Course and Curriculum Changes Approved By

The College of Veterinary Medicine Faculty

Friday, March 7, 2008
3:00 pm
301 Trotter Hall

Departments that may be directly impacted by this change have been notified.

These departments are:
Diagnostic Medicine and Pathobiology, Anatomy and Physiology
and
Clinical Sciences

Please provide the sponsors of this proposal with any information, regarding fiscal or programmatic impact on your department, program, and/or students.

Department of Clinical Sciences

New Course Proposed

CS 610 – Feedlot Health Systems

Brief Outline of course:

This will be a course that describes the management of health systems in a commercial feedyard. This course will cover cattle handling, processing, vaccination protocols, identification and treatment of sick cattle, necropsy techniques and other management issues associated with the cattle department. We will also utilize time to discuss many disease syndromes that occur in feeder cattle. We will spend time understanding how to utilize health computer data to make management decisions for the health and well-being of the feeder cattle.

Catalog Description:

CS 610. Feedlot Health Systems. (2) I. Health of cattle in a commercial feedyard. Includes health risk assessment, cattle handling, processing, vaccination protocols, identification/treatment of sick cattle, necropsy techniques, using computer data to make management decisions for feeder cattle, other management issues. Discussion of disease syndromes and foreign diseases.

Faculty members responsible:

Daniel U. Thomson, PhD, DVM

Qualifications

Dr. Thomson is a faculty member who researches and teaches feedlot production medicine. He has worked directly or indirectly with feeder cattle for over twenty years. He teaches the feedlot production medicine courses in the College of Veterinary Medicine. He also spends many hours working with feedlots and practioners world-wide on feedlot health and well-being issues.

Conflicts with other courses: None

Reasons for the proposed course and how it fits into the curriculum:

We are starting to look at ways to form multi-disciplinary curriculum for the training of a more well-rounded and prepared student for working in the beef industry. There is no course on our campus, or any campus, that is designed like this course. This course will supplement graduate student and undergraduate student educations in many College of Agriculture degree programs. It will also be a great course for graduate students in the College of Veterinary Medicine.

Other comments:

The Beef Cattle Institute will propose an undergraduate certificate program for Feedlot Production Management. This course is essential for students who intend to manage a cattle department in a commercial feedyard.

Department of Diagnostic Medicine/Pathobiology

New Course Proposed

DMP 816 – Trade and Agricultural Health

Brief Outline of course:

This course addresses the multilateral trading system and its relevance to the international agricultural and food trade. The *Agreement on the Application of Sanitary and Phytosanitary Measures* (the SPS Agreement) and the World Trade Organization (WTO) set forth a framework for WTO member countries to follow when developing trade-restricting measures for protecting animal, plant, and human health. Three international bodies – collectively known as the "Three Sisters" – are recognized by the WTO and the SPS Agreement, and provide guidelines for developing sanitary (animal and human health) and phytosanitary (plant health) standards that protect health while facilitating trade. The Three Sisters include the Codex Alimentarius Commission, the World Organization for Animal Health (OIE), and the International Plant Protection Convention (IPPC). National governments, consumers, and stakeholders involved in the global food system should be aware of the WTO, the SPS Agreement, and the Three Sisters; this course provides such awareness. The course will also address such important topics as technical barriers to trade, subsidies, trade-related aspects of intellectual property rights, anti-dumping measures, food security, and public health.

Catalog Description:

DMP 816. Trade and Agricultural Health. (2) II. This course considers the multilateral trading system as it relates to food safety, food security, animal health, plant health, and international cooperation. The course content will be of value to students interested in food safety and security, epidemiology, public health, agriculture, food science, security studies, political science, agricultural economics, veterinary medicine, and international relations.

Faculty members responsible:

Justin Kastner, PhD

Qualifications:

Currently: Assistant Professor, Food Safety & Security, Dept. of Diagnostic Medicine/Pathobiology, KSU (2004 – present); coordinator, *Frontier* program for the historical studies of border security, food security, and trade policy (http://frontier.k-state.edu).

Maria Correa, PhD (adjunct faculty member, KSU)

Qualifications:

Currently: Associate professor of epidemiology and public health, North Carolina State University

Conflicts with other courses:

No other courses are expected to deal with similar content.

Reasons for the proposed course and how it fits into the curriculum:

This course, currently taught as FDSCI 630 Prb/Trade and Agricultural Health, offers Food Science, Veterinary Medicine, and other Agriculture- and Public Health-related graduate students an opportunity to learn about the multilateral trading system and food safety, animal health, and plant health. In Dr. Kastner's view, *Trade and Agricultural Health* certainly requires "800-level" critical thinking, reading lists, frequent interaction, and group problem solving. Dr. Tom Herald, Chair of Food Science Graduate Program, and the Food Science Graduate Coordinating Committee, have (a) expressed support for elevating the course to the 800 level and (b) a willingness to drop the FDSCI 630 offering of this course once the DMP 816 course is approved.

The World Trade Organization (WTO), the WTO *Agreement on the Application of Sanitary and Phytosanitary Measures*, and such international standard-setting organizations as the World Organization for Animal Health are key structures in the multilateral trading system; this course uniquely provides an overview of these structures and how they influence the agricultural and food trade. This course will attract students from Food Science, Animal Science, Agricultural Economics, and Veterinary Medicine (as well as other departments and programs). This course will be valuable to graduate students in the Food Safety and Security program at K-State. Dr. Bob Larson, College of Veterinary Medicine, has expressed support for the offering of this course to veterinary students in the MPH program at K-State. Many food safety and security related courses are offered in the Department of Diagnostic Medicine/Pathobiology (DMP). Dr. Kastner, a member of the Dept. of DMP, is also a member of the Food Science graduate faculty.

Other comments:

The course *Trade and Agricultural Health* was initially offered as a FDSCI 600-level problem course in the Food Science Program. The 600 level was the only problem course available for master's students in the food science program (and FDSCI 630 is oftentimes used for ad-hoc and initially-taught courses in food safety and security). The proposed 800-level course is designed to meet the needs of graduate students – both MS and PhD).

Department of Diagnostic Medicine/Pathobiology

New Course Proposed

DMP 910 – Pathogenic Mechanisms of Viruses

Brief Outline of course:

The goals of the course are to learn various pathogenic mechanisms (virus-host interactions) of selected virus (RNA and DNA) and Prion diseases. The course will cover the molecular basis of pathogenesis both *in vitro* and in animal models.

Catalog Description:

DMP 910. Pathogenic Mechanisms of Viruses. (3) I in even-numbered years. The goals of the course are to learn various pathogenic mechanisms (virus-host interactions) of selected virus (RNA and DNA) and Prion diseases. The course will cover the molecular, cellular and immunological bases of pathogenesis both in vitro and in animal models. Pr: BIOL 730 (General Virology) and BIOL 670 (Immunology). Students without the prerequisite must have the permission of the course coordinator.

Faculty members responsible:

S.I. Chowdhury, PhD – Course Coordinator
R.R.R. Rowland, PhD
K.O. Chang, PhD
R.A. Hesse, PhD
Juergen Richt, PhD

Conflicts with other courses:

None. However, BIOL 730 and DMP 722 deal with General and Veterinary virology, respectively. General virology is a prerequisite for this course which will lay down the foundation for this graduate course. Dr. R. Clem and Dr. R. Oberst, the course coordinators for BIOL 730 and DMP 722, respectively, have been consulted and do not have any objection or problem. The proposed course builds upon these two courses and is an extension of this introductory course. DMP 722, which emphasizes clinical findings, pathogenesis in the natural host and specific diagnostic tests of animal viral diseases. The proposed course will deal mainly with molecular pathogenesis of animal viral diseases.

Reasons for the proposed course and how it fits into the curriculum:

The emphasis of the course will be: 1) To understand viral strategies in the pathogenesis of disease(s) and 2) To design and interpret data from in vitro and in vivo

experiments and to interpret the data and discuss the findings in light of current knowledge.

In the proposed course, host-virus interactions will be covered in depth. Three lectures will be given on general viral mechanisms (both RNA and DNA) and three lectures will be given on general defense mechanism by the host against viruses (both RNA and DNA). These lectures will be followed by discussions on recent publications covering molecular, cellular and immunological bases of viral diseases in laboratory and native hosts. Drs. Chowdhury and Hesse will cover DNA viruses and Drs. Rowland and Chang will cover RNA viruses. Dr. Juergen Richt (Regents Professor) will cover Prions. In addition, guest lectures will be scheduled to cover aspects of DNA and RNA viruses.

Other comments:

This course fills a current unfilled need for graduate students in Pathobiology Graduate Program.

Department of Anatomy & Physiology

Title Change and Minor Modification

AP 796 – Topics in Exercise Physiology

Brief Explanation of Modification:

Title will change from Topics in Kinesiology to Topics in Exercise Physiology

Prerequisite will change from 6 hours of Kinesiology 500 or above to: KIN 335, KIN 336

Catalog Description:

AP 796. Topics in Exercise Physiology. (1-4) I, II, S. On sufficient demand. Selected topics in Exercise Physiology involving either greater in-depth study, or application of theory presented in a related course. May be repeated as topic varies. Pr.: KIN 335, KIN 336. Only 6 hours may be counted toward degree. Cross-listed with Kinesiology. See KIN 796.