examines the student's knowledge in the major field of study as well as the Related and Research Tool areas.
- B. The exam begins with a written examination prepared by the faculty in the student's concentration area (reproductive physiology or ruminant nutrition). This examination must be passed satisfactorily before the student continues with the remainder of the process.
- C. Secondly, the student is administered a separate written examination by each member of the Doctoral Committee. This segment must be passed satisfactorily before the student proceeds.
- D. The final phase of the Doctoral Comprehensive Examination is the Oral Exam.
- E. Students that satisfactorily complete all segments of the Comprehensive Examination are admitted to candidacy for the doctorate.

VI. Final Oral Examination

- A. The final oral exam is primarily concerned with the dissertation research conducted by the student but it may also extend over the entire discipline.
- B. Doctoral candidates are expected to exhibit the skills required to conduct independent research in the animal science discipline.

