241. Auditing and the Accounting Profession (4)
Lecture—4 hours. Prerequisite: course 201; any Management 200A. Restricted to Graduate School of Management students. Introduction to the audit environment, professional standards, the accounting profession, and the professional responsibilities of accountants. Integrate audit topics across the areas of financial, cost, tax, and systems accounting. (S/U grading only.)—F. (F.) Snyder

243. Auditing and Attestation Services (4)
Lecture—4 hours. Prerequisite: course 241. Restricted to graduate students in Graduate School of Management. Advanced treatment of the audit process and environment. Topics include audit planning and performing, internal controls, professional standards, and audit reports. Reviews, compilations and attestation services are examined. As—S (E) Ekanayake

251. Managerial Accounting and Controls (4)
Lecture—4 hours. Prerequisite: course 201; any Management 200A. Restricted to graduate students in the Graduate School of Management. Analysis of management accounting systems including cost accounting, performance measurement, and compensation and reward systems. Focuses on the production of information useful for managerial decision-making, as well as the design of these systems. Not open for credit to students who have completed any Management 271.—W. (W.) Anderson

253. Accounting Information and Control Systems (4)
Lecture—4 hours. Prerequisite: course 201 or any Management 200A. Restricted to students in Graduate School of Management. Analysis of information system controls for accounting, keeping, and control. Topics include the regulatory requirements of accounting control systems as well as their implementation and auditing considerations. Not open for credit to students who have taken any Management 271.—W. (W.)

261. Communications for Professional Accountants (4)
Lecture—4 hours. Prerequisite: course 201 or any Management 200A. Restricted to students in Graduate School of Management. Analysis of written and oral professional communications with an emphasis on structuring and documenting audits and reports, understanding audiences (investors, creditors, regulatory stakeholders), and consideration of ethical and regulatory responsibilities. Not open for credit to students who have taken any Management 271.—W. (W.)

271. Accounting Ethics (4)
Lecture—4 hours. Prerequisite: course 201; any Management 200A. Restricted to Graduate School of Management students. Analysis of accountants’ professional responsibilities and ethics. Topics include the recognition, measurement, and disclosure, as well as the theoretical foundations of and motivations for financial reporting choices. Not open for credit to students who have taken any Management 272.—S. (S.) Skalfe

211. Tax Reporting and Analysis (4)
Lecture—4 hours. Restricted to Master of Professional Accountancy graduate students. Introduction to the taxation of business entities and their related transactions, with an emphasis on the details of tax law and tax reporting requirements. Topics include individual, partnership, and corporate taxation, as well as tax theory. Not open for credit to students who have completed any Management 264.—F. (F.) Yetman

213. Intermediate Tax Reporting and Analysis (4)
Lecture—4 hours. Prerequisite: course 211; any Management 264. Restricted to graduate students in the Graduate School of Management. Detailed analysis of federal taxation of individuals. Topics include the timing of income recognition, deductions and credits for tax purposes, as well as the basics of property transactions.—W. (W.) Snyder

215. Advanced Tax Reporting and Analysis (4)
Lecture—4 hours. Prerequisite: course 213. Restricted to graduate students in Graduate School of Management. Advanced treatment of complex tax transactions and entities. Topics include aspects of federal taxation of entities and the applicable impact upon individual taxpayers. Coverage includes basic analysis as applicable to pass through entities and an introduction to professional responsibilities.—S. (S.) Snyder

217. Taxation of Individuals, Property, and Estates (4)
Lecture—4 hours. Prerequisite: course 213. Restricted to graduate students in Graduate School of Management. Analysis of detailed business entity tax issues including basis calculations, minimum statutory, multi-state and multinational taxation, stock transactions, and mergers and acquisitions. Tax planning for entities and relationships between business entities and their owners. Offered irregularly.—F. (F.)

231. Analysis and Use of Accounting Reports (4)
Lecture—4 hours. Prerequisite: course 203. Restricted to students enrolled in the Master of Professional Accountancy degree program. Evaluation of complex financial accounting reports by managers and persons outside the firm, such as investors, creditors, and financial analysts. Topics include cash flow vs. income measurement, ratio and valuation analysis, and the effects of international accounting standards. Not open for credit to students who have completed any Management 272.—S. (S.) Skalfe

Master of Preventive Veterinary Medicine (A Graduate Group)
Ashley Hill, D.V.M., M.P.V.M., Ph.D., Chairperson of the Group

Group Office, 5215 Vet Med 3A
530-752-2657; Fax 530-754-9161;

Faculty
John Adaska, D.V.M., M.P.V.M., Ph.D., Associate Professor of Clinical (Pathology, Microbiology & Immunology)
Sharif Aly, BVSc, M.P.V.M., Ph.D., Assistant Professor (Population Health and Reproduction)
Robert Atwill, D.V.M., M.P.V.M., Ph.D., Professor (Population Health and Reproduction)
Chris Barker, M.S., Ph.D., Assistant Adjunct Professor (Pathology, Microbiology & Immunology)
Walter Boyle, D.V.M., M.S., Ph.D., Professor (Pathology, Microbiology & Immunology)
David Bunn, B.S., M.S., Ph.D., Assistant Adjunct Professor (Animal Science)
Munashe Chiwergwe, BVSc, MPH, Ph.D., Assistant Professor (Medicine & Epidemiology)
Bruno Chomet, DrSc, D.V.M., M.S., Ph.D., Professor (Population Health & Immunology)
Mary Christopher, D.V.M., Ph.D., Professor (Pathology, Microbiology & Immunology)
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Kirsten Girdard, D.V.M., Health Sciences Clinical Professor (Medicine & Epidemiology) Ashley Hill, D.V.M., M.P.V.M., Ph.D., Associate Professor of Clinical (Medicine & Epidemiology)
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Donald Klingborg, D.V.M., Professor Emeritus (Population Health & Reproduction)

Emeritus Faculty
Thomas Farver, M.S., Ph.D., Professor Emeritus (Population Health & Reproduction)
David Hird, D.V.M., M.P.V.M., Ph.D., Professor Emeritus (Medicine & Epidemiology)


Pre-Fall 2011 General Education (GE) AA—Arts and Humanities; SE—Science and Engineering; SS—Social Sciences; OL—Oral Skills; OL—Quantitative; SL—Scientific; VL—Visual; WC—World Cultures; WE—Writing Experience
Fall 2011 and on Revised General Education (GE) AA—Arts and Humanities; SE—Science and Engineering; SS—Social Sciences; OL—Oral Skills; OL—Quantitative; SL—Scientific; VL—Visual; WC—World Cultures; WE—Writing Experience
Quarter Offered: F=Fall, W=Winter, S=Spring, Su=Summer; 2017-2018 offering in parentheses
Mark Thurmond, D.V.M., M.P.V.M., Ph.D., Professor Emeritus
(Medicine & Epidemiology)
Graduate Adviser. Contact the Group office.

Courses in Preventive Veterinary Medicine (PM) Graduate

200. Introduction to Information Management for Epidemiologists (1)
Lecture—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 worksheet/database software tools for organizing, analyzing, reporting, and interpreting data. Ten, three-hour sessions. — Su. (Su.) Lehenbauer

201. Emerging Issues at the Interface of Animal, Human, and Ecosystem Health (2.5)
Lecture—1 hour; discussion—1.5 hours. 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. (S.) Spero

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; non-parametric methods; multiple regression; unconditional logistic regression; survival analysis; analysis of time dependent data. — F, W, S. (F., W., S.) Chomel

204. Medical Statistics III (4)
Lecture—3 hours; laboratory—2 hours. Continuation of course 203. Selecting the best regression equation, conditional logistic regression, Poisson regression, survival analysis, analysis of time dependent variation and trends, and microcomputer applications in population medicine to reinforce principles that are taught in lecture. Required for students in the Preventive Veterinary Program Graduate Group (PMV) and the Masters of Public Health Program (MPH). — Su. (S.) Spero

402. Professional 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. Continuation of course 401. Analysis of time dependent variation and trends, analysis of multiway frequency tables; logistic regression; survival analysis selecting the best regression equation; biomedical applications. — S. (S.)

403. Epidemiology Laboratory (1)
Lecture—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. Data sets provided by the instructor. — F, W. (F., W.) Farver

404. Medical Statistics III (4)
Lecture—3 hours; laboratory—2 hours. Prerequisite: course 202, an introductory statistics course, or consent of the instructor. Continuation of course 202. Basic epidemiological concepts and approaches to epidemiological research, with examples from veterinary and human medicine. Includes weak investigation, infectious disease epidemiology, properties of tests, and an introduction to epidemiologic study design and surveillance. (Same course as Epidemiology 205.) — F. (F.)

207. Applied Epidemiologic Problem Solving (1)
Lecture—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

402. Medical Statistics I (3)
Lecture—37 sessions; laboratory—13 sessions. Prerequisite: MPVM standing in the School of Veterinary Medicine or consent of instructor. Statistics in clinical, laboratory, and population medicine: graphical and tabular presentation of data; probability; binomial; Poisson, normal, t-, F-, and Chi-square distributions; elementary nonparametric methods; simple linear regression and correlation; life tables. Microcomputer applications of statistical procedures in population medicine. — 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; non-parametric 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 variation and trends, analysis of multiway frequency tables; logistic regression; survival analysis selecting the best regression equation; biomedical applications. — S. (S.)

407. Field 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 405. Data sets provided by the instructor. — F, W. (F., W.) Chomel

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. — Foley

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. — W. (W.) Spero

408C. Veterinary Research: Planning and Reporting (1)
Discussion—10 sessions. Prerequisite: Master of Preventive Veterinary Medicine standing in the School of Veterinary Medicine or consent of instructor; completion of course 408A and course 408B. Planning, critical analysis, ethics, and written and oral communication of veterinary research. — S. (S.) Chomel

410. Animal Health Policy and Risk Communication (1)
Discussion—10 sessions. Prerequisite: MPVM standing in the School of Veterinary Medicine or 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 communication, message-mapping for the public and policy-makers, and effective meeting management. — F. (F.) Mazet

426. Applied Epidemiologic Problem Solving (1)
Laboratory—10 sessions. Prerequisite: MPVM standing in the School of Veterinary Medicine or consent of instructor. Integration of epidemiologic and statistical methodology in a problem-solving approach to contemporary animal population health issues. Data validation and manipulation; descriptive statistical analysis using spreadsheets, database management, and Epi Info software. Builds on skills learned in courses 405L and 406. — W. (W.)

Maternal and Child Nutrition (Department of Nutrition)

Francene M. Steinberg, Ph.D., Chairperson of the Department

Department Office. 3135 Meyer Hall 530-752-4630; http://www.extension.ucdavis.edu/nutrition

Faculty

Faculty members are listed on the website.

Graduate Study. The Nutrition Department offers the degree of M.A.S. in Maternal and Child Nutrition. This program consists of three required six-unit core courses (Nutrition During Pregnancy, Lactation and Infant Nutrition, and Child and Adolescent Nutrition), six to eight units of special topics seminars, two units of electives, and a six-unit student project (produced in consultation with a three-member guidance committee) for a total of 36 units. Each of the core courses will comprise 10 weeks of in-class instruction twice per week for two-and-a-half hours per meeting. Classes will also include online discussion of related material and readings. Each student will be assigned a three-member guidance committee consisting of two members of the teaching faculty and an additional qualified faculty member to advise the student in identifying a student project.

Preparation. Admission to the program requires a bachelor’s degree with a grade point average of 3.5 or better, and includes (or is comparable to): one year of general chemistry, two quarters of organic chemistry, a course in statistics, one course in general physiology, and two quarters of the biochemistry of nutrition.

Graduate Advisers. Kathryn G. Dewey, Ph.D., Professor (Nutrition), Jane Heinig, Ph.D., Academic Administrator (Nutrition)

Courses in Maternal and Child Nutrition. See courses under Nutrition, on page 490.

Mathematical and Physical Sciences

[College of Letters and Science]
Jesus De Loera, Ph.D., Program Director
Program Office. 118 Everson Hall
Committee in Charge
Andreas J. Albrecht, Ph.D. (Physics)
Joel Hass, Ph.D. (Mathematics)
Jacquelyn Gervay-Hague, Ph.D. (Chemistry)
Hans-Georg Muller, Ph.D. (Statistics)
Howard J. Spero, Ph.D. (Earth and Planetary Sciences)

The Program of Study

The Division of Mathematical and Physical Sciences teaches students to use experimental studies and the-