190. Seminar in Avian Sciences (1)
Seminar—1 hour. Prerequisite: upper division standing in Avian Sciences and consent of instructor. May be repeated three times for credit. (P/NP grading only.)—I, II, III (I, III)

192. Internship in Avian Sciences (1-12)
Internship—3-36 hours. Prerequisite: completion of a minimum of 84 units, consent of instructor. Internship on and off campus in poultry, game birds or exotic bird production, management and research; or in a business, industry, or agency concerned with these entities. Compliance with Internship Approval form essential. (P/NP grading only.)

195. Topics in Current Research (1-3)
Lecture/discussion—1-3 hours. Prerequisite: consent of instructor. Discussion of topics of current interest in avian sciences. May be repeated three times for credit.—I, II, III (I, II, III)

197T. Tutoring in Avian Sciences (1-3)
Tutorial—1-3 hours. Prerequisite: Avian Sciences or related major, advanced standing, consent of instructor. Tutoring of students in lower division avian sciences courses; weekly conference with instructors in charge of courses; written critiques of teaching procedures. (P/NP grading only.)

198. Directed Group Study (1-5)
Prerequisite: consent of instructor. (P/NP grading only.)

199. Special Study for Advanced Undergraduates (1-5)
Prerequisite: consent of instructor. (P/NP grading only.)

Graduate

203. Advanced Avian Development and Genomics (1)
Discussion—1 hour. Prerequisite: graduate standing; concurrent enrollment in course 103. In consultation with the instructor, students develop a lecture and associated instructional materials, i.e., lesson plan, including justification, reading and presentation and evaluation aids. The topic must complement a topic covered in Avian Sciences 103 (Avian Development and Genomics).—I. (I)

290. Seminar (1)
Seminar—1 hour. Reports and discussions of recent advances and selected topics of current interest in avian genetics, physiology, nutrition, and poultry technology.—I (I)

290C. Research Conference (1)
Discussion—1 hour. Prerequisite: graduate standing and consent of instructor. Major professors lead research discussions with their graduate students. Research papers are reviewed and project proposals presented and evaluated. Format will combine seminar and discussion. (S/U grading only.)—I, II, III (I, II, III)

297T. Supervised Teaching in Avian Sciences (1-4)
Prerequisite: graduate standing and consent of instructor. Tutoring of students in lower, upper division, and graduate courses in Avian Sciences; weekly conference with instructor in charge of course; written critiques of teaching methods in lectures and laboratories. (S/U grading only.)

298. Group Study (1-5)
Prerequisite: consent of instructor.

299. Research (1-12)
Prerequisite: consent of instructor. (S/U grading only.)

Avian Sciences
(A Graduate Group)
Kirk Klassing, Ph.D., Chairperson of the Group
Group Office. 1249 Meyer Hall 530-752-2382; http://aviansciences.ucdavis.edu

Faculty
C. Christopher Calvert, Ph.D., Professor (Animal Science)
Thomas P. Coombs-Hahn, Ph.D., Associate Professor (Neurobiology, Physiology, and Behavior)
Mary E. Delany, Ph.D., Professor (Animal Science)
John M. Eadie, Ph.D., Professor (Wildlife, Fish, and Conservation Biology; Animal Science)
Holly B Ernest, D.V.M., Ph.D., Associate Professor (Veterinary Genetics Laboratory and Population Health and Reproduction; School of Veterinary Medicine)
Michelle Hawkins, V.M.D., ABVP, Associate Professor (Medicine and Epidemiology, School of Veterinary Medicine)
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Annie J. King, Ph.D., Professor (Animal Science)
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Joy A. Munch, Ph.D., Professor (Animal Science)
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Joanne R. Paul-Murphy, D.V.M., Ph.D. Professor (Medicine & Epidemiology; School of Veterinary Medicine)
Lisa A. Tell, D.V.M., Professor (Medicine and Epidemiology, School of Veterinary Medicine)
Andrew Townsend, Ph.D., Assistant Professor (Wildlife, Fish, and Conservation Biology)

Emeriti Faculty
Hans Abplanalp, Ph.D., Professor Emeritus
Dan Anderson, Ph.D., Professor
Francine A. Bradley, Ph.D., Specialist Emeritus
Ralph A. Ernst, Ph.D., Specialist Emeritus
Peter Marler, Ph.D., Professor Emeritus
Barry W. Wilson, Ph.D., Professor Emeritus

Graduate Study. The Graduate Group in Avian Sciences offers the M.S. degree program to students who wish to pursue specialized advanced work on avian species. Specializations students may choose include behavior, nutrition, physiology, reproduction, pathology, immunology, toxicology, food chemistry, management, ecology, genetics, reproductive, environmental physiology, and cellular and developmental studies using wild and domestic birds as experimental animals. Both master’s degree plans, thesis or comprehensive examination, are available.

Preparation. Applicants should have undergraduate preparation in a field appropriate to the course of study selected, including courses in most of the following subjects: general biology, general and organic chemistry, biochemistry, avian biology, genetics, nutrition, physiology, and statistics.


Biochemistry and Molecular Biology

See Biochemistry, Molecular, Cellular and Developmental Biology, on page 177; Molecular and Cellular Biology, on page 430

Biochemistry and Molecular Biology
(A Graduate Group)

The Biochemistry and Molecular Biology program has merged with the Cell and Developmental Biology program to form Biochemistry, Molecular, Cellular, and Developmental Biology (BMCD); see Biochemistry, Molecular, Cellular and Developmental Biology, on page 177.

Group Office. 227B Life Sciences 530-752-9091; http://biochem3.ucdavis.edu/GradGroups/BMCD/

Biological Chemistry

See Medicine, School of, on page 396.

Biochemistry, Molecular, Cellular and Developmental Biology

Mitch Singer, Ph.D., Chairperson of the Group
Group Office. 227B Life Sciences 530-752-9095; http://biochem3.ucdavis.edu/GradGroups/BMCD/