Courses in Preventive Veterinary Medicine (PMH)

Graduate

200. Introduction to Information Management for Epidemiologists (1)
Laboratory—1 hour. Restricted to students in the Master of Preventive Veterinary Medicine program. Introduction to practical application of epidemiological methods to solve problems involving population health data. Emphasis on using workshop/database software tools for organizing, analyzing, reporting, and interpreting data. Ten, three-hour sessions. —Su. (Su./J.) Lohenehrer

201. Emerging Issues at the Interface of Animal, Human, and Ecosystem Health (2.5)
Lecture—1 hour; discussion—1.5 hours. Class size limited to 35 students. Introduce one health topics emphasizing relationships between environmental, animal and human health. Topics include ecosystem change and impacts on animals and humans, cross-species disease transmission and approaches for addressing critical data gaps to inform ecosystem health and disease prevention. —F. (F.) Johnson

202. Medical Statistics I (4)
Lecture—13 sessions; laboratory—10 sessions. Prerequisite: MPVM or MPH standing, or consent of the instructor. Restricted to 80 students. Basic statistics in clinical, laboratory and population medicine: descriptive statistics; probability; binomial, Poisson, normal, t-, F-, and Chi-square distributions; sampling distributions; parameter estimation; hypothesis testing; elementary nonparametric methods, simple linear regression and correlation; life table construction and analysis. —Su. (F.)

203. Medical Statistics II (4)
Lecture—3 hours; laboratory—2 hours. Prerequisite: course 202 (or equivalent) or consent of instructor. Continuation of course 202. Analysis of variance in biomedical sciences; nonparametric methods; multiple regression; unconditional logistic regression; biomedical applications of statistical methods. Microcomputer applications in population medicine to reinforce principles that are taught in lecture. Required for students in the Preventive Veterinary Program Graduate Group (PMH) and the Masters of Public Health Program (MPH). —F. (F., W., Su.)

204. Medical Statistics III (4)
Lecture—5 hours; laboratory—2 hours. Continuation of course 203. Selecting the best regression equation, conditional logistic regression, Poisson regression, survival analysis, analysis of time dependent variables and trends. Microcomputer applications in population medicine to reinforce principles that are taught in lecture. —W. (W.)

205. Principles of Epidemiology (4)
Lecture—4 hours. Prerequisite: course 202, an introductory statistics course, or consent of the instructor. Continuation of course 202. Basic epidemiologic concepts and approaches to epidemiologic research, with examples from veterinary and human medicine, including study design, analysis, estimation of disease risk, and history of epidemicologic research and surveillance. [Same course as Epidemiology 205.] —F. (F.)

206. Epidemiologic Study Design (4)
Lecture—30 sessions; discussion—9 sessions; laboratory—2 sessions. Prerequisite: course 205 or consent of instructor. Builds on concepts presented in course 205. Concepts of epidemiologic study design-clinical trials, observational cohort studies, case control studies-introduced in course 205A are covered in more depth, using a problem-based format. Discussion of published epidemiologic studies. [Same course as Epidemiology 206.] —F., W., S., F., W., S., J. Atwill

207. Applied Epidemiologic Problem Solving (1)
Laboratory/discussion—2 hours. Integration of epidemiologic and statistical methodology in a problem-solving approach to contemporary animal population health issues. Data validation and manipulation. —W. (W.) Martinez Lopez

Professional

400. Medical Statistics I (5)
Lecture—37 sessions; laboratory—13 sessions. Prerequisite: MPVM standing in the School of Veterinary Medicine or consent of instructor. Statistical methods to solve problems in veterinary medicine. Exploration of statistical methods taught in this course. —F., W., Su. (F., W., Su.)

401. Epidemiology Laboratory (1)
Lecture—1 session; lecture/discussion—1 session; laboratory—1 session. Prerequisite: MPVM standing in the School of Veterinary Medicine or consent of instructor. Practical application of epidemiological methods using the microcomputer as a tool to solve problems. Utilizes spreadsheets and databases as tools to organize and analyze data. Emphasize epidemiological methods introduced in course 402. —S. (S.)

402. Veterinary Medical Epidemiology (4)
Lecture—20 sessions; laboratory—2 hours. Prerequisite: MPVM standing in the School of Veterinary Medicine or consent of instructor. Practical application of epidemiological methods using the microcomputer as a tool to solve problems. Utilizes spreadsheets and databases as tools to organize and analyze data. Emphasizes epidemiological methods introduced in course 402. —F., W. (F., W.) Farver

403. Medical Statistics II (3)
Lecture—20 sessions; laboratory—10 sessions. Prerequisite: MPVM standing in the School of Veterinary Medicine and/or successful completion of course 402 (or equivalent) or consent of instructor. Analysis of variance in biomedical sciences; nonparametric methods; multiple regression; biomedical applications of statistical methods. Microcomputer applications to reinforce principles that are taught in lecture. Continuation of course 402. —F., W. (F., W.) Farver

404. Medical Statistics III (4)
Lecture—3 hours; laboratory—2 hours. Prerequisite: MPVM standing in the School of Veterinary Medicine and/or successful completion of course 403 (or equivalent) or consent of instructor. Continuation of course 403. Analysis of time dependent variables, effects of time, rates and trends, analysis of multiway frequency tables; logistic regression; survival analysis selecting the best regression equation; biomedical applications. —S. (S.)

405. Laboratory—1 hour. Restricted to students in the School of Veterinary Medicine or consent of instructor; completion of course 405 and consent of instructor. Computer and communication of veterinary research. —F., W., Su. (F., W., Su.)

408A. Veterinary Research: Planning and Reporting (2)
Lecture—20 sessions. Prerequisite: MPVM standing in the School of Veterinary Medicine or consent of instructor. Planning, critical analysis, ethics, and written and oral communication of veterinary research. —F., W., Su. (F., W.)

408B. Veterinary Research: Planning and Reporting (1)
Lecture—10 sessions. Prerequisite: MPVM standing in the School of Veterinary Medicine or consent of instructor. Planning, critical analysis, ethics, and written and oral communication of veterinary research. —F., W., Su. (F., W., Su.)

408C. Veterinary Research: Planning and Reporting (1)
Lecture—10 sessions. Prerequisite: MPVM standing in the School of Veterinary Medicine or consent of instructor. Planning, critical analysis, ethics, and written and oral communication of veterinary research. —S. (S.)

409. Animal Health Policy and Risk Communication (1)
Discussion—10 sessions. Prerequisite: Master of Preventive Veterinary Medicine standing in the School of Veterinary Medicine and consent of instructor; completion of course 408A and course 408B. Planning, critical analysis, ethics, and written and oral communication of veterinary research. —S. (S.)

410. Animal Health Policy and Risk Communication (1)
Discussion—10 sessions. Prerequisite: MPVM standing in the School of Veterinary Medicine and consent of instructor. International, national and state policy issues affecting veterinary medicine, how policy is made, organizational cultures, the role of science in policy-making, ten best practices in risk/crisis com-