

Animal Physiology

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An Interdisciplinary Program

The graduate program in Animal Physiology is an interdisciplinary curriculum leading to a Master of Science in Agricultural Life Sciences with a concentration in Animal Physiology and/or Doctor of Philosophy degree in Life Sciences with a concentration in Animal Physiology. Course offerings are from several departments including, but not exclusively, Animal and Dairy Sciences; Basic Science (College of Veterinary Medicine); Biochemistry and Molecular Biology; Biological Sciences; Entomology and Plant Pathology; Poultry Science; and Wildlife, Fisheries and Aquaculture. The program of study is developed by the student and his/her major professor with the approval of the student's graduate program committee. Specific courses vary depending on the needs of the student. A limited number of assistantships are available to qualified applicants.

Admission Criteria

Prerequisites for admission include a bachelor's or master's degree in animal, dairy or poultry science; human sciences; wildlife; fisheries or aquatic science; biological or physical science; or a doctor of medicine or veterinary medicine degree with an adequate background in chemistry. A minimum 3.00 overall grade point average (GPA) on a 4.00 scale is required. A student who has not fully met the requirements stipulated by the University and the program for admission (i.e., students with 2.50 to 2.99 GPA) may be granted admission to the Animal Physiology program with provisional status. The Graduate Record Exam (GRE) is not required for admission, but applicants are required to attempt the GRE. A paper-based (PBT) TOEFL (Test of English as a Foreign Language) of 575 (84 iBT) or an IELTS (International English Language Testing Systems) score of 7.0 or better is required of all international applicants. Letters of recommendation are required of all applicants.

Provisional Admission

A student who has not fully met the GPA or other requirements stipulated by the University may be admitted on a provisional basis. The provisionally-admitted student is eligible for a change to regular status after receiving a 3.00 GPA on the first 9 hours of graduate courses at Mississippi State University (with no grade lower than a C). The first 9 hours of graduate courses must be within the student's program of study. Courses with an S grade, transfer credits, or credits earned while in Unclassified status cannot be used to satisfy this requirement. If a 3.00 is not attained, the provisional student **shall** be dismissed from the graduate program. Academic departments may set higher standards for students to fulfill provisional requirements; a student admitted with provisional status should contact the graduate coordinator for the program's specific requirements. **While in the provisional status, a student is not eligible to hold a graduate assistantship.**

Academic Performance and Continuous Enrollment

An overall GPA of 3.00 is required for graduation. To be eligible for the preliminary/comprehensive examination, a graduate student must maintain an overall B average in all graduate courses attempted after admission to the program. Continuous enrollment in the Animal Physiology program is dependent upon satisfactory evaluation of academic performance and progress toward the completion of the respective research degrees. A student will be recommended for dismissal if he/she receives more than two grades of C or any grade below a C in courses taken for credit.

Master of Science in Agricultural Life Sciences with Animal Physiology Concentration

Select two of the following:

PHY 8811	Animal Physiology Seminar	2
PHY 8841	Animal Physiology Seminar	
8000-level coursework		12
PHY 8000	Thesis Research/ Thesis in Animal Physiology	6
Additional graduate-level coursework		10
Total Hours		30

A thesis defense is required.

M.S. candidates are required by the Animal Physiology program to submit a written proposal of the intended research area during the first year of the graduate program, in addition to the submission of an annual progress report of research, teaching, and/or extension and service activities of the thesis work.

The Animal Physiology program does not offer a non-thesis M.S. degree.

Other course requirements may include BCH 6603 and/or BCH 6613 and ST 8114 or equivalents.

A minor is not required but if selected an additional 9 hours of credit is required and a committee member from the minor area is required.

A graduate program of study should be submitted and approved by the student's graduate committee and graduate coordinator by the end of the first semester of graduate study. The graduate committee should be composed of the major professor and two committee members, one of whom should be a member of the Animal Physiology graduate faculty and the other may be a minor professor. Additional committee members may be included at the discretion of the major professor.

Doctor of Philosophy in Life Sciences with Animal Physiology Concentration

The Ph.D. in Animal Physiology requires a minimum of three academic years beyond the B.S. degree; the number of hours will vary as determined by the student and major professor. The student is required to take at least 3 hours of PHY 8811, PHY 8821, PHY 8831, and PHY 8841.

Ph.D. candidates are required by the Animal Physiology program to submit a written proposal of the intended research area during the first year of the graduate program, in addition to the submission of an annual progress report of research, teaching, and/or extension and service activities of the dissertation work. For a Ph.D. candidate, a written and oral preliminary/comprehensive examination will be administered by the student's graduate committee in accordance with Graduate School guidelines prior to the submission of defense of dissertation research.

The preliminary/comprehensive examination must be attempted by the end of the fifth semester of the program.

Other course requirements may include BCH 6603, BCH 6613, ST 8114, and ST 8214 or equivalents.

A minor is not required, but if a minor is selected an additional 12 hours of graduate credit is required and a committee member from the minor area is required.

A program of study should be submitted and approved by the student's graduate committee and graduate coordinator by the end of the first semester of graduate study. If a minor is selected, the graduate committee should be composed of at least five members including the major professor, who must be a full member of the Animal Physiology graduate faculty; at least two additional members of the Animal Physiology graduate faculty and two additional members, one of whom must be from the minor field; the other may be from outside the major area. Additional committee members may be included at the discretion of the major professor.